

# **COURSE CATALOG**

## **2022-2023**



**LAWRENCE UNIVERSITY**  
APPLETON, WISCONSIN

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# ABOUT LAWRENCE

## Mission statement

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 diverse learning community of scholars and artists, we actively foster a transformative process that emphasizes engaged 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 places 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, and articulate a personal identity that leads to thoughtful life choices. 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 *First-Year Studies* program, continues through the sophomore and junior years, and ends with the *Senior Experience*.

## Statements on inclusion and non-discrimination

The Faculty of Lawrence University reaffirms its commitment to fostering a diverse and welcoming learning community that embraces all members, including those marginalized by aspects of their identities. The principles of respect and inclusion are critical to our mission as an educational institution dedicated to cultivating dialogue across differences and to the development of meaningful citizenship that will meet the challenges of a complex world.

Lawrence University is committed to providing equal access and opportunity to qualified individuals of all

backgrounds. In accordance with this policy and with applicable federal and state law, the University prohibits discrimination in admissions, its programs and activities, employment and advancement on the basis of race, color, creed, religion, national origin, ancestry, age, sex, sexual orientation, gender identity, gender expression, marital status, pregnancy, genetic information, disability, military service, protected veteran status, political affiliation, arrest record or conviction record. Retaliation against an individual for filing a discrimination complaint or for participating in a complaint investigation violates this policy and may constitute a form of illegal discrimination. University policy also prohibits harassment of individuals on any of the bases listed above. An act based on an individual's status as listed above may violate this policy and warrant University discipline even if the act does not rise to the level of unlawful discrimination, retaliation or harassment.

*To request information or assistance or to file a complaint for violations of this policy, contact the Vice President for Diversity and Inclusion, 2nd floor of Sampson House, at 920-832-7451.*

## **Lawrence in the community**

Lawrence is part of an intellectual and creative community that includes Appleton and 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 our academic programs and such resources as Björklunden, the Lawrence Community Music School, the Esch-Hurvis Center for Spiritual and Religious Life, the Center for Community Engagement and Social Change, and the Career Center, Lawrence contributes to the vitality of the surrounding community by:

- making available programs of cultural enrichment;
- placing students in the community as volunteers, interns, musicians, and tutors;
- drawing on the knowledge and experience of members of the community to explore significant issues;
- certifying public school teachers in the state of Wisconsin; and
- providing opportunities for alumni to stay connected to Lawrence and each other while encouraging their lifelong interest in learning.

## **Accreditation**

Lawrence University is accredited by the Higher Learning Commission, and the Conservatory of Music is a member in good standing of the National Association of Schools of Music.

# THE LIBERAL ARTS EDUCATION

## Liberal learning

Liberal education is transformative education. It transforms individuals with intellectual and creative potential into persons ready for lives of accomplishment and fulfillment. Through liberal learning, students develop their intellect, capacity for creativity, and self-direction. Liberal learning is based on principles of open and free inquiry, a devotion to excellence, and engagement with exciting and interesting fields of knowledge. Liberal learning aims to develop analytical thinking abilities, communication skills, quantitative reasoning, and creativity. It is creativity—the capacity to create what did not exist before—that helps set us free and makes liberal education a liberating education.

Liberal learning frees 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.

Above all, however, a liberal education enables us to be self-directed—to choose for ourselves what we want to be and what we want to create. Lawrence students use their education for many careers—law, public service, health professions, business, teaching, science and technology, creative writing, theatre, the social sciences, and art. The liberal education that Lawrence provides is a solid foundation for all of these careers—and many more. At Lawrence, we help you learn how to learn things you have not experienced before and create what is new, and these abilities will help you in anything you choose to do in life.

## What makes Lawrence special?

Lawrence University places a priority on preparing students for a life of personal fulfillment and professional accomplishment and a lifetime of learning. It is the job of all Lawrentians to learn by availing themselves of those things that are unique to Lawrence.

## ENGAGED LEARNING

Engaged Learning is that which characterizes a Lawrence education and distinguishes Lawrentians. Although students may have encountered engaged learning experiences elsewhere, at Lawrence it is the foremost attribute of every subject and every class we offer. By actively engaging in challenging and meaningful learning

experiences with faculty and with one another, students will be prepared to adapt and succeed in an ever-changing world. Those who prefer to passively absorb information passed from teacher to student will find Lawrence to be a poor fit. Those who prefer instead to explore, debate, create, research, practice, and perform in collaboration with others—to be an active participant in the learning experience—will find Lawrence to be an exhilarating community in which to live and thrive.

## FIRST-YEAR STUDIES

From the moment they arrive at Lawrence, new students have something in common with every other new student on campus: *First-Year Studies*. The cornerstone of the Lawrence curriculum for more than sixty years, each *First-Year Studies* class consists of no more than 15 students who explore a multidisciplinary list of books, musical works, art, and films in discussions facilitated by a professor. Students are asked not to summarize or memorize but to think deeply and critically about each topic. The *First-Year Studies* course is required of all incoming students and establishes the expectation for all other classes to come, regardless of discipline. Those expectations include advance preparation, critical thinking, active class participation, and disciplined writing. The fact that all new students simultaneously work through the same syllabus ensures that all share the excitement of liberal learning and that discussions continue well beyond the classroom.

## CHANDLER SENIOR EXPERIENCE

Every Lawrence student's course of study culminates in a *Senior Experience*, a capstone seminar, project, exhibition, performance, or portfolio in which the student integrates learning in the major with their broader liberal arts interests as they establish their independence as a scholar or creative artist. The Chandler Senior Experience Fund provides financial support for distinctive or ambitious Senior Experience projects, and every student is eligible to apply for this funding.

## BJÖRKLUNDEN

Each year, more than a thousand Lawrence students flock to the sanctuary and serenity of Björklunden, a 425-acre estate in Door County on the shore of Lake Michigan that serves as Lawrence's "northern campus." Björklunden is a place where students are encouraged to leave old assumptions behind and barriers are removed in order for students and faculty to learn from each other. Björklunden's natural setting is the perfect backdrop for engaged learning opportunities.

## COMMUNITY ENGAGEMENT

Keenly interested in their local and global communities, the active citizens at Lawrence reach beyond volunteerism when it is intertwined with education. Lawrence believes community engagement is an essential ingredient in a liberal arts education and an opportunity for students to connect learning in the classroom, studio, and laboratory with real-world experiences in Appleton, the Fox Cities, and around the world.

## MULTI-INTERESTED STUDENTS

Typical is not a word one associates with Lawrentians. However, one characteristic is typical of most students

arriving at Lawrence: their wide variety of interests. The Lawrence curriculum is well-suited to such students because it encourages the exploration and development of several interests, rather than focusing on just one. Lawrence's undergraduate liberal arts college is uniquely and fully integrated with a nationally renowned conservatory of music, a place where gifted musicians might be inspired to tackle physics and math majors may compose music for the jazz ensemble. Athletics are also seen as part of the educational experience as a complement to, and enhancement of, a well-rounded liberal arts education, and Lawrence takes pride in its scholar-athlete tradition.

## A RESIDENTIAL COMMUNITY

Lawrence is by design a residential college. All students live on campus because we believe that a small residential community with abundant opportunities for personal interaction outside the classroom provides the proper environment for a liberal arts education. Juniors can learn from first-years, science majors from art majors, and student athletes from student musicians. Located aside downtown Appleton on the banks of the Fox River, the Lawrence campus has become the cultural and intellectual heart of a vibrant, modern Midwestern city.

At the core of everything we do is a deep commitment to our mission to educate young adults in the liberal arts and sciences: developing intellect, talent, knowledge, and understanding; cultivating judgment and values; and preparing students for lives of service, achievement, leadership, personal fulfillment, and lifelong learning.

## Academic freedom

The Lawrence University Faculty adopted the following statement on February 7, 2017:

Lawrence University, a liberal arts college and conservatory of music, is dedicated to the development of intellect and talent, the pursuit of knowledge and understanding, and the cultivation of critical literacy and sound judgment. To that end, members of the Lawrence community are free to engage in, speak on, and write about scholarly research and creative activity without fear of censorship or retaliation. In the classroom, laboratory, and studio, teachers must be free to teach and students free to learn; we must be free to challenge each other's beliefs, to explore new ideas and critically examine old ones, and to listen to others without disruption. Knowledge, skill, understanding, and creative expression are acquired through interactions that are often complex and even controversial. Although these interactions may at times cause discomfort, they may not be obstructed. Intellectually honest and vibrant communities engage in complex interactions and the ability, hereby protected, to exchange ideas in a spirit of mutual respect is

essential to our educational mission.

Lawrence University faculty, as well as invited speakers and performers, may express their views publicly. However, the University may restrict speech that is defamatory of character, harassing, or infringes a protected right to privacy or confidentiality.

# STRUCTURE OF THE CURRICULUM

## The structure of the Lawrence curriculum

The curriculum of the university is structured in three parts. For the Bachelor of Arts degree, students take about 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 about one-third of their courses in general education and the remaining two-thirds in music-related study. All courses of study begin with *First-Year Studies* and culminate in a *Senior Experience*.

## Divisions within the university

Lawrence University has organized its academic departments into divisions referenced in the degree requirements. The divisions are as follows:

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

Interdisciplinary programs, which include Biomedical Ethics, Cognitive Science, East Asian Studies, Environmental Science, Environmental Studies, Ethnic Studies, Film Studies, Gender Studies, Global Studies, Health and Society, Innovation & Entrepreneurship, Latin American Studies, Linguistics, Museum Studies, and Neuroscience, are non-divisional. University courses are offered outside the auspices of any specific department or program. Non-divisional and university courses may be assigned divisional affiliations when appropriate.

## First-Year Studies

Entering students are enrolled in *First-Year 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. *First-Year Studies* is both an introduction to the liberal arts and a foundation for a Lawrence education.

Transfer students may have one or both terms of *First-Year Studies* waived based on the amount and nature of the credit accepted from other colleges and universities towards a Lawrence degree. Transfer students

required to take one term of *First-Year Studies* will be placed in a section of FRST 201: *Studies in the Liberal Arts* in their first term on campus (or, in the very rare case of a Spring term transfer, the following Fall). This course will satisfy their *First-Year Studies* requirement for the degrees offered at Lawrence.

## General education requirements

General education ensures that Lawrence students gain familiarity with different academic disciplines and the modes of thought and expression appropriate to each, that they develop an understanding of global and domestic diversity and their impact on contemporary life, and that they develop competencies in writing/speaking, quantitative reasoning, and world languages. All of the requirements below apply to the Bachelor of Arts degree and the B.A./B.Mus. double degree. The Bachelor of Music and Bachelor of Musical Arts degrees have fewer general education requirements as described under Degree Requirements in the catalog.

### DISTRIBUTION

The purpose of the distribution requirement is to ensure that students graduating from Lawrence experience the breadth of study central to a liberal arts education. For that reason, students in the Bachelor of Arts degree program are required to take at least one course in each division: humanities, natural sciences (with laboratory), social sciences, and fine arts (see "Divisions within the university"). This requirement cannot be satisfied with examination credit (AP, IB, or A-levels).

*Humanities:* In the humanities, students learn to engage in close readings of literary, cultural, historical, religious, or philosophical works and provide critical comments on those works. They also learn to place works in their historical, cultural, and/or literary contexts.

*Natural sciences (with laboratory):* In the natural sciences, students learn to use their understanding of a scientific concept to interpret a natural phenomenon and to draw reasonable conclusions from scientific data.

*Social sciences:* In the social sciences, students learn to define significant questions within the fields of anthropology, economics, education, government, or psychology and to explain how one would seek to answer those questions using methods from one or more of those fields.

*Fine arts:* In the fine arts, students learn to recognize and describe the concepts and/or methods involved in creating a piece of visual art, music, or theatre. They also learn to recognize and describe forms of artistic expression in their historical and cultural contexts and to create or interpret visual art, music, or theatre using methods introduced or practiced in the classroom or studio.

### DIVERSITY

The purpose of the diversity requirements is to prepare students for an increasingly diverse American society and an increasingly interconnected world. Diversity requirements call for at least one course focusing on an area outside Europe and the United States or on a global perspective on a contemporary issue (courses listed

with a “G” designation in the class schedule) and one course exploring dimensions of diversity that affect contemporary American society (courses listed with a “D” designation in the class schedule).

*Global diversity:* In global diversity (G) courses, students learn to describe important aspects of the political, economic, social, or cultural context of at least one region of the world outside Europe and the United States or, alternatively, to articulate a global and/or comparative perspective on a contemporary issue.

*Dimensions of diversity:* In dimensions of diversity (D) courses, students learn to discuss critically at least one dimension of diversity (such as race, ethnicity, gender, or sexuality) that is of importance in understanding contemporary society and to demonstrate an awareness of how diversity influences social life.

## COMPETENCY

Competency requirements improve fundamental skills central to a liberal arts education and include courses designated as writing-intensive (W) or speaking-intensive (S), as emphasizing quantitative reasoning (Q), and as leading toward proficiency in a language other than English (at the 200 level or above). Alternative ways to satisfy the language proficiency requirement are described under Academic Procedures and Regulations.

*Writing-intensive & speaking-intensive:* In writing-intensive (W) and speaking-intensive (S) courses, students learn to articulate a coherent thesis and supporting argument, to incorporate feedback and revision into the writing or speaking process to improve critical thinking, and to demonstrate awareness of the conventions and traditions of the discipline in which the work is undertaken.

*Quantitative reasoning:* In quantitative reasoning (Q) courses, students learn to apply quantitative techniques (mathematical, graphical, algebraic, or statistical), algorithmic methods, or formal logical analysis to solve defined problems or bodies of problems.

*Language proficiency:* In modern language courses that satisfy the language proficiency requirement, students learn to listen, speak, read, and write at the American Council of Teachers of Foreign Languages (ACTFL) intermediate-mid level for French, German, Italian, or Spanish or intermediate-low level for Arabic, Chinese, Japanese, or Russian. In classical language courses that satisfy the requirement, students learn to read and comprehend extended passages in Latin or Ancient Greek. In all language courses, students express, interpret, and negotiate meaning in the target language using linguistic, social, and historical knowledge about the target culture(s) and people(s).

## Major

Liberal learning calls for depth 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. Students can choose to major in the academic area that best suits their interests or design their own major (see Student-initiated Courses and Programs). Students pursuing a Bachelor of Music degree also select an area of emphasis for the major in performance, music education, or composition (see Conservatory of Music). All major programs share a commitment to increasing knowledge and methodological sophistication in a specific area of

study, and every major includes a *Senior Experience* (see below) as a capstone requirement.

The learning goals and requirements for majors are described under Areas of Study in the catalog.

## Elective areas of study

Many students supplement the major with focused study in a minor or interdisciplinary area; certification to teach in pre-kindergarten through 12th-grade education; or preparation for professional study in business, law, health careers, or engineering. Students may participate in one or more terms of off-campus study, and they may choose from on-campus courses that emphasize community-based learning, incorporate travel, or deal with subjects beyond the purview of one department. Students may also initiate their own courses under the guidance of a Lawrence faculty member.

### MINORS AND INTERDISCIPLINARY AREAS

Minors provide an opportunity for students to do focused work in a field outside the major. 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 of study. Minors are offered by almost all curricular departments and interdisciplinary programs of the university.

Interdisciplinary areas allow students to cross departmental or disciplinary boundaries and address issues from several perspectives. A student who satisfies the requirements of an interdisciplinary area may have the area listed on the transcript along with the declared major.

Majors, minors, and interdisciplinary areas are listed alphabetically under Areas of Study.

### TEACHER CERTIFICATION

Lawrence offers certification at the elementary level (with any major), at the secondary level (with a major in the subject area and major or minor for any additional area), and at all levels (preK–12) in music, art, world languages, and English as a second language. Students complete a semester of student teaching during the senior year or in a 13th term (without normal tuition charges) in the fall after graduation. Those interested in teacher certification should consult with the education or music education faculty at their earliest opportunity.

### PRE-PROFESSIONAL STUDY

Students who plan to attend professional school in business, law, or health-related professions can receive guidance on the selection of courses and pursuit of internships to prepare for professional study. Students may also apply for one of Lawrence's cooperative degree programs in engineering, forestry and environmental science, law, or occupational therapy, or for preferred admission to a master's program in nursing. See the information under "postgraduate options" in Academic Planning and under Cooperative Degree Programs in the catalog.

## OFF-CAMPUS PROGRAMS

Lawrence University encourages students to extend their programs of study by participating in the challenging educational and cultural experiences offered through our portfolio of off-campus programs. Lawrence operates two programs of its own, the London Centre and the Francophone Seminar in Senegal, and 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). These programs have been evaluated by the faculty and approved for Lawrence affiliation.

It is best to plan ahead for off-campus study when considering options for majors and minors. Interested students should make an appointment with the director of off-campus programs as early as the freshman year to explore the range of possibilities for including off-campus study in their degree program.

## COMMUNITY-BASED LEARNING COURSES

Community-based learning (CBL) is one of the diverse pedagogies used to promote student academic achievement at Lawrence. The emphasis in CBL courses is on promoting the intellectual and character development of students through interaction with off-campus communities. In contrast with field trips, the off-campus experiences in CBL courses are deeply integrated with classroom learning, course assignments, and learning outcomes and involve significant participation in a community or interaction with community issues, concerns, or needs. CBL courses may be located nearby in the Fox Valley or at more distant sites such as London or Chicago.

## TRAVEL COURSES

Some courses include travel to remote destinations for place-based learning, research, and engagement with local peoples, cultures, and historic sites. These may be regular term courses that include travel during winter or spring break or December Term courses that take place at another location. Travel courses charge a program fee for travel expenses and have similar eligibility requirements to off-campus programs, except that some travel courses are also open to first-year students.

## UNIVERSITY COURSES

University courses (listed with the prefix UNIC) deal with subjects of interest and importance that are outside the purview of any given department. These include courses in additional languages, academic skills, or personal development, as well as interdisciplinary courses on contemporary concerns that cross traditional academic boundaries. Students from all disciplines may enroll in university courses.

## STUDENT-INITIATED COURSES

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 interest in depth. Additional opportunities for individualized learning include academic internships, directed study, and writing for credit. Non-music majors may request private music lessons by audition or interview and with an additional fee. For more information,

see the section on Student-initiated Courses and Programs.

## Senior Experience

*Senior Experience* is the culmination of a Lawrence education, a way for students to integrate knowledge and skills developed through years of study, demonstrate proficiency in their major fields, and develop scholarly or artistic independence. Every graduating senior produces something significant — an independent or collaborative project, major seminar paper, portfolio, performance, or exhibition — to satisfy criteria for the major set by faculty of that department or program. The *Senior Experience* is thus unique to each student yet universal to students across the university.

Every major listed under Areas of Study includes a description of how students can satisfy the *Senior Experience* requirement for that department or program. Juniors should discuss with their academic advisors how they plan to fulfill the requirement for graduation. Students pursuing studies in more than one area can propose a *Senior Experience* that integrates two majors or incorporates student teaching, and the proposal must be approved by both departments or programs as satisfying the requirement. Students pursuing projects that are ambitious or distinctive should check the *Senior Experience* web page for possible sources of funding.

*Senior Experience* titles appear in the Commencement program. Graduating seniors are asked to submit their titles as part of the graduation application process.

# ACADEMIC PLANNING

## Preparing for academic success

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 discuss their academic plans regularly with their faculty advisors and, as needed, with advisors of other programs in which they have an interest. As they pursue their studies, students should seek additional guidance from academic support staff in Mudd Library, the Center for Academic Success, and the Career Center.

## Faculty advisors

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 benefit most from a Lawrence education. Students may change advisors as they develop a close working relationship with a faculty member in their preferred area of study.

Every student should have an advisor in their major department or program by the spring term of their sophomore year when they register for their junior courses. The major advisor will help the student plan their coursework to satisfy requirements for the major, select courses in other areas to complement the major or satisfy personal interests, and prepare for their *Senior Experience*. The major advisor will also certify completion of major requirements when the student applies for graduation.

Students must have an advisor for every major. Students do not need an official advisor for a minor, interdisciplinary area, or teacher certification, and are encouraged to consult with the chair or other faculty in those departments or programs for advice on course selection and how to satisfy requirements.

## Planning a course of study

First-year students typically enroll in seven courses (two in fall, two in winter, and three in spring) in addition to the two-term *First-Year Studies* sequence. Bachelor of Music students have fewer choices in the first year since they must also take music theory and private lessons. First-years should take courses that will help them plan their next three years of study by exploring possible majors and areas of interest while also trying new subjects. Students interested in math, computer science, or natural sciences should take a math sequence the first year, while students interested in the humanities, social sciences, or arts should consider a language sequence. Students should also balance different types of courses each term, with no more than one lab course or intensive reading/writing course at a time. Some majors and pre-professional programs require that specific course sequences be started in the first year. And students may want to look ahead to off-campus programs and learn when these programs are offered and what, if any, coursework is required to participate in them.

In the second year of study, sophomores continue to sample a variety of disciplines and satisfy general education requirements as they work toward declaring a major and finding an advisor in their major department who can help them plan their final two years of study. At this point, students might begin to pursue a minor, interdisciplinary area, or teacher certification. Finally, the sophomore year is an excellent time to plan for off-campus study (often undertaken in the junior year), to explore possible internships or summer research that places learning in context, and to begin considering postgraduate options such as graduate study, professional study, or the start of a career.

In the third and fourth years of study, juniors and seniors complete coursework for the major and any minor, interdisciplinary area, or teacher certification. They may pursue experiential learning through off-campus study, internships, or summer research. All students plan and carry out a *Senior Experience* to integrate what they have learned in their Lawrence education.

While planning is essential, it should not be rigid. Interests that students express on arrival at Lawrence often change as a result of exposure to new and different areas of study. This is why students are encouraged to explore the curriculum during the first year of study and need not declare a major until later in the sophomore year.

## Course numbering

Lawrence courses are numbered at four different levels: introductory (100-199), foundation/gateway (200-399), advanced (400-599), and capstone (600-699). First-year students select courses mostly at the introductory level, though some foundation/gateway courses can be taken without prerequisites or with advanced placement credit. Some departments make further distinctions within these levels, which are described under the Areas of Study.

*Introductory courses (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.

*Foundation/gateway courses (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 beginning students, but in some departments they might be appropriate for continuing students with no prior experience in the subject.

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

*Capstone courses (600–699):* Capstone courses include the culminating work in a discipline that is typically part of a *Senior Experience*. They are not appropriate for students who are neither majors nor minors in the discipline.

It is the responsibility of the student to satisfy any prerequisites listed for specific courses. Faculty members

may refuse to admit any student who has not satisfied listed prerequisites.

## Course credit

A standard course at Lawrence is valued at 6 units. A normal course load for a term is three standard courses (18 units). A student must take 15 or more units for full-time student status and may take up to 22 units (plus music ensembles) without additional fees. A total of 36 standard courses (216 units) is required for a Lawrence degree.

Some courses are valued at fewer than 6 units. December Term courses are all 3 units. Academic support courses (academic success, academic English for speakers of other languages, topics in precalculus, etc.) are typically also 3 units. Music ensembles and theatre production courses are valued at 1 unit per term.

For more information about course loads and how to translate Lawrence units into semester or quarter hours, see Academic Procedures and Regulations.

## 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 and summer employment. The Career Center participates in job and internship fairs and on-campus and off-campus recruiting opportunities, and it 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. Students are urged to attend Career Center events as early as the first year to begin developing career plans and internship opportunities.

### 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.

### 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 pre-professional interests.

At the same time, we recognize that some professional programs and schools require specific preparation at the undergraduate level. Students should consult with the coordinator for pre-professional advising in the Career Center, who can arrange for them to meet with a faculty advisor and guide them through the process of preparing for and applying for professional study.

### *Pre-Business*

Advisor: Adam Galambos

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*

Advisory Committee: Ty Collins (chair), Chloe Armstrong, Steven 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.

Lawrence offers a cooperative degree program with Marquette Law School, which is described in the catalog under Cooperative Degree Programs.

### *Health Careers*

Advisory Committee: Elizabeth De Stasio (chair), Matt Ansfield, Stefan Debbert, Doug Martin, Nancy Wall. Judith Humphries for pre-Vet advising.

The health careers advisory committee works closely with students as they explore career options in health care delivery and public health and as they prepare applications for professional school programs. Committee members assist and advise students as they plan a curriculum that meets their individual goals, for example, finding the best time to undertake an off-campus program, or choosing course work to meet particular professional school prerequisites. We work with students planning careers in medicine, veterinary medicine, dentistry, public and global health, and allied health professions such as genetic counseling, physical and occupational therapy, physician assistant, and nursing. Students should work directly with a member of the committee to talk about ways to explore health care career paths, including job shadowing, and to discuss sequencing of pre-requisite courses for greatest success. Later in the process, committee members provide guidance in the selection of schools, in developing applications, in the preparation for interviews, and in planning for admissions testing.

Students who plan to attend medical school may concentrate in academic areas of their greatest interest. Health professional schools do, however, require considerable work in the natural and social sciences, including biology, chemistry and physics, and psychology as well as in writing and thinking within the humanities. We encourage students to consider courses in the Health and Society minor to round out their education and help build an understanding of the various origins of health, wellness, and disability and the disparate health outcomes based on identity or social status. Members of the health careers advisory committee are available to help students select courses that will meet the requirements of medical and other professional 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 is able to support healthcare-related experiences and training for students of limited means thanks to the Florence Kasel Testamentary Trust.

Lawrence offers a cooperative degree program in public health with the Medical College of Wisconsin and in occupational therapy with the School of Medicine at Washington University in St. Louis. More information can be found in the catalog under Cooperative Degree Programs. Lawrence also has an articulation agreement with Rush University's College of Nursing with preferential admission for qualified Lawrence applicants to the Generalist Entry Master of Science program in Nursing and certification as a Clinical Nurse Leader. Students complete the pre-professional basic science and general education components of their Lawrence bachelor's degree at Lawrence, while Rush provides the professional curriculum leading to a master's degree (MSN). Information can be found at <https://www.rushu.rush.edu/college-nursing/programs-admissions/masters-entry-nursing-msn-non-nurses>.

# DEGREE REQUIREMENTS

## Residence Requirements

To qualify for a Lawrence University B.A., B.M.A., or B.Mus. degree, students are required to have a minimum of six terms in residence and 108 units earned in Lawrence courses. Nine terms in residence and 162 units are required for the five-year B.A. and B.Mus. double-degree program. Seniors must be in residence or in a cooperative degree program until the requirements for a major have been certified as complete.

Attending courses on the Appleton campus counts as being in residence. Participating in a Lawrence-sponsored or Lawrence-affiliated off-campus program also counts as being in residence, and units earned in these programs are counted as Lawrence courses, not as transfer credit. The optional December Term does not count toward the residence requirement.

Petitions for exceptions must be approved by the Faculty Subcommittee on Administration.

## Bachelor of Arts Degree

Students seeking the Bachelor of Arts degree will complete approximately one-third of their work in each of three areas: *First-Year Studies* and general education, a major, and elective study. The *First-Year 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
  - d. no more than 42 units in EDUC
  - e. no more than 18 units in ESL courses
  - f. no more than 12 units from academic internships
2. Completion of 12 units of *First-Year Studies*, normally taken during the fall and winter terms of the first year
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 language other than English 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, geosciences, or physics in the division of natural sciences

See [divisions within the university](#) under Structure of the Curriculum.

- 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 language other than English taken from courses numbered 200 or above and taught primarily in that language. The language competency requirement may be satisfied in other ways described under Academic Procedures and Regulations.
- 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 and encouraged to declare a major by spring term of the sophomore year, when they advance register for junior-year courses.
- 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 or program and any other courses required for the major)
- 7. Completion of the required terms and units in residence as specified by the university [residence requirements](#).

Completion of a minor or interdisciplinary area is optional. If a minor is declared, a 2.000 grade-point average in the minor (all courses taken in the minor department or program and any other courses required for the minor) is required to complete the minor and have it recorded on the academic record.

## STIPULATIONS PERTAINING TO THE GENERAL EDUCATION REQUIREMENTS

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 (Advanced Placement [AP], International Baccalaureate [IB], or A-levels) may be used as appropriate to fulfill diversity or competency requirements; such credit may not be used to fulfill distribution requirements. Coursework from other institutions may not be used to fulfill the writing or speaking competency requirement.

## Bachelor of Musical Arts Degree

The Bachelor of Musical Arts is a professional degree. Courses in music represent approximately one-half of the curriculum while the other half is devoted to *First Year Studies*, general education requirements, and a secondary field of study (cognate).

### REQUIREMENTS FOR THE BACHELOR OF MUSICAL ARTS DEGREE

1. Completion of a minimum of 216 units.
2. Of the 216 units required to complete the degree, a student must present:
  - a. a minimum of 108 units in music
  - b. a minimum of 78 units in courses other than music
  - c. a minimum of 30 units in a secondary field of study (cognate), developed according to procedures described below.
  - d. no more than 18 units in ESL courses
  - e. no more than 12 units from academic internships
3. Completion of 12 units of *First-Year Studies*, normally taken during the fall and winter terms of the first year
4. Completion of the general education requirements:
  - a. 6 units selected from courses designated as writing-intensive
  - b. International diversity. One of the following: Note: While some music courses may satisfy general education requirements, a minimum of 78 units in courses other than music is required for the degree.
    - 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 language other than English. The language competency requirement may be satisfied in other ways described under Academic Procedures and Regulations
    - iii. Participation for one term in a Lawrence or affiliated off-campus study program held outside the United States
5. Completion of music requirements:
  - a. Applied Musicianship I, II, and III: MUJI 150, 250, and 350
  - b. Theory and improvisation: 3 units selected from MUJI 410 or 420
  - c. Keyboard skills
    - i. MURP 201, 202, 203 or MURP 301, 302
    - ii. MURP 320
  - d. Musicology
    - i. MUCO 211 and 212
    - ii. 6 units selected from courses in musicology numbered 400 or above
  - e. Applied music individual instruction: a minimum of 36 units and 12 terms of study
  - f. Ensemble study
    - i. a minimum of 9 units selected from major ensembles
    - ii. a minimum of 3 units selected from MUEN 245 or 248
    - iii. students are required to participate in an ensemble every term in which they are attending classes on the Appleton campus.

- g. Jazz composition and arranging
  - i. MUCA 230
  - ii. MUCA 330
  - iii. 3 units selected from MUCA 100 or 530
- h. MUEP 305 Jazz Pedagogy
  - i. MUEP 120 Basic Audio Recording
  - j. MUJI 130 Contemporary Orchestration for Digital Workstations
- 6. Presentation of a half recital during junior year and a full recital during senior year
- 7. A 2.000 grade-point average in all Lawrence courses
- 8. Completion of required terms and units in residence as specified by the [residence requirements](#)

## SENIOR EXPERIENCE

The required senior recital is considered the standard *Senior Experience* for students in the Bachelor of Musical Arts degree program. 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.

## STIPULATIONS PERTAINING TO THE GENERAL EDUCATION REQUIREMENTS

A single course may be used to satisfy both requirement a. (writing intensive) and b. (international diversity) above. Credits granted pursuant to university policy for advanced placement or for transfer work may be used to fulfill general education requirements with the exception that coursework from other institutions may not be used to fulfill requirement a. (writing intensive).

## STIPULATIONS PERTAINING TO THE SECONDARY FIELD OF STUDY (COGNATE)

Depending upon each student's academic objectives, the secondary field can consist of courses from a single academic department, courses from a single existing Lawrence interdisciplinary program, or courses from multiple departments and/or programs that can be combined to constitute a coherent interdisciplinary/multi-disciplinary secondary field not represented by one of Lawrence's already established interdisciplinary programs.

The procedure for establishing the courses to be taken for the secondary field is as follows:

1. With both the academic advisor and a faculty member from the secondary field, the student develops a statement on the planned secondary field. The statement indicates (a) the proposed secondary field of study; (b) how the secondary field will serve the student's academic objectives; and (c) the specific courses to be taken as part of the secondary field.
2. The student submits the statement of the proposed secondary course of study, endorsed by the faculty advisor and faculty member from the secondary field, to the associate dean of the conservatory for review by the conservatory committee on administration before the end of Term I of the student's sophomore year.
3. The conservatory committee on administration takes action on the proposal and through the associate dean communicates its action to the student, the faculty academic advisor, and the faculty member from the secondary field.

## 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 *First Year Studies* and general education requirements.

### ADMISSION TO THE BACHELOR OF MUSIC DEGREE

An entrance audition is required of all applicants for admission to the Bachelor of Music degree. Bachelor of Arts or Bachelor of Musical 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.

### 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 18 units in ESL courses
  - d. no more than 12 units from academic internships

The additional 12 units may be selected from any department.

3. Completion of 12 units of *First-Year Studies*, normally taken during the fall and winter terms of the first year
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 language other than English. The language competency requirement may be satisfied in other ways described under Academic Procedures and Regulations.
    - 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.

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. Musicology
    - i. MUCO 211 and 212
    - ii. 12 units selected from courses in musicology 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.
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 non-music 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 [residence requirements](#).

Completion of a minor or interdisciplinary area is optional. If a minor is declared, a 2.000 grade-point average in the minor (all courses taken in the minor department, program, or area and any other courses required for the minor) is required to complete the minor and have it recorded on the academic record.

## STIPULATIONS PERTAINING TO THE GENERAL EDUCATION REQUIREMENTS

A single course may be used to satisfy both requirement a. (writing intensive) and b. (international diversity) above. Credits granted pursuant to university policy for advanced placement or for transfer work may be used to fulfill general education requirements with the exception that coursework from other institutions may not be used to fulfill requirement a. (writing intensive).

## Bachelor of Arts/Bachelor of Music Degree

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, theory, or 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. 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 and the director of teacher education.

## **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. December Term does not count as a term toward this requirement. 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. no more than 18 units in ESL courses
  - e. a minimum of 72 units from courses numbered 200 and above
  - f. no more than 90 units from a single department outside of music
  - g. no more than 12 units from academic internships
2. Completion of 12 units of *First-Year Studies*, normally taken in the fall and winter terms of the first year.
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 language other than English 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
  - See [divisions within the university](#) under Structure of the Curriculum.
  - 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 language other than English taken from courses numbered 200 or above and taught primarily in a language other than English. The language competency requirement may be satisfied in other ways described under Academic Procedures and Regulations.
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 and encouraged to declare a major by spring term of the sophomore year, when they advance register for junior-year courses.
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. Musicology
    - i. MUCO 211 and 212
    - ii. 12 units selected from courses in musicology 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.
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 college major (all courses in the major department or program and any other courses required for the major)
  - c. 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.

Completion of a minor or interdisciplinary area is optional. If a minor is declared, a 2.000 grade-point average in the minor (all courses taken in the minor department, program, or area and any other courses required for the minor) is required to complete the minor and have it recorded on the academic record.

## STIPULATIONS PERTAINING TO THE GENERAL EDUCATION REQUIREMENTS

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 (Advanced Placement [AP], International Baccalaureate [IB], or A-levels) may be used as appropriate to fulfill diversity or competency requirements; such credit may not be used to fulfill distribution requirements. Coursework from other institutions may not be used to fulfill the writing or speaking competency requirement.

## 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 (164 for pre-law) 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.

Students who earn the required number of units at Lawrence and successfully complete the first year of study in professional school may participate in the Lawrence Commencement with their matriculation class.

### Engineering

Program advisors: [Matthew Stoneking](#) and [Margaret Koker](#)

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 MATH 140, 155, 200, and a tutorial in differential equations), computer science (CMSC 150), introductory chemistry (CHEM 115 and 116), introductory physics with calculus (PHYS 141 and 151), 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: [Bart De Stasio](#)

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.

## Law

Program advisor: Ty Collins, Chloe Armstrong, and Steven Wulf

A liberal education, whatever the disciplinary focus, is excellent preparation for law school and a legal career. The conventional time for completion of a *juris doctor (J.D.)* law degree is four years for the undergraduate degree plus three years of law school. Lawrence has an accelerated 3-plus-3 cooperative partnership with Marquette Law School that allows qualified students to complete both the Lawrence degree and *juris doctor* degree in just six years.

Students in the accelerated program must complete 164 units of coursework at Lawrence, including general education requirements and a major (with *Senior Experience*), prior to enrolling at Marquette Law School. Students are awarded the Lawrence degree upon successful completion of the first year at Marquette. They then continue for two more years to complete the *juris doctor* degree.

Incoming first-year students with a 28 or higher on the ACT test may apply for admission to the 3-plus-3 program. Matriculated students who have completed the first year and have a cumulative GPA of 3.5 or higher may apply prior to the start of the junior year. Students must take the LSAT as part of the application process, and Marquette considers applicants as part of the general pool for admission and financial aid. Admitted students who decline the opportunity may return to or remain at Lawrence for a fourth year to complete the bachelor's degree.

Students interested in the accelerated pre-law program are strongly encouraged to work with their academic advisor and pre-law advisor early in their academic career.

## Occupational therapy

Program advisor: [Matthew Ansfield](#)

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 at 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 3.250 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: BIOL 130, 150, 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; PSYC 250 and 260; one course (6 units) chosen from among PHIL 100, PHIL 120, PHIL 320, PHIL 440, or ECON 290; two additional courses (12 units) chosen from the social sciences; and STAT 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 the program advisor as well.

More detailed information about the program, requirements for admission, and how to apply can be found at <https://www.ot.wustl.edu/education/masters-msot-131>.

## Public health

Program advisors: [Mark Jenike](#) and [Judith Humphries](#)

Lawrence offers a 4+1 program in public health in conjunction with the Medical College of Wisconsin (MCW). Students spend three years of study at Lawrence and a year of dual enrollment at Lawrence and in MCW's online public health program starting the summer after their junior year. In the dual degree year, while still in residence at Lawrence, students take the equivalent of 27 units at LU in addition to the online MPH courses. Up to 15 credits (27 LU units) of MCW graduate work may count towards both the undergraduate and graduate

degrees. After the dual enrollment year students who have satisfied the Lawrence University general education requirements and their major requirements will graduate with a Bachelor of Arts. Students then continue for a summer semester and a full year in MCW's online public health program after which they will earn a Masters in Public Health.

Lawrence students apply to the online public health program of the Medical College of Wisconsin by April 10th of their junior year and must meet the entrance requirements established by the public health program. A 3.0 Lawrence grade-point average is a minimum requirement but does not guarantee admission. Prior to starting the public health program, students must complete 162 units at Lawrence. Although there is no restriction on a student's choice of major at Lawrence, students must fulfill the following prerequisite course requirements for public health: two terms of Freshman Studies, a writing intensive course, a statistics course (STAT 107; MATH 255; BIOL 170; PSYC 170; or ANTH 207), and BIOL 130. An additional intermediate or upper level course in BIOL or ANTH with connections to human health selected in consultation with a program advisor is strongly recommended.

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 the MCW's public health program advisor as well.

More detailed information about the program, requirements for admission, and how to apply can be found at [www.mcw.edu/mph](http://www.mcw.edu/mph)

# ANTHROPOLOGY

Professor:	P. Peregrine
Visiting professor:	K. Rocker
Associate professors:	C. Daughtry ( <i>chair</i> ), B. Jenike ( <i>Edward F. Mielke Professor of Ethics in Medicine, Science and Society</i> ) ( <i>on leave term(s) II, III</i> ), M. Jenike
Visiting assistant professor:	D. Proctor

Anthropology is the study of humanity in all its cultural, biological, linguistic, 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; linguistic diversity; 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, linguistic anthropology, and ethnology. Faculty members provide expertise in a number of ethnographic areas, including North and West Africa, India, East Asia, the Middle East, and North America. Topical interests include archaeological methods, refugee communities, medical anthropology, linguistic anthropology, biological anthropology, forensic anthropology, and museum studies. The department maintains two well-equipped laboratories, as well as collections of archaeological and ethnographic materials from many culture areas. The department holds a full suite of geophysical equipment for non-invasive archaeology and also provides equipment for audio and video data collection and transcription to support research in the cultural and linguistic anthropology subfields.

## Required core courses for the major in anthropology

Students who complete the major will demonstrate an understanding of unique concepts and theoretical

perspectives of anthropology. They will apply methodological approaches used in anthropology and comprehend and critically analyze research literature. Moreover, they will be able to explain the relevance of anthropology to understanding contemporary human life.

The major requires the following core courses plus one of the tracks listed below.

1. The following introductory courses:
  - a. ANTH 110: *Cultural Anthropology* or ANTH 130: *Linguistic Anthropology*
  - b. ANTH 120: *World Prehistory*
  - c. ANTH 140: *Biological Anthropology*
2. ANTH 200: *History of Anthropological Ideas* (Students are expected to complete this course during their sophomore year and no later than the end of their junior year.)
3. ANTH 401: *Research Preparation in Anthropology* (taken in the spring of the junior year)
4. *Senior Experience* foundation course: ANTH 430 or any 6-unit 500- or 600-level course in Anthropology taken in the senior year. This is in addition to the upper-division seminar elective requirement (courses numbered in the 500s) for any of the tracks.
5. ANTH 699: *Senior Experience in Anthropology* (2 units) taken concurrently with the senior experience foundation course.
6. Completion of the requirements for one of the tracks listed below.

### **Required for the anthropology major: cultural anthropology and general track**

1. Students are expected to complete the following methods courses during their sophomore year and no later than the end of their junior year:
  - a. ANTH 207: *Quantitative Analysis in Anthropology*
  - b. ANTH 210: *Research Methods in Cultural Anthropology*
2. Four six-unit elective courses in anthropology numbered 300 or above, 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: linguistic anthropology track (suspended pending review of the curriculum)**

1. Students are expected to complete the following methods courses by the end of their sophomore year and not later than the end of their junior year:
  - a. ANTH 207: *Quantitative Analysis in Anthropology*
  - b. ANTH 210: *Research Methods in Cultural Anthropology*
2. ANTH 330: *Language and Culture* or ANTH 331: *Introduction to Sociolinguistics*
3. ANTH 430: *Methods in Linguistic Anthropology*
4. ANTH 530: *Topics in Linguistic Anthropology* or ANTH 531: *Semiotics*
5. One additional six-unit elective course in anthropology numbered 300 or above

*Note:* All required courses in the linguistic anthropology track also apply towards completion of the cultural anthropology track. The linguistic anthropology track is suspended pending review of the curriculum.

### Required for the anthropology major: archaeology track

1. Students are expected to complete the following methods courses during their sophomore year and no later than the end of their junior year:
  - a. ANTH 207: *Quantitative Analysis in Anthropology*
  - b. ANTH 525: *Research Methods in Archaeology* or another approved field experience
  - c. ANTH 222: *Historic Preservation Theory and Practice*
2. Six units of ANTH 422: *Archaeological Collections Management*
3. Three six-unit elective courses in anthropology numbered 300 or above, including ANTH 520: *Topics in Archaeology* or a related 500-level seminar.

### Required for the anthropology major: biological anthropology track

1. BIOL 130: *Integrative Biology: Cells to Organisms*
2. BIOL 150: *Integrative Biology: Organisms to Ecosystems*
3. ANTH 207: *Quantitative Analysis in Anthropology* or BIOL 170: *Integrative Biology: Experimental Design and Analysis*. ANTH 210 *Research Methods in Cultural Anthropology* is recommended for students pursuing an interest in biocultural anthropology via the biological anthropology track. Students are expected to complete this requirement during their sophomore year and no later than the end of their junior year.
4. Three six-unit elective courses in anthropology numbered 300 or above, including ANTH 540: *Topics in Biological Anthropology*.
5. Three six-unit courses in biology, chemistry, geosciences, mathematics, or psychology (347 & 348 only), at least two of which must be psychology (347 & 348 only) or biology or courses numbered 200 or above AND at least one of which must be a laboratory course.

### Senior Experience in anthropology

The Department of Anthropology's *Senior Experience* is a two-course sequence which is 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, and move on in their sophomore year to a three-course theory and methods sequence. After further exploration of their specific interests within anthropology through elective courses and off-campus study, each anthropology student develops a plan for their *Senior Experience* by the end of the spring term of their junior year. Typically, students will develop this plan in **ANTH 401: Research Preparation**. However, students who are studying off-campus during spring of their junior year will need to consult with their advisor about an alternative to ANTH 401, including the addition of 6 credits of at least 400-level coursework to their requirements for the major.

Following from the plan developed in the junior year, students will enroll in a **Senior Experience foundation course** in their senior year that will serve as the basis for *Senior Experience* work. Any 500- or 600-level course in Anthropology can serve as the *Senior Experience* foundation course. Concurrent with the foundation course, students must enroll in 2 units of ANTH 699 with the foundation course instructor, for which they will complete additional mentored independent work that results in a research paper, exhibit, film, or other product that demonstrates their proficiency in anthropological knowledge. Students are also required to present their project in a classroom or public forum, typically either at the end of the foundation course, or during spring term at a formal symposium for juniors enrolled in ANTH 401.

## Required for the minor in anthropology

1. Two of the following courses:
  - ANTH 110: *Cultural Anthropology* or ANTH 130: *Linguistic Anthropology*
  - ANTH 120: *World Prehistory*
  - ANTH 140: *Biological Anthropology*
2. Three six-unit electives in anthropology, selected from courses numbered 200 and above, except ANTH 401
3. One six-unit upper-division seminar (courses numbered in the 500s)

## Teacher certification in social studies

Anthropology majors can seek certification to teach social studies at the secondary level. For certification in broad-field social studies, students must complete the major and a minimum of two courses each in two other social studies (economics, government/political science, history, or psychology) and at least one course in each of the remaining social studies. Students are strongly encouraged to take a course in U.S. history and a course in global history. A course in environmental studies is also required. Students can seek endorsement to teach English as a second language by completing the Teaching ESL minor in linguistics. Students who plan to seek teacher certification should review the requirements in the Education section of the catalog and meet with the director of teacher education, preferably before the end of the sophomore year.

## Courses - Anthropology

### 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 language, kinship, and religion as cultural systems, as well as to forms of social control, stratification and inequality in relation to culture (including gender, race, ethnicity, and class). Social patterns and processes within and across cultures examined through ethnographic cases studies from around the world. PREREQUISITES: Freshman or sophomore standing; consent of instructor required for juniors and seniors *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. This course may not be taken on a Satisfactory/Unsatisfactory basis. PREREQUISITES: Freshman or sophomore standing; consent of instructor required for juniors and seniors *Units: 6.*

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

### **ANTH 130: LINGUISTIC ANTHROPOLOGY**

In this introductory course, students will learn basic concepts and theories in linguistic anthropology, begin to understand the complex relationship between language and culture, survey some of the important literature in the field, learn linguistic ethnographic methods, and work on hands-on projects that will demonstrate what they have learned. Classes will be a mix of lecture, discussion, and project work. PREREQUISITES: Freshman or sophomore standing; consent of instructor required for juniors and seniors *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. PREREQUISITES: Freshman or sophomore standing; consent of instructor required for juniors and seniors *Units: 6.*

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

### **ANTH 191: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **ANTH 195: INTERNSHIP IN ANTHROPOLOGY**

Applied work in anthropology arranged and carried out under the direction of an instructor. 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **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. PREREQUISITES: 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. *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. PREREQUISITES: 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. *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 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. PREREQUISITES: 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. *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 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 will take part in field research. When this course is scheduled at 8-noon TR, class will dismiss early for scheduled convocations. PREREQUISITES: ANTH 120 *Units: 6.*

*Also listed as Environmental Studies 260*

*Prerequisite: ANTH 120*

### **ANTH 222: HISTORIC PRESERVATION THEORY AND PRACTICE**

Historic preservation endeavors to identify and conserve historic objects, properties, and landscapes. It has become a focal task for many anthropologists today. This course introduces students to the basic theory of historic preservation, the laws guiding practice, and the techniques used by historic preservation professionals. *Units: 6.*

### **ANTH 300: TOPICS IN ANTHROPOLOGY**

An examination of a particular topic in contemporary anthropology. The specific topic investigated changes each year or term.

*Topic for Fall 2022: Migration & Health*

Prerequisites: sophomore standing, ANTH 110 or instructor consent

This course explores the intersection between migration and the political economic, and social dimensions of health and well-being among migrants, their families, and their communities. Drawing on a wide range of contemporary ethnographic case studies, we will explore how global and local processes structure the ways migrants are rendered differently vulnerable, while also recognizing how they actively assess and navigate these challenges in their daily lives. While experiences of movement are critical to this course, we will also consider the experiences of those "left behind," such as the children of migrant parents. Issues to be explored include transnationalism, race, gender, citizenship, structural violence, and health disparities.

*Units: 6.*

*Prerequisite: sophomore standing, ANTH 110 or instructor consent*

### **ANTH 306: ANTHROPOLOGY OF GENDER**

An anthropological approach to the study of gender and a/sexuality, and how they intersect with other dimensions of social difference such as race, class, and ethnicity. Topical, ethnographic approach to examining these intersections. Focus on issues such as sexual behavior, reproduction, parenting, transgender identity, work, communication, and violence. PREREQUISITES: ANTH 110 or GEST 100 *Units: 6.*

*Also listed as Gender Studies 350*

*Prerequisite: ANTH 110 or GEST 100*

### **ANTH 314: GLOBAL HEALTH**

An introduction to the multidisciplinary field of global health, emphasizing health inequities, transnational health issues, and partnership-based approaches to meeting important public health challenges. Topics include social and ecological determinants of health as well as strategies for prevention and care. Analysis of historical case studies and discussion of contemporary health concerns. Discussion/lecture format; writing, exams and presentations. PREREQUISITES: Sophomore Standing *Units: 6.*

*Prerequisite: Sophomore Standing*

### **ANTH 320: ARCHAEOLOGY OF GENDER AND SOCIAL CLASS**

An examination of the relationship between gender, social class, and material culture. Focus on how social roles and statuses are reflected in the archaeological record and on the problems in identifying and determining social roles and statuses in prehistory. Readings include studies from both the Old and New Worlds and modern theoretical approaches. PREREQUISITES: ANTH 120 *Units: 6.*

*Also listed as Gender Studies 351*

*Prerequisite: ANTH 120*

### **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. PREREQUISITES: ANTH 120 *Units: 6.*

*Prerequisite: ANTH 120*

### **ANTH 326: BIZARRCHAEOLGY**

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. PREREQUISITES: ANTH 120 *Units: 6.*

*Prerequisite: ANTH 120*

### **ANTH 328: PUBLIC ARCHAEOLOGY**

An exploration of ethical and legal concerns surrounding archaeology: the ownership and treatment of archaeological remains and relations between archaeologists and descendent communities. Topics include the

ethics and legality of collecting looting, and the antiquities market; archaeology and nationalism; repatriation of skeletons and artifacts; and professional responsibilities of archaeologists. PREREQUISITES: Sophomore standing and ANTH 120, an ARHI course (preferably ancient to Renaissance), or consent of instructor *Units: 6.*

*Prerequisite: Sophomore standing and ANTH 120, an ARHI course (preferably ancient to Renaissance), or consent of instructor*

### **ANTH 330: LANGUAGE AND CULTURE**

An introduction to the core concepts of linguistic anthropology, definitions of language, basic methods of linguistic anthropology (observation, transcription, analysis, ethnography), power and language, language discrimination, and language ideology theory. Lectures, discussions, and labs. PREREQUISITES: ANTH 110 or ANTH 130 or LING 150 *Units: 6.*

*Also listed as Linguistics 330*

*Prerequisite: ANTH 110 or ANTH 130 or LING 150*

### **ANTH 331: 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. PREREQUISITES: LING 150 or ANTH 110 or ANTH 130 *Units: 6.*

*Also listed as Linguistics 325*

*Prerequisite: LING 150 or ANTH 110 or ANTH 130*

### **ANTH 332: SIGNIFYING IDENTITY: THE SEMIOTICS OF EMBODYING MUSICAL GENRE AFFILIATIONS**

The exploration of how people embody and display their identities as they relate to musical genres. From Doc Martens to zoot suits, body mod to makeup, we will learn about the semiotics of musical genre affiliations, paying attention to how embodied expressions of affiliation intersect with different aspects of identities such as ethnicity, queerness, or race. Class includes discussions, projects, and speakers. PREREQUISITES: Sophomore Standing *Units: 6.*

*Also listed as Musicology 232, Linguistics 232*

*Prerequisite: Sophomore Standing*

### **ANTH 337: INDIGENEITY UNLEASHED: PERSPECTIVES OF INSTITUTIONAL DECOLONIZATION TODAY**

This course centers Indigeneity by exploring how we may practice and enact decolonization at institutions through ethnographic analyses and studying talk and symbolic practice. We will equip students with the skills to identify and assess how colonialism currently affects them today in an effort to create innovation around systemic structural change. Using an interdisciplinary lens students will investigate the topic through music, art, literature, and ethnographic research. Field experiences and guest presenters from Indigenous communities will be an important component of this course. PREREQUISITES: Sophomore standing *Units: 6.*

*Also listed as Music Education and Pedagogy 337, Ethnic Studies 337*

*Prerequisite: Sophomore standing*

### **ANTH 340: HUMAN BIOLOGY, EVOLUTION, AND HEALTH**

Students will develop an understanding of modern human biology as the outcome of interactions between evolved genomes and the myriad environments in which we are born, develop and live out our lives. Topics of study will include evolutionary approaches to reproduction, growth and development, health, behavior, adaptation, and life history. PREREQUISITES: ANTH 140, BIOL 150, or consent of instructor *Units: 6.*

*Prerequisite: ANTH 140, BIOL 150, or consent of instructor*

### **ANTH 341: HUMAN VARIATION**

A survey of human biological variation and adaptation. Topics include the geographic distribution of human variation; evolutionary approaches to understanding human diversity; historic and modern concepts of race and ethnicity; human biological adaptations to disease, climate, poverty, and other stressors; and the genetics of simple and complex traits. PREREQUISITES: ANTH 140, BIOL 110, or consent of instructor *Units: 6.*

*Also listed as Ethnic Studies 341*

*Prerequisite: ANTH 140, BIOL 110, or consent of instructor*

### **ANTH 342: MEDICAL ANTHROPOLOGY**

An introduction to the comparative, cross-cultural study of health, healing, and beliefs about the body and illness. Topics covered include: (1) biocultural approaches to understanding health; (2) social determinants of health (how social inequalities become embodied); (3) medical systems, including biomedicine, as cultural systems of knowledge and practice; (4) the social construction of illness and health; and (5) an introduction to global health. PREREQUISITES: Sophomore standing, and ANTH 110 or 140 *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. PREREQUISITES: ANTH 140 or consent of instructor *Units: 6.*

*Prerequisite: ANTH 140 or consent of instructor*

### **ANTH 345: DISTRIBUTED COGNITION AND THE EXTENDED MIND**

The new science of the mind treats cognition as a distributed process involving the brain, body, and world. This seminar explores the role of material settings and tools, bodily engagement, social interaction, and cultural processes in human reasoning, problem solving, and learning. Students will write short papers examining aspects of cognitive activity in real-world settings. PREREQUISITES: PHIL 105 recommended *Units: 6.*

*Also listed as Cognitive Science 345, Psychology 345, Education Studies 345*

*Prerequisite: PHIL 105 recommended*

### **ANTH 347: INTRODUCTION TO FORENSIC ANTHROPOLOGY**

This course is an introduction to forensic anthropology and human osteology, including a comprehensive study of the human skeleton and sections on determining ancestry, sex, and age of a skeleton. Further topics include how to approach a crime scene, determining forensic significance, and the postmortem processes of the human body. PREREQUISITES: Sophomore standing required; ANTH 140 recommended *Units: 6.*

*Prerequisite: Sophomore standing required; ANTH 140 recommended*

### **ANTH 348: PRIMATE BEHAVIOR AND ECOLOGY**

This course provides an introduction to the Order *Primates*. In addition to exploring the behavior and ecology of prosimians, monkeys, and apes, the course will cover techniques in primate behavioral observation. Further, biological and social adaptations will be examined in an evolutionary context. PREREQUISITES: Sophomore standing and one of the following: ANTH 140, BIOL 140, BIOL 150, consent of instructor *Units: 6.*

*Prerequisite: Sophomore standing and one of the following: ANTH 140, BIOL 140, BIOL 150, consent of instructor*

### **ANTH 353: READING ETHNOGRAPHY**

This seminar explores ethnography as the defining feature of cultural anthropology. Reading a range of articles and booklength works, students survey several ethnographic genres including classic realist, experimental, narrative, self-reflexive, and critical ethnography. Students also gain experience leading discussion and delivering oral reports and presentations. PREREQUISITES: ANTH 110 or sophomore standing *Units: 6.*

*Prerequisite: ANTH 110 or sophomore standing*

### **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. PREREQUISITES: ANTH 110 or consent of instructor *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. PREREQUISITES: ANTH 110 or consent of instructor *Units: 6.*

*Also listed as Ethnic Studies 335*

*Prerequisite: ANTH 110 or consent of instructor*

### **ANTH 364: ETHNOGRAPHY OF EAST ASIA**

A critical and comparative examination of key areas of sociocultural change in present-day East Asia. Focusing on China, we address new areas of research in East Asian anthropology such as demographic change, modernization, urbanization and stratification, gender and the body politic, sexuality, pop culture, consumption, ethnic minorities and national cultural identities. PREREQUISITES: ANTH 110 or sophomore standing *Units: 6.*

*Also listed as East Asian Studies 364*

*Prerequisite: ANTH 110 or sophomore standing*

### **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: national cultural identity, historical consciousness, family and gender ideologies, the Heisei recession, invisible and

visible others, demographic change, sexuality, pop culture, youth culture, multiculturalism, and recovery from calamity. PREREQUISITES: ANTH 110 or sophomore standing *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.* PREREQUISITES: Must be attending the Lawrence 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. PREREQUISITES: Sophomore standing and one course in anthropology or consent of instructor *Units: 6.*

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

### **ANTH 377: CULTURE AND AGING**

This course uses ethnographic studies from non-Western and Western societies to understand how the experience of aging throughout the life course not only differs cross-culturally, but also within the same society over time in response to increased longevity and biomedical advances. Of particular concern will be cultural constructions of health, well-being, disability, and dependency, including in-depth analysis of aging in Asia. PREREQUISITES: ANTH 110 or sophomore standing *Units: 6.*

*Prerequisite: ANTH 110 or sophomore standing*

### **ANTH 378: ANTHROPOLOGY OF FOOD**

All humans must consume food in order to live, but how "food" is defined, produced, procured, and interacted with is subject to endless variation. This class examines how food becomes more than just sustenance: how food acts as a means of building identities, making meaning, organizing society, and exerting power. PREREQUISITES: ANTH 110 or consent of instructor *Units: 6.*

*Prerequisite: ANTH 110 or consent of instructor*

### **ANTH 390: TUTORIAL STUDIES IN ANTHROPOLOGY**

Advanced study of selected topics. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **ANTH 391: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **ANTH 395: INTERNSHIP IN ANTHROPOLOGY**

Applied work in anthropology arranged and carried out under the direction of an instructor. 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **ANTH 399: INDEPENDENT STUDY IN ANTHROPOLOGY**

Advanced research. Students considering an honors project should register for this course, for one or more terms. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **ANTH 401: RESEARCH PREPARATION IN ANTHROPOLOGY**

Students will develop advanced library research skills with a focus on anthropological resources and topics. Each student will write a thematic annotated bibliography based on library research, consider ethical implications of empirical research on the topic they have chosen, and formulate a plan for their senior experience foundation and independent study courses. This course will also explore career development for anthropology majors. Seminar. PREREQUISITES: ANTH 200 and junior or senior standing *Units: 6.*

*Prerequisite: ANTH 200 and junior or senior standing*

### **ANTH 422: PRACTICUM IN ARCHAEOLOGICAL COLLECTIONS MANAGEMENT**

Applied work in all aspects of archaeological collections management from cleaning and conservation to cataloguing and storage. Students will work with Lawrence's existing archaeological collections and materials generated from ongoing field and laboratory research. Collection projects vary from term to term. Course may be repeated in subsequent terms for no more than a total of 6 units. PREREQUISITES: ANTH 222 *Units: 2 TO 6.*

*Prerequisite: ANTH 222*

### **ANTH 430: METHODS IN LINGUISTIC ANTHROPOLOGY AND SOCIOLINGUISTICS**

A hands-on introduction to advanced linguistic anthropology and sociolinguistics methods and relevant theories. Will cover transcription, discourse analysis, conversation analysis, and narrative analysis. Classes will be a combination of labs, workshops, and seminars. Prerequisites are non-negotiable. PREREQUISITES: Junior standing, and ANTH 210, ANTH 330, or ANTH 331 *Units: 6.*

*Also listed as Linguistics 430*

*Prerequisite: Junior standing, and ANTH 210, ANTH 330, or ANTH 331*

### **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. PREREQUISITES: Must be attending the LU Francophone Seminar *Units: 6.*

*Also listed as French 400, Global Studies 402*

*Prerequisite: Must be attending the LU Francophone Seminar*

### **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*

*Topic for Fall 2022: Food Justice Movements*

Prerequisites: Junior standing and at least two courses in anthropology or consent of instructor  
Carole Counihan and Penny Van Esterik write that “Food is a powerful lens on capital, labor, health, and the environment” (Food and Culture: A Reader, 2013:9). This course draws upon the theories, methodologies and cultural knowledge of anthropology to explore food activism and various food justice movements. *Units: 6.*

*Prerequisite: Junior standing and at least two courses in anthropology or consent of instructor*

### **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. PREREQUISITES: Junior or senior standing and at least two other courses in the social sciences *Units: 6.*

*Also listed as Ethnic Studies 512*

*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. *Topic for*  
This course *Units: 6.*

*Prerequisite: ANTH 120 and junior standing or consent of instructor*

### **ANTH 522: TOPICS IN MUSEUM STUDIES**

An examination of a particular topic in contemporary museum studies, focused on anthropological collections and museums. 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. Course may be repeated when topic is different. *Units: 6.*

*Prerequisite: ANTH 222*

### **ANTH 525: 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 will take part in field research. When this course is scheduled at 8-noon TR, class will dismiss early for scheduled convocations. PREREQUISITES: ANTH 120 or instructor approval. ANTH 222 is recommended. *Units: 6.*

*Prerequisite: ANTH 120 or instructor approval. ANTH 222 is recommended.*

### **ANTH 530: TOPICS IN LINGUISTIC ANTHROPOLOGY**

An examination of a particular topic in linguistic anthropology. The specific topic being investigated will change from year to year. Students are expected to do advance reading and independent research. Course may be repeated when topic is different. *Units: 6.*

*Also listed as Linguistics 532*

*Prerequisite: ANTH 330, ANTH 331, or LING 325 and junior standing, or consent of instructor*

### **ANTH 531: SEMIOTICS**

Semiotics is the study of signs, symbols, and signification in social life. This course will cover semiotic theory, including theorists such as Saussure, Peirce, Jakobson, Lévi-Strauss, Barthes, and Bakhtin, and the application of semiotics to the study of language and social life, conducted through lectures and seminar-style discussions. PREREQUISITES: ANTH 330/LING 330 or ANTH 331 *Units: 6.*

*Also listed as Linguistics 531*

*Prerequisite: ANTH 330/LING 330 or ANTH 331*

### **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. May be repeated when topic is different. *Topic for*

This course *Units: 6.*

*Prerequisite: ANTH 140 and one other course in anthropology; or BIOL 150 and instructor's consent; and junior or senior standing*

### **ANTH 542: ANTHROPOLOGY AND PUBLIC HEALTH**

This advanced discussion seminar considers applied critical medical anthropology's contributions, in terms of theory, research, and practice, to addressing community and global health concerns. With a political-economic framework, we will focus on the social determinants of health and how both macrostructural forces and local conditions have to be considered for effective health development. Reading response papers, final research paper and presentation. PREREQUISITES: ANTH 342 or ANTH 340, and junior or senior standing *Units: 6.*

*Prerequisite: ANTH 342 or ANTH 340, and junior or senior standing*

### **ANTH 551: ANTHROPOLOGY OF BIOMEDICINE**

This advanced seminar, for students who have already had an introduction to medical anthropology or to poststructural anthropological theory, draws from critical theory and ethnographic research to study

biomedicine as a system of knowledge and social practice, including discussion of the radical societal changes and ethical debates arising from the global application of biomedical technologies. Response papers, final research paper and presentation. PREREQUISITES: ANTH 342 or 200, and junior or senior standing *Units: 6.*

*Prerequisite: ANTH 342 or 200, and junior or senior standing*

### **ANTH 552: DISABILITY AND CULTURE**

Disability is a social and lived category fundamental to human experience. This advanced discussion seminar draws from experiential, reflexive, phenomenological, and critical approaches in cultural and medical anthropology to cross-culturally explore the subjectivities of perceived disabilities in both local and global worlds. Topics may include: autism, learning disabilities, bipolar disorder, schizophrenia, chronic pain, d/Deaf culture, and other categories of social impairment. Papers, research paper and presentation.

PREREQUISITES: ANTH 110 or ANTH 342, and junior or senior standing *Units: 6.*

*Prerequisite: ANTH 110 or ANTH 342, and junior or senior standing*

### **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.

*Units: 6.*

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

### **ANTH 590: TUTORIAL STUDIES IN ANTHROPOLOGY**

Advanced study of selected topics. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **ANTH 591: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **ANTH 595: INTERNSHIP IN ANTHROPOLOGY**

Applied work in anthropology arranged and carried out under the direction of an instructor. 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **ANTH 599: INDEPENDENT STUDY IN ANTHROPOLOGY**

Advanced research. Students considering an honors project should register for this course, for one or more terms. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

**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. PREREQUISITES: ANTH 501 and senior standing or consent of instructor. *Units: 6.*

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

**ANTH 690: TUTORIAL STUDIES IN ANTHROPOLOGY**

Advanced study of selected topics. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

**ANTH 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

**ANTH 695: INTERNSHIP IN ANTHROPOLOGY**

Applied work in anthropology arranged and carried out under the direction of an instructor. 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

**ANTH 699: INDEPENDENT STUDY IN ANTHROPOLOGY**

Advanced research. Students considering an honors project should register for this course, for one or more terms. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

# STUDIO ART

<b>Professors:</b>	R. Neilson ( <i>Frederick R. Layton Professor of Art, chair</i> ), B. Rinehart
<b>Associate professor:</b>	J. Shimon
<b>Visiting assistant professors:</b>	T. Conrad, B. Sievers
<b>Instructor:</b>	M. Sullivan

An integral part of a liberal arts curriculum, the courses of the studio art department encourage aesthetic awareness and appreciation by emphasizing the interdependence of art-making, art history, and other intellectual fields. Certification for teaching K-12 is available in conjunction with the studio art major. Students planning to major in studio art should take the introductory 100-level courses required for the major in their freshman and sophomore years. Students may take a maximum of 90 units in the studio art department.

## Required for the major in studio art

Students who major in studio art will learn the principles of two-dimensional design (line, shape, texture, value, color theory, balance, rhythm, emphasis, illusion of space, etc.), three-dimensional design (form, function, dimensionality, line, plane, volume, mass, space, texture, light, color, balance, scale, proportion, materials, etc.), and four-dimensional design (elements of time, narrative, non-narrative, multiples, experimental structure, installations, etc). Students will generate and propose project ideas for a fully realized body of work to be included in ongoing exhibitions, installations and public art displays. Moreover, they will recognize the continuum of art history, theory, and criticism to provide background and context for critiquing and producing art, and they will interpret contemporary art and design and its relationship to art history and visual culture. In so doing, they will implement the communication skills required for evaluating art. At the conclusion of the major, students will produce a fully realized body of work backed by an artist statement and properly presented in the Senior Exhibition.

The major in studio art requires the following:

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

## Senior Experience in studio art

The studio art *Senior Experience* consists of two separate yet complementary components: ART 600: *Senior Seminar* (usually offered Term I) 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.

## Required for the minor in studio art

1. A minimum of six studio art courses (36 units) to include:
  - a. Two 100-level studio art courses
  - b. One course (6 units) numbered 500 or above
  - c. Three additional courses (18 units)
2. A grouping of works in the senior minors' exhibition

## Teacher certification in art (K-12)

Studio art majors may seek certification to teach art in grades K-12. Recommended art courses for certification include ART 200, 240, 250, and 585, and ARHI 100 and 102. These courses may be taken in conjunction with or in addition to the studio art major requirements. Additional recommended courses to expand knowledge of media and processes are ART 220, 230, and 270. Students can add an endorsement for a second area (such as English as a second language) by completing the appropriate minor. Students who plan to seek teacher certification should notify their advisor, review the requirements in the Education section of the catalog, and meet with the director of teacher education as soon as possible, preferably before the end of the sophomore year.

## Courses - Studio Art

### ART 100: INTRODUCTION TO 3D ART

An introduction to studio art and the fundamental principles of 3-Dimensional design. Projects, lectures, readings, class discussions, and critiques examine elements of 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 105: INTRODUCTION TO COMPUTER DESIGN

An introduction to computer design utilizing the Adobe Creative Suite (Photoshop, InDesign, Illustrator, &

Premiere) programs, emphasizing the creative development and implementation through a variety of 2D, 3D, & 4D media. Class work is based on exercises that strengthen visual research capabilities, design aesthetics, and output techniques with a variety of programs and equipment. Assigned projects address fundamental technical and conceptual problems suggested through artistic and commercial practice. Lectures, readings, discussions, and critiques explore elements of concept and design pertinent to design mediums and platforms. *Units: 6.*

*Also listed as Film Studies 105*

### **ART 110: INTRODUCTION TO 2D ART**

An introduction to 2-Dimensional mediums, 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, and critiques explore elements of concept and design pertinent to 2-Dimensional mediums. *Units: 6.*

### **ART 115: SPECIAL TOPICS IN ART**

*Topic for Fall 2022: Collage*

Prerequisites: None

Spontaneous, irreverent, personal, and political, collage is the ideal artistic medium for our time. This course provides an introduction to the art of collage, photomontage, and assemblage. Students explore approaches to creating meaning through combining and transforming images and materials. Projects, lectures, readings, class discussions, and critiques examine historic and contemporary tactics and methods. Emphasis is placed on developing the practical and critical conceptual skills required in visual expression. *Units: 6.*

### **ART 120: IMAGE AND SOUND I**

A basic introduction to the fundamental forms, concepts, terminology, and techniques of filmmaking, contextualized within a critical/historical framework. Students explore multiple approaches to creating meaning through readings, screenings, lectures, discussions, and critiques, paired with video exercises and hands-on instruction. *Units: 6.*

*Also listed as Film Studies 120*

### **ART 125: INTERDISCIPLINARY MEDIA**

A course designed to provide students an opportunity to study interdisciplinary approaches to art making and knowledge seeking. Topics will vary based on instructors' areas of expertise and interests. May be repeated for credit when topic is different. *Units: 1 TO 98.*

*Also listed as Film Studies 110*

### **ART 191: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **ART 195: 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, internship site supervisor, and the Career Center to design, implement and evaluate their academic experience. 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.

**PREREQUISITES:** Counter Registration Required. *Units: 1 TO 98.*

*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 individual 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.

**PREREQUISITES:** Any 100-level Studio Art course *Units: 6.*

*Prerequisite: Any 100-level Studio Art course*

### **ART 212: DRAWING**

An exploration of drawing as a contemporary art medium with an emphasis on observational self-expression. Students will examine various modes of representation centered on the technical and creative aspects of mark-making. Mixed media and experimental elements are encouraged for those students wishing to expand the boundaries of traditional drawing media. **PREREQUISITES:** Any 100-level Studio Art course *Units: 6.*

*Prerequisite: Any 100-level Studio Art course*

### **ART 220: PRINTMAKING**

An introduction to printmaking including three or more of the following processes: monoprint, pressure print, stencil, linocut, woodcut, silk screen, and digital printmaking. There is a strong emphasis on conceptual development with practical application of both traditional 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. **PREREQUISITES:** Any 100-level Studio Art course *Units: 6.*

*Prerequisite: Any 100-level Studio Art course*

### **ART 222: ARTIST BOOKS**

Artist books are explored in a variety of forms including accordions, exposed and non-adhesive bindings, pop-ups, box making and alternative structures. Letterpress along with other forms of printmaking and surface treatments will be used. Techniques of cutting, folding, sewing, gluing, printing and working in dimension are examined in detail. Unique content is expected for each project. **PREREQUISITES:** Any 100-level Studio Art course *Units: 6.*

*Prerequisite: Any 100-level Studio Art course*

### **ART 223: IMAGE AND SOUND II**

A continuation of FIST 120 with expanded instruction in image design, sound design, sequencing, and concept development. Historical development of the medium and contemporary approaches to creative expression, representational ethics, and audience are emphasized through exercises, readings, lectures, demonstrations, discussions, and critiques, culminating in a final video project. PREREQUISITES: FIST 120 or consent of instructor *Units: 6.*

*Also listed as Film Studies 220*

*Prerequisite: FIST 120 or consent of instructor*

### **ART 224: SOUND DESIGN**

An introduction to film sound studies paired with hands-on exploration of cinematic audio recording and editing techniques, with emphasis on sound/image relationships and the use of sound to create meaning. Students will engage in close readings of critical and theoretical texts, view and discuss film screenings, and produce a series of short audio and video exercises, culminating in a final video project showcasing the creative use of film sound. PREREQUISITES: FIST 120 or consent of instructor *Units: 6.*

*Also listed as Film Studies 222*

*Prerequisite: FIST 120 or consent of instructor*

### **ART 225: SPECIAL TOPICS IN PRINTMAKING**

This course provides an introduction to specific peripheral processes of printmaking like papermaking, letterpress printing, and digital printmaking processes and applications. The focus is on research and studio practice in regards to printmaking as an art form with special emphasis on craft and conceptual development. Traditional and contemporary practices in each medium are explored in detail.

*Topic for Fall 2022: Paper & Print*

Prerequisites: 100 level ART course

This course provides an introduction to handmade paper and relief printmaking as an art form with special emphasis on craft and conceptual development. Traditional and contemporary practices in each medium are explored in detail. A variety of methods and processes are combined for each project to develop a unique narrative. Technical application, formal elements, and materiality play an important role in evaluating papermaking and relief printmaking as a form of visual expression. *Units: 6.*

*Prerequisite: ART 100 or ART 110*

### **ART 230: PHOTOGRAPHY**

An introduction to traditional black-and-white darkroom photography within a fine art context. Medium-format and 35mm SLR camera operations are covered along with darkroom instruction on processing film and making gelatin silver prints. Historic and contemporary ideas about photography as a medium are examined through projects, readings, lectures, demonstrations, discussions, critiques, and visiting artist presentations. PREREQUISITES: Any 100-level Studio Art course *Units: 6.*

*Also listed as Film Studies 231*

*Prerequisite: Any 100-level Studio Art course*

### **ART 240: NEW MEDIA IN ART**

An introduction to new media within a fine art context. Digital photography, experimental video, sound, photo book design, and blogging are covered as students use the Internet as a venue for presenting projects. The evolution of technology, new media theory, contemporary art discourse, and visual culture are examined through projects, readings, lectures, demonstrations, discussions, critiques, and visiting artist presentations. Mac-based. PREREQUISITES: Any 100-level Studio Art course *Units: 6.*

*Also listed as Film Studies 240*

*Prerequisite: Any 100-level Studio Art course*

### **ART 245: INTERARTS: INSTALLATIONS**

In this course students make projects that engage with space. Lectures, discussions, readings, and critiques will investigate contemporary interdisciplinary practices that involve site-specific installation of works of art, everyday objects, performances, projections, etc. Interactive works and immersive virtual reality will also be considered. Students will create a self-designed installation project that will be planned and executed over the duration of the term. PREREQUISITES: FIST 100, ART 100, ART 105, or ART 110, or consent of instructor *Units: 1 TO 98.*

*Also listed as Film Studies 245*

*Prerequisite: FIST 100, ART 100, ART 105, or ART 110, or consent of instructor*

### **ART 250: CERAMICS**

An introduction to the basic working methods of ceramics through hand-building techniques. Emphasis will be placed on conceptual development, sensitivity to three-dimensional form, and technical skills of surface and glazing. Lectures, readings, and individual research treat historical and contemporary approaches to expressive work in the ceramic medium. PREREQUISITES: Any 100-level Studio Art course *Units: 6.*

*Prerequisite: Any 100-level Studio Art course*

### **ART 256: SPECIAL TOPICS IN CERAMICS**

This course is a combination of research and studio practice. Through lectures, readings and discussions the class will survey the history of ceramics with the goal of informing the studio work for the course. Students will engage in independent research to develop ideas and critical thinking as well as building on a variety of ceramic skills to create a personal body of work. When scheduled on Tuesday-Thursday, class will dismiss early for University Convocations. *Units: 6.*

*Prerequisite: Any 100-level Studio Art course or consent of instructor*

### **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. PREREQUISITES: Any 100-level Studio Art course *Units: 6.*

*Prerequisite: Any 100-level Studio Art course*

### **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. PREREQUISITES: ART 200 *Units: 6.*

*Prerequisite: ART 200*

### **ART 311: THE FIGURE IN STUDIO ART**

An exploration of the use of the human form in contemporary art. Work includes figure studies in two- and three-dimensional media and advanced-level works on paper and sculptures based on these studies. Includes work with live models. PREREQUISITES: ART 100 and any 200 level studio art course *Units: 6.*

*Prerequisite: ART 100 and any 200 level studio art course*

### **ART 312: INTERMEDIATE DRAWING**

An emphasis on a more refined exploration of various models of the formal, conceptual, and personal modes of expression including issues of stylization, abstraction, and mixed media. Students will develop a cohesive body of work informed by an awareness of historical art movements and contemporary uses of the medium.

PREREQUISITES: ART 210 or ART 212 *Units: 6.*

*Prerequisite: ART 210 or ART 212*

### **ART 318: TOPICS IN INTERDISCIPLINARY ART**

A course designed to provide students an opportunity to study interdisciplinary approaches to art making and knowledge seeking. Topics will vary based on the faculty member's areas of expertise and interests. May be repeated for credit when topic is different. *Units: 6.*

*Also listed as Film Studies 318*

*Prerequisite: FIST 100 or instructor approval*

### **ART 319: PRINCIPLES OF EDITING**

A theoretical and practical introduction to connecting images and sound in a compelling way. The goal is to promote understanding of film, video, and new media as tools for creative expression and to help students think critically and make informed choices about editing. PREREQUISITES: FIST 100 or consent of instructor *Units: 6.*

*Also listed as Film Studies 319*

*Prerequisite: FIST 100 or consent of instructor*

### **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. Three or more of the following processes are used to enhance the conceptual and visual narrative inherent to this graphic medium, including collagraph, intaglio, plate and stone lithography, and relief. PREREQUISITES: ART 220 or ART 225 *Units: 6.*

*Prerequisite: ART 220 or ART 225*

### **ART 322: INTERMEDIATE ARTIST BOOKS**

A continuation of ART 222, exploring historical and contemporary bindings, and letterpress printing with an emphasis on conceptual ties between structure, process, and function. Additional surface treatments and printing techniques are used in conjunction with altered, collaborative, dimensional, movable books, and

historical binding. More advanced techniques of binding, printing, and working in dimension are examined in detail to enhance the conceptual and visual narrative inherent to this sequential medium. PREREQUISITES: ART 222 *Units: 6.*

*Prerequisite: ART 222*

### **ART 330: INTERMEDIATE PHOTOGRAPHY**

A continuation of ART 230 with an introduction to pinhole and 4x5 view cameras along with expanded darkroom instruction on sheet film processing and the cyanotype print. The history of photography and contemporary art issues related to the medium are examined through projects, readings, lectures, demonstrations, discussions, critiques, and visiting artist presentations. PREREQUISITES: ART 230 *Units: 6.*

*Also listed as Film Studies 331*

*Prerequisite: ART 230*

### **ART 340: INTERMEDIATE NEW MEDIA IN ART**

A continuation of Art 240 or 245 using new media within a contemporary art context. Digital photography, experimental video, social media, performance, and installation are covered while using the Internet and campus spaces as venues for projects. Contemporary art discourse is examined through projects, readings, lectures, demonstrations, discussions, critiques, and visiting artist presentations. Mac-based. PREREQUISITES: ART 240 or ART 245 *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 clay and glaze formulation 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. PREREQUISITES: ART 250 or ART 255 *Units: 6.*

*Prerequisite: ART 250 or ART 255*

### **ART 365: INTERMEDIATE TOPICS IN STUDIO ART**

A course designed to provide students an opportunity to study important issues in contemporary art not covered in other regularly offered classes. Topics will vary based on the faculty member's areas of expertise and interests. May be repeated for credit when topic is different. *Units: 6.*

*Prerequisite: Any 200-level studio art course*

### **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. PREREQUISITES: ART 270 *Units: 6.*

*Prerequisite: ART 270*

### **ART 371: DOCUMENTARY FORMS**

This course presents a broad overview of contemporary and historical documentary filmmaking practice through readings, screenings, discussion, and short video projects. Students will engage with critical dialogues and explore several distinct approaches to documentary production, including rhetorical, observational, participatory, and reflexive forms, culminating in a completed short documentary. PREREQUISITES: FIST 100 or consent of instructor *Units: 6.*

*Also listed as Film Studies 371*

*Prerequisite: FIST 100 or consent of instructor*

### **ART 372: AVANT-DOC**

An exploration of personal, experimental, and emerging approaches to documentary filmmaking through video projects, readings, screenings, lecture, discussion, and critique. This course examines both contemporary practice and historical intersections among filmmaking traditions, with a focus on engaging with critical dialogues and diverse ways of articulating relationships between maker, subject, and audience. PREREQUISITES: FIST 100 or consent of instructor *Units: 6.*

*Also listed as Film Studies 370*

*Prerequisite: FIST 100 or consent of instructor*

### **ART 373: ANIMATED DOCUMENTARY**

This course examines animated documentary as an emerging hybrid form that raises unique ethical considerations and interesting possibilities for representation and expression. Through readings, screenings, and creative exercises, students will learn several animation techniques and examine both contemporary practice and historical antecedents, with a focus on engaging with critical dialogues and diverse ways of articulating relationships between maker, subject, and audience. PREREQUISITES: FIST 100 or consent of instructor *Units: 6.*

*Also listed as Film Studies 372*

*Prerequisite: FIST 100 or consent of instructor*

### **ART 390: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **ART 391: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **ART 395: 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, internship site supervisor, and the Career Center to design, implement and evaluate their academic experience. 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.

**PREREQUISITES:** Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **ART 399: INDEPENDENT STUDY IN STUDIO ART**

Advanced creative research for students preparing for the senior exhibition or doing honors projects.

**PREREQUISITES:** Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **ART 403: IMAGE DESIGN**

This course will explore cinematic image design through hands-on workshops, film and video exercises, readings, screenings, discussion, and critique. Students will study foundational composition principles, learn new techniques in cinematography and lighting, and create short film and video projects that showcase the creative use of composition to create meaning. **PREREQUISITES:** FIST 100 or consent of instructor *Units: 6.*

*Also listed as Film Studies 403*

*Prerequisite: FIST 100 or consent of instructor*

### **ART 440: 16MM FILMMAKING**

Explore the artistic use of analog film in the digital age! In this hands-on course, students will learn the fundamentals of 16mm motion picture production and post-production, practicing both traditional and contemporary workflows with an emphasis on creative use of the medium. **PREREQUISITES:** FIST 100 or consent of instructor *Units: 6.*

*Also listed as Film Studies 440*

*Prerequisite: FIST 100 or consent of instructor*

### **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. **PREREQUISITES:** ART 300 and consent of instructor *Units: 6.*

*Prerequisite: ART 300 and consent of instructor*

### **ART 501: JUNIOR STUDIO ART PRACTICUM**

This course assists in the research, planning, design, and preparatory development of the junior level studio art major as they begin the process of conceptualizing and creating a mature body of work for the senior exhibition and/or honors projects. The "why and how" of art practice will also be addressed. This course will be taught as a seminar with a studio component. May be repeated once for credit. **PREREQUISITES:** Any 500-level studio art course or consent of instructor *Units: 3 OR 6.*

*Prerequisite: Any 500-level studio art course or consent of instructor*

## **ART 512: ADVANCED DRAWING**

An advanced exploration of drawing as a contemporary art medium with an emphasis on more complex self-expression and conceptual development. Current themes in contemporary visual culture will be examined as a place for students to contemplate his or her own voice in the continuum of the drawing discipline.

PREREQUISITES: ART 312 or consent of instructor *Units: 6.*

*Prerequisite: ART 312 or consent of instructor*

## **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. PREREQUISITES: ART 320 and consent of instructor *Units: 6.*

*Prerequisite: ART 320 and consent of instructor*

## **ART 522: ADVANCED ARTIST BOOKS**

A continuation of ART 322, exploring advanced research into combining book making techniques, with exploration of formal, theoretical and technical issues related to artist books 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. PREREQUISITES: ART 322 *Units: 6.*

*Prerequisite: ART 322*

## **ART 530: ADVANCED PHOTOGRAPHY**

A continuation of Art 330 with instruction in advanced analog photography practice within a contemporary art context. Project planning and implementation are emphasized as students work toward producing a self-designed project with a developed artist statement. The history of photography and contemporary art issues related to the medium are examined through readings, lectures, demonstrations, discussions, critiques, and visiting artist presentations. PREREQUISITES: ART 330 and consent of instructor *Units: 6.*

*Also listed as Film Studies 531*

*Prerequisite: ART 330 and consent of instructor*

## **ART 540: ADVANCED NEW MEDIA IN ART**

A continuation of Art 340 using new media at an advanced level. Digital photography, experimental video, social media, performance, and installation are covered while using the Internet and campus spaces as venues for projects. Contemporary art discourse is examined through projects, readings, lectures, demonstrations, discussions, critiques, and visiting artist presentations. Mac-based. PREREQUISITES: ART 340 and consent of instructor *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. PREREQUISITES: ART 350 and consent of instructor *Units: 6.*

*Prerequisite: ART 350 and consent of instructor*

### **ART 565: ADVANCED TOPICS IN STUDIO ART**

A more advanced and in-depth opportunity to study important issues in contemporary art not covered in other regularly offered classes. Current themes in contemporary visual culture will be examined as a place for students to contemplate the role and purpose of art in its larger societal context. May be repeated for credit when the topic is different. *Units: 6.*

*Prerequisite: Any 300-level studio art course*

### **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. PREREQUISITES: ART 370 and consent of instructor *Units: 6.*

*Prerequisite: ART 370 and consent of instructor*

### **ART 585: ART IN THE ELEMENTARY AND SECONDARY SCHOOLS**

A seminar on teaching art in the elementary, middle, and high school. Emphasis on curriculum planning, methods of instruction, and assessment of learning. PREREQUISITES: Taken concurrently with EDUC 560 history courses *Units: 2.*

*Also listed as Education 585*

*Prerequisite: Taken concurrently with EDUC 560 history courses*

### **ART 590: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **ART 591: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **ART 595: 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, internship site supervisor, and the Career Center to design, implement and evaluate their academic experience. 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.

PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **ART 599: INDEPENDENT STUDY IN STUDIO ART**

Advanced creative research for students preparing for the senior exhibition or doing honors projects.

PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **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. PREREQUISITES: Senior standing and declared major in Studio Art or consent of the instructor *Units: 6.*

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

### **ART 601: SENIOR STUDIO ART PRACTICUM**

This course helps facilitate the studio art majors' preparations for the senior exhibition departmental requirement by immersion in the creation and exhibition of a body of work. Guidance by visiting art professionals strengthens students' synthesizing of information, ideas, and conceptual concerns. The "why and how" of art practice will also be addressed. This course will be taught as a seminar with a studio component. May be repeated once for credit. PREREQUISITES: ART 600 *Units: 3 OR 6.*

*Prerequisite: ART 600*

### **ART 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **ART 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **ART 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, internship site supervisor, and the Career Center to design, implement and evaluate their academic experience. 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.

PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

**ART 699: INDEPENDENT STUDY IN STUDIO ART**

Advanced creative research for students preparing for the senior exhibition or doing honors projects.

PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

# ART HISTORY

Associate professors:	E. Carlson ( <i>on leave term(s) III</i> ), D. Joyner ( <i>chair</i> )
Assistant professors:	N. Lin, B. Zinsli

Students who major in art history will develop a broad knowledge of the major monuments of art and their historical and cultural contexts. They will acquire and demonstrate the ability to look closely at works of art, provide precise and accurate descriptions, and analyze form and content. Through their studies, they will gain a detailed and sophisticated knowledge of a small group of works of art (selected by artist, period, medium, iconography, function, or some other organizing principle), and they will interpret and evaluate works of art in their historical and cultural context using appropriate art historical vocabulary. Through the course of the major, they will acquire a familiarity with differing theories and methods of art historical practice and show the ability to apply such theories appropriately. At the conclusion of the major, they will demonstrate proficiency in conducting art historical research and presenting the results of such research in both written and oral forms.

Students planning to major in art history should take the introductory 100-level course required for the major in their freshman or sophomore years.

## Required for the major in art history

The major in art history has the following requirements:

1. A minimum of nine art history courses (54 units) to include:
  - a. ARHI 101: *Introduction to Art History*
  - b. One 200- or 300-level course (6 units each) in each of the following periods or areas:
    - East Asian
    - Ancient/Medieval/Renaissance
    - Modern and Contemporary
  - c. One 400-level seminar course (6 units)
  - d. ARHI 680: *Senior Seminar*
  - e. Three additional art history courses (18 units)
2. One course in studio art (6 units)

## Senior Experience in art history

The art history *Senior Experience* consists of ARHI 680: *Senior Seminar*, 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.

## Required for the minor in art history

1. A minimum of six art history courses (36 units) to include:
  - a. ARHI 101: *Introduction to Art History*
  - b. Three courses at the 200 or 300 level (6 units each) to be taken from at least two of the following periods or areas:
    - Modern and Contemporary
    - Ancient/Medieval/Renaissance
    - East Asian
  - c. One 400-level seminar course (6 units)

## Off-campus study

Art history majors are encouraged to participate in one of Lawrence's international off-campus programs or the program at the Newberry Library in Chicago.

## Courses - Art History

### ARHI 101: *INTRODUCTION TO ART HISTORY*

This lecture course aims to develop skills in the critical analysis of a wide range of visual materials. Issues and problems in the making, exhibition, and understanding of images and objects will be explored through lectures, classroom discussion of key works, critical reading of primary and secondary sources, and visits to the Wriston Print Study Room. Students will be assessed through exams and writing assignments. *Units: 6.*

### ARHI 130: *ART OF ISLAMIC CULTURES*

This course introduces students to the rich artistic traditions generated by Islamic cultures from the 7th century onward. While considering the Umayyad, Abbasid, Ilkhanid, and Mughal dynasties, among others, we examine architecture, illuminated manuscripts, metalwork, ceramics, and more. A broad selection of readings and activities supplements class discussions on themes that include the role of art in Islam, relationships between art and power, and the importance of cross-cultural exchange. *Units: 6.*

*Also listed as Global Studies 130*

### ARHI 135: *TEMPLES AND TOGAS: ARTS OF THE ANCIENT WORLD*

This introductory class examines the art and architecture of ancient Greece and Rome, spanning from the Minoans on Crete to the Arch of Titus in the Roman Forum. Students will learn about the progression of styles, functions, and historical meanings of these objects as they are introduced to basic art historical methods. *Units: 6.*

*Also listed as Classics 135*

### ARHI 160: *CANTIGAS DE SANTA MARIA*

The Cantigas de Santa Maria, a thirteenth century songbook from Spain, contains hundreds of songs and dozens of miniatures. In this class, we analyze the poetry, music, and artwork of the Cantigas in regular class meetings for the first five weeks of the term. Students submit short analytic papers in tenth week, but no classes are held after week five. *Units: 3.*

*Also listed as Musicology 111, Spanish 302*

### **ARHI 175: THE ARTS OF EAST ASIA**

An introduction to artistic traditions in China, Japan, and Korea, from prehistory to the 21st century, including tomb and temple sites, gardens, calligraphy, ink painting, woodblock prints, tea ceremony vessels, and contemporary art. Through a balance of broader art historical readings, primary texts, scholarly essays, and close-looking at objects, students will explore how an object's visual and material properties contribute to its function. *Units: 6.*

*Also listed as East Asian Studies 175*

### **ARHI 191: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **ARHI 195: INTERNSHIP IN ART HISTORY**

Applied work in art history arranged and carried out under the direction of a faculty member. Students might work for a gallery, museum, archive, auction house, a publication, or visual resource database. The academic internship is supplemented with readings, discussions, and assignments. The course grade will be based on submitted work evaluated by the supervising faculty member. PREREQUISITES: Sophomore standing *Units: 1 TO 98.*

*Prerequisite: Sophomore standing*

### **ARHI 205: VIKINGS TO VAULTINGS: ART AND ARCHITECTURE OF MEDIEVAL NORTHERN CULTURES**

This course examines the art and architecture associated with cultures from northern Europe from the fourth to the fourteenth centuries. Beginning with pre-Christian Germanic, Celtic, and Scandinavian examples, we will examine how these groups responded artistically to conversion, Latinity, the impact of Mediterranean traditions, and the establishment of new kingdoms throughout the long medieval millennium. *Units: 6.*

### **ARHI 206: MOSQUES & MINOTAURS: THE MEDIEVAL MEDITERRANEAN**

This course examines the art and architecture of cultures in the Mediterranean region (c. 400-1400). We begin with early Christian art in the waning Roman and developing Byzantine Empires and consider its evolution from Coptic Egypt to Petrarchian Italy. Additionally, we explore the artistic impact of the establishment of spread of Islam as well as the ongoing traditions of Sephardic Jews. *Units: 6.*

### **ARHI 213: GLASS, GOLD, AND GLORY: GOTHIC ART AND ARCHITECTURE**

The term "Gothic" as it is applied to European art and architecture from the mid-twelfth to the fifteenth century carries a wide range of connotations. In examining the inventive architecture, sculpture, manuscripts, metalwork, wall-paintings and textiles from these centuries, this class will compare the implications historically ascribed to "Gothic" with the ideas promoted by the cultures and individuals creating and using these inspired

objects. PREREQUISITES: ARHI 101 or sophomore standing *Units: 6.*

*Prerequisite: ARHI 101 or sophomore standing*

### **ARHI 215: *PARCHMENT, POWER, AND PLAY: ART OF THE MEDIEVAL MANUSCRIPT***

Medieval manuscripts offer extraordinarily immediate, hands-on access to the art, ideas, actions, and people of the long Middle Ages. Their pages, filled with epic literature, devout (and sometimes less than devout) prayers, scientific treatises, philosophical essays, law codes, and more, offer glimpses of a world long past and yet, sometimes, surprisingly familiar. This class examines masterful and mundane manuscripts made from the fifth to the fifteenth centuries as a means of introducing students both to the diverse and fascinating world of the Middle Ages and to their creative practices. Visits to regional collections to examine actual manuscripts and work with digitized libraries will supplement class discussions on topics including materials and production, the word made flesh, and subversive marginalia. PREREQUISITES: ARHI 101 or sophomore standing *Units: 6.*

*Prerequisite: ARHI 101 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. PREREQUISITES: ARHI 101 or sophomore standing *Units: 6.*

*Prerequisite: ARHI 101 or sophomore standing*

### **ARHI 225: *MUSIC IN THE MONASTERY***

This course examines intersections of music and art in pre- and early-modern monasteries. Students will gain facility analyzing visual and musical traditions as we explore themes such as the cosmos and community, gender, and the Christian body politic. Students will learn about varied disciplinary approaches to chant and polyphony, architecture and sculpture, the politics of enclosure, and practices of faith and spirituality, among other topics. PREREQUISITES: Sophomore Standing. *Units: 6.*

*Also listed as Musicology 225*

*Prerequisite: Sophomore Standing.*

### **ARHI 240: *FROM ROMANTICISM TO POST-IMPRESSIONISM: ART OF THE 19TH CENTURY***

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 how political instability, industrialization, imperialism, and the growth of popular culture influenced production, style, and presentation of painting and sculpture. PREREQUISITES: ARHI 101 or sophomore standing *Units: 6.*

*Prerequisite: ARHI 101 or sophomore standing*

### **ARHI 242: *ART OF THE AVANT-GARDE: 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 time period.

PREREQUISITES: ARHI 101 or sophomore standing *Units: 6.*

*Prerequisite: ARHI 101 or sophomore standing*

### **ARHI 244: *REPRESENTING IDENTITY IN 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. PREREQUISITES: ARHI 102 or sophomore standing *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.* PREREQUISITES: Must be attending the Lawrence London Centre. *Units: 6.*

*Prerequisite: Must be attending the Lawrence London Centre.*

### **ARHI 247: ART NOW: CONTEMPORARY ART IN LONDON**

This seminar will introduce students to the historical framework and theoretical tools to critically experience and examine the practices of contemporary British art through site visits to London museums, galleries, and studios. Students will explore such topics as: British and global identity, art as instruments of socio-political change, art reception, the changing gallery system, the global art market, DIY practices, and new media and technology. *Offered at the London Centre.* PREREQUISITES: Must be attending the Lawrence London Centre. *Units: 6.*

*Prerequisite: Must be attending the Lawrence London Centre.*

### **ARHI 248: LONDON'S BUILT ENVIRONMENT: 600 YEARS OF ARCHITECTURE**

This seminar will examine the rich architectural history of London. Through case studies, students will acquire an understanding of architectural vocabulary, historical periods and styles, and how humans have constructed and interacted with sacred and secular spaces, examples of which include St. Paul's Cathedral, the Houses of Parliament, Tate Modern, Neasden Temple, the Barbican, 2 Willow Road, and the Serpentine Galleries. *Offered at the London Centre.* PREREQUISITES: Must be attending the Lawrence London Centre. *Units: 6.*

*Prerequisite: Must be attending the Lawrence London Centre.*

### **ARHI 250: HISTORY OF PHOTOGRAPHY**

Introduction to photography's histories, from early attempts to fix light and shadows to the diverse digital practices of the present. Topics will include: social, scientific, and artistic uses of photography; theoretical and critical writings on photography and its place in our visual culture; and major figures, movements, and images. PREREQUISITES: ARHI 101 or sophomore standing *Units: 6.*

*Prerequisite: ARHI 101 or sophomore standing*

### **ARHI 272: AFRICAN-AMERICAN ART**

Beginning with the late eighteenth century and concluding with art today, this course examines African-American history through visual culture. We will examine how race relations in the United States were and are constructed through an examination of painting, sculpture, public monuments, photography, advertising, and performance. PREREQUISITES: Sophomore standing *Units: 6.*

*Also listed as Ethnic Studies 290*

*Prerequisite: Sophomore standing*

### **ARHI 275: *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. PREREQUISITES: One 300-level course in Spanish or consent of instructor *Units: 6.*

*Also listed as Spanish 425*

*Prerequisite: One 300-level course in Spanish or consent of instructor*

### **ARHI 284: *THE SPECTACLE OF EDO JAPAN***

This course will focus on the diverse artistic production and consumption practices within Edo-period Japan (1603-1868). Topics include the revival of classical Heian narratives like *The Tale of Genji*, the rise of an urban bourgeois culture, the prints and paintings depicting kabuki actors, courtesans, and ghosts, the reification of the tea ceremony and encounters with the West through trade. PREREQUISITES: ARHI 101 or 175 or sophomore standing *Units: 6.*

*Also listed as Global Studies 284, East Asian Studies 284*

*Prerequisite: ARHI 101 or 175 or sophomore standing*

### **ARHI 285: *THE TRANSFORMATION OF THE MODERN CITY: TOKYO, SEOUL AND SHANGHAI (1860-1945)***

This course explores the transformation of the cityscape in Tokyo, Seoul, and Shanghai. Topics include the emergence of the modern artist, the search for an “avant-garde” of the East, the modernization of public and private spaces, the introduction of film and photography and the rise of the “modern girl.” PREREQUISITES: ARHI 101 or 175 or sophomore standing *Units: 6.*

*Also listed as Global Studies 285, East Asian Studies 285*

*Prerequisite: ARHI 101 or 175 or sophomore standing*

### **ARHI 286: *THE POLITICS OF POWER IN MODERN AND CONTEMPORARY CHINESE ART***

Over the past century, China has witnessed the arrival of Western Imperialism, mass rebellion, revolution, and radical reconstruction under the Communist regime. This class will trace how artists attempted to intervene in social life to change its course of development and how art continues to affect radical social change.

PREREQUISITES: ARHI 101 or 175 or sophomore standing *Units: 6.*

*Also listed as East Asian Studies 286, Global Studies 286*

*Prerequisite: ARHI 101 or 175 or sophomore standing*

### **ARHI 290: *TOPICS IN INTERDISCIPLINARY APPROACHES TO ART HISTORY***

*Topic for Fall 2022: Marco Polo and Ibn Battuta*

Prerequisites: Sophomore Standing

This course will focus on two texts by famous travelers of the late medieval period, one from Europe and the other from the Middle East. Marco Polo was a traveler from Venice who wrote a “best-seller” about his trip to China. Ibn Battuta was a Moroccan traveler who began a journey to complete the Hajj in Mecca, but then kept traveling to sites all around the Mediterranean and as far away as Timbuktu (Mali) and China. This class will

focus on select passages from both of these medieval accounts. This half-credit course will meet twice a week for the first six weeks of the term. By Week 7, students will devise a question that will be the basis for a longer written analysis due at the end of the term. *Units: 3.*

*Also listed as Religious Studies 450*

### **ARHI 301: TOPICS IN ANCIENT ART**

An examination of a particular topic in ancient art history. Students are expected to carry out independent research through a series of guided assignments. The topic will change periodically. May be repeated when topic is different. Not open to students who have previously received or need to receive credit for ARHI 400 with the same topic. *Units: 6.*

*Prerequisite: 200-level art history course or consent of instructor*

### **ARHI 305: MEDIEVAL ECOLOGIES: ART, NATURE, AND THE ENVIRONMENT**

This class investigates intersections among people, arts, and the environment in European regions during the Middle Ages (c. 400-1400). Readings draw broadly from primary sources in translation, ecocritical studies, and environmental histories and dovetail with close examinations of images, objects, monuments, and sites across varied medieval landscapes. We question what constitutes medieval ecologies and consider their profound relevance for today's world. *Units: 6.*

*Also listed as Environmental Studies 305*

### **ARHI 315: INTRODUCTION TO THE ART MUSEUM: HISTORY, ISSUES, AND PRACTICES**

Introduction to art museums and exhibitions as objects of critical inquiry, and to issues and practices in the art museum field. Topics will include: history and evolution of collecting and display; museum exhibitions and knowledge formation; collection practices and ethics; exhibition theory and design; controversies, institutional critique, and the artist-as-curator. PREREQUISITES: Sophomore standing *Units: 6.*

*Also listed as Ethnic Studies 315*

*Prerequisite: Sophomore standing*

### **ARHI 320: CONTEMPORARY ART: CRITICAL QUESTIONS IN ART TODAY**

A study of art since 1960. Students will examine a diverse range of art works and the theories and strategies that have informed their production and exhibition. Students will learn about how artists today respond to such issues as gender, racial and ethnic identity, globalization, market capitalism, and new media and technology. PREREQUISITES: ARHI 101 or sophomore standing *Units: 6.*

*Prerequisite: ARHI 101 or sophomore standing*

### **ARHI 321: TOPICS IN MEDIEVAL AND RENAISSANCE ART**

An examination of a particular topic in medieval and renaissance art history. Students are expected to carry out independent research through a series of guided assignments. The topic will change periodically. Course may be repeated when topic is different. Not open to students who have previously received or need to receive credit for ARHI 420 with the same topic. *Units: 6.*

*Prerequisite: 200-level art history course or consent of instructor*

### **ARHI 331: TOPICS IN EAST ASIAN ART**

An examination of a particular topic in East Asian art history. Students are expected to carry out independent

research through a series of guided assignments. The topic will change periodically. Course may be repeated when the topic is different. Not open to students who have previously received or need to receive credit for ARHI 430. *Units: 6.*

*Also listed as East Asian Studies 331*

*Prerequisite: One 200-level course in art history or consent of instructor*

### **ARHI 333: GLOBAL MODERNISMS**

This course aims to interrogate the Eurocentric prejudices of the art history discipline and consider instead the concept of multiple modernities. Readings and assignments will focus on expanding art historical, curatorial, digital practices. Students will put these ideas into practice by curating and designing a virtual exhibition using the OMEKA online platform to examine how art continues to circulate in a global context. *Not open to students who have previously received or need to receive credit for ARHI 433.* PREREQUISITES: ARHI 101 or consent of instructor *Units: 6.*

*Prerequisite: ARHI 101 or consent of instructor*

### **ARHI 341: TOPICS IN MODERN AND CONTEMPORARY ART**

An examination of a particular topic in modern and/or contemporary art history. Students are expected to carry out independent research through a series of guided assignments. The topic will change periodically. Course may be repeated when the topic is different. Not open to students who have previously received or need to receive credit for ARHI 440. *Units: 6.*

*Prerequisite: One 200-level course in art history or consent of instructor*

### **ARHI 345: THEORIZING THE FEMALE BODY IN EAST ASIAN ART**

This course explores how the female body and the gendering of space has been addressed in murals, paintings, performance, film, and popular culture during the course of East Asian art history. We will discuss how social and political issues were defined through images of bodies in Japan, Korea, and China in the context of national identity formation, historical reconstruction, subjectivity, and sexuality. Students will also work to develop and refine the quality of their communication skills by presenting and debating their ideas throughout the course. PREREQUISITES: Sophomore standing *Units: 6.*

*Also listed as Gender Studies 345, East Asian Studies 345*

*Prerequisite: Sophomore standing*

### **ARHI 370: GENDER AND SEXUALITY IN MODERN AND CONTEMPORARY ART**

This discussion-based course examines the role gender has played in the development of Western art from the modern and post-modern periods. The student should expect to achieve an understanding of the following topics: how artists have represented, theorized, and politicized gender in their work, the gendering of the art historical canon and its marginalized artists, and how the act of looking in art reception is informed by gender and sexuality. PREREQUISITES: ARHI 101 or GEST 100 or approval of instructor *Units: 6.*

*Also listed as Gender Studies 370*

*Prerequisite: ARHI 101 or GEST 100 or approval of instructor*

### **ARHI 381: TOPICS IN ART HISTORY**

An examination of a particular topic in art history. Students are expected to carry out independent research

through a series of guided assignments. The topic will change periodically. Course may be repeated when topic is different. Not open to students who have previously received credit or need to receive credit for ARHI 480.

*Units: 6.*

*Prerequisite: 200-level art history course or consent of instructor*

### **ARHI 390: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **ARHI 391: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **ARHI 395: INTERNSHIP IN ART HISTORY**

Applied work in art history arranged and carried out under the direction of a faculty member. Students might work for a gallery, museum, archive, auction house, a publication, or visual resource database. The academic internship is supplemented with readings, discussions, and assignments. The course grade will be based on submitted work evaluated by the supervising faculty member. PREREQUISITES: Sophomore standing *Units: 1 TO 98.*

*Prerequisite: Sophomore standing*

### **ARHI 399: INDEPENDENT STUDY IN ART HISTORY**

Advanced study for students doing honors projects in art history. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **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 when the topic is different. Not open to students who have previously received or need to receive credit for ARHI 301 with the same topic. *Units: 6.*

*Also listed as Classics 540*

*Prerequisite: One 200- or 300-level course in art history, 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 when the topic is different. Not open to students who have previously received or need to receive credit for ARHI 420 with the same topic. *Units: 6.*

*Prerequisite: One 200- or 300-level course in art history, or consent of the instructor*

### **ARHI 430: TOPICS IN ASIAN ART**

An examination of a particular topic in East Asian art history. Students are expected to carry out independent research through a series of guided assignments. The topic will change periodically. Course may be repeated when the topic is different. Not open to students who have previously received or need to receive credit for ARHI 331. *Units: 6.*

*Also listed as East Asian Studies 430*

*Prerequisite: One 200-level course in art history or consent of instructor*

### **ARHI 433: GLOBAL MODERNISMS**

This course aims to interrogate the Eurocentric prejudices of the art history discipline and consider instead the concept of multiple modernities. Readings and assignments will focus on expanding art historical, curatorial, digital practices. Students will put these ideas into practice by curating and designing a virtual exhibition using the OMEKA online platform to examine how art continues to circulate in a global context and by writing a research paper. *Not open to students who have previously received or need to receive credit for ARHI 333.* PREREQUISITES: ARHI 101 or consent of instructor *Units: 6.*

*Prerequisite: ARHI 101 or consent of 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, culminating in a research paper. The topic will change periodically. Course may be repeated when topic is different. Not open to students who have previous received credit for ARHI 341. *Units: 6.*

*Prerequisite: One 200-level course in art history or consent of instructor*

### **ARHI 480: TOPICS IN ART HISTORY**

An examination of a particular topic in art history that does not fit the chronological format of the other 400-level topics seminars in art history. Course may be repeated when topic is different. Not open to students who have previously received credit or need to receive credit for ARHI 381. *Units: 6.*

*Prerequisite: One 200- or 300-level course in art history or consent of instructor*

### **ARHI 590: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **ARHI 591: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **ARHI 595: INTERNSHIP IN ART HISTORY**

Applied work in art history arranged and carried out under the direction of a faculty member. Students might work for a gallery, museum, archive, auction house, a publication, or visual resource database. The academic internship is supplemented with readings, discussions, and assignments. The course grade will be based on

submitted work evaluated by the supervising faculty member. PREREQUISITES: Sophomore standing *Units: 1 TO 98*.

*Prerequisite: Sophomore standing*

### **ARHI 599: INDEPENDENT STUDY IN ART HISTORY**

Advanced study for students doing honors projects in art history. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98*.

*Prerequisite: Counter Registration Required.*

### **ARHI 660: CRITICAL THEORIES IN VISUAL AND MATERIAL CULTURE**

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. PREREQUISITES: Junior standing *Units: 6*.

*Prerequisite: Junior standing*

### **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 students 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. PREREQUISITES: Senior standing, and one 400-level art history course or consent of the instructor *Units: 6*.

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

### **ARHI 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98*.

*Prerequisite: Counter Registration Required.*

### **ARHI 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98*.

*Prerequisite: Counter Registration Required.*

### **ARHI 695: INTERNSHIP IN ART HISTORY**

Applied work in art history arranged and carried out under the direction of a faculty member. Students might work for a gallery, museum, archive, auction house, a publication, or visual resource database. The academic internship is supplemented with readings, discussions, and assignments. The course grade will be based on submitted work evaluated by the supervising faculty member. PREREQUISITES: Sophomore standing *Units: 1 TO 98*.

*Prerequisite: Sophomore standing*

**ARHI 699: *INDEPENDENT STUDY IN ART HISTORY***

Advanced study for students doing honors projects in art history. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

# BIOCHEMISTRY

<b>Professors:</b>	E. De Stasio ( <i>Biology, The Raymond H. Herzog Professor of Science</i> ) (on leave term(s) I), S. Debbert ( <i>Chemistry</i> )
<b>Associate professors:</b>	K. Dickson ( <i>Biology</i> ) (on leave term(s) II, III), D. Martin ( <i>Physics, chair</i> )
<b>Assistant professor:</b>	K. Culhane ( <i>Chemistry</i> )

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 related biomedical fields such as bacteriology, molecular biology, or immunology) as well as for many pre-professional programs of study, such as forensic science or pharmacy.

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.” Biochemistry majors can attain these skills in either the Biology or Chemistry *Senior Experience* course sequences.

## Required for the major in biochemistry

Students who complete the major will be able to explain major concepts in biochemistry, including the structure/function relationship in molecules and the evolutionary forces that shape those molecules, processes

of energy conversion in organisms, and processes of information storage and transfer in organisms. They will learn to critically analyze scientific literature and to conduct biochemical research.

The major in biochemistry requires the following:

*Foundation courses:*

1. CHEM 116: *Principles of Chemistry*
2. CHEM 250: *Organic Chemistry I*
3. BIOL 130: *Integrative Biology: Cells to Organisms*
4. MATH 140: *Calculus I*
5. One of the following:
  - BIOL 280 (or BIOL 170): *Experimental Design and Statistics*
  - CHEM 210: *Analytic Chemistry*
  - Statistics in the math department over the 200 level
6. PHYS 141: *Principles of Classical, Relativistic, and Quantum Mechanics*
7. PHYS 151: *Principles of Classical Physics*

*Senior Experience* (Please see course descriptions in the respective departmental portions of the course catalog)

Either:

1. BIOL 650 (5 units and 1 unit) and
2. BIOL 600 or equivalent for two terms (Fall and Spring, 1 unit S/U each)

-OR-

1. CHEM 380 (1 unit S/U)
2. CHEM 480 (2 units S/U)
3. CHEM 680 (3 units S/U)

*Core courses:*

1. BIOL 354: *Molecular Biology*
2. CHEM 340: *Biochemistry I* (cross-listed as BIOL 444)
3. CHEM 440: *Biochemistry II* or BIOL 465: *Advanced Biotechnology*
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 226: *Microbiology*
    - BIOL 235: *Evolutionary Biology*
    - BIOL 325: *Cell Biology*
    - BIOL 340: *Topics in Neuroscience* (also PSYC 580)
    - BIOL 360: *Introduction to Bioinformatics*
    - BIOL 430: *Immunology* or BIOL 431: *Immunology (lecture only)*

- BIOL 450: *Special Topics* with advisor permission
- BIOL 453: *Developmental Biology*
- BIOL 510: *Modern Concepts of Embryogenesis*
- BIOL 520: *Cancer Biology*
- Chemistry courses:
  - CHEM 210: *Analytical Chemistry*
  - CHEM 252: *Organic Chemistry II*
  - CHEM 320: *Inorganic Chemistry*
  - CHEM 350: *Bioorganic and Medicinal Chemistry*
  - CHEM 370: *Chemical Dynamics*
  - CHEM 410: *Instrumental Analysis*
  - CHEM 450: *Topics in Advanced Organic Chemistry*
- Other:
  - PSYC 350: *Psychopharmacology and Behavior*
  - PHYS 275: *Introduction to Biophysics* (also BIOL 275)
  - CMSC 205: *Data-Scientific Programming*

On-line coursework cannot be transferred to fulfill these requirements.

Students interested in chemistry-focused graduate programs or careers are encouraged to take CHEM 210: *Analytical Chemistry* and CHEM 370: *Chemical Dynamics*. Students interested in molecular biology-focused careers or graduate programs are encouraged to take BIOL 260: *Genetics* and BIOL 325: *Cell Biology*.

## Courses - Biochemistry

### **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 for students who have not completed CHEM 115. See the chemistry department's web page for placement examination information. PREREQUISITES: CHEM 115 or placement examination *Units: 6*.

*Prerequisite: CHEM 115 or placement examination*

### **BIOL 130: *CELLULAR FORM AND FUNCTION CELLULAR FORM AND FUNCTION CELLULAR FORM AND FUNCTION***

An exploration of fundamental cellular processes in an evolutionary context including homeostasis, cell cycle, gene expression, energy transformation, inheritance, and multi-cellular development. Experimental approaches will be emphasized. Lecture and laboratory. PREREQUISITES: First-year or second-year standing; consent of instructor required for juniors and seniors. Simultaneous enrollment in BIOL 130 and BIOL 131 required for first- and second-year students. *Units: 6*.

*Prerequisite: First-year or second-year standing; consent of instructor required for juniors and seniors. Simultaneous enrollment in BIOL 130 and BIOL 131 required for first- and second-year students.*

### **MATH 140: *CALCULUS***

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.  
PREREQUISITES: Minimum score on ALEKS online diagnostic exam, as set by the department. *Units: 6.*  
*Prerequisite: Minimum score on ALEKS online diagnostic exam, as set by the department.*

### **PHYS 141: INTRODUCTION TO PHYSICS I**

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.  
PREREQUISITES: None, but calculus is recommended. *Units: 6.*  
*Prerequisite: None, but calculus is recommended.*

### **PHYS 151: INTRODUCTION TO PHYSICS II**

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. PREREQUISITES: PHYS 141, or one year of high school physics and MATH 140. *Units: 6.*  
*Prerequisite: PHYS 141, or one year of high school physics and MATH 140.*

### **BIOL 170: INTEGRATIVE BIOLOGY: EXPERIMENTAL DESIGN AND STATISTICS**

An introduction to experimental and sampling design in the fields of biology and biochemistry, as well as methods of data analysis and interpretation. The connection between statistical analysis and experimental design will be emphasized. Topics include descriptive, exploratory, and confirmatory statistical analyses. Lecture and computer laboratory. PREREQUISITES: BIOL 150 or consent of instructor *Units: 6.*  
*Prerequisite: BIOL 150 or consent of instructor*

### **CHEM 210: ANALYTICAL CHEMISTRY**

A course in the quantitative description of chemical equilibria in solution (acid-base, complexation, redox, solubility) using classical, separation, electrochemical, and spectrochemical methods of analysis. This course covers methods of quantification, statistics, and data analysis as applied to modern chemistry. Students will have the opportunity to individually design projects. Three lectures and two laboratory periods per week. PREREQUISITES: CHEM 116, placement exam, or consent of instructor; concurrent enrollment in CHEM 211 required *Units: 6.*  
*Also listed as Environmental Studies 250*  
*Prerequisite: CHEM 116, placement exam, or consent of instructor; concurrent enrollment in CHEM 211 required*

### **BIOL 226: 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. PREREQUISITES: BIOL 130 and BIOL 150, CHEM 116 recommended *Units: 6.*  
*Prerequisite: BIOL 130 and BIOL 150, CHEM 116 recommended*

### **BIOL 235: EVOLUTIONARY BIOLOGY**

A study of biological evolution, including natural selection, adaptation, the evolution of sex, speciation, extinction, and constraints on evolutionary change. Reading primary literature is emphasized. Two lectures and one discussion per week. PREREQUISITES: BIOL 130 or ANTH 140 *Units: 6.*

*Also listed as Environmental Studies 213*

*Prerequisite: BIOL 130 or ANTH 140*

### **CHEM 250: ORGANIC CHEMISTRY I**

A study of the relationship between structure and function in organic compounds. Basic topics such as molecular orbital theory, conformational equilibria, stereochemistry, and nucleophilic substitution are covered. Students also learn to use instrumental analysis (NMR, IR, GC-MS) to identify and characterize compounds. One four-hour laboratory per week. PREREQUISITES: CHEM 116 or 119 or consent of instructor *Units: 6.*

*Prerequisite: CHEM 116 or 119 or consent of instructor*

### **CHEM 252: ORGANIC CHEMISTRY II**

A study of organic reactions and their mechanisms. The focus of the class is synthesis, both in the concrete sense of building molecules and in the abstract sense of pulling together disparate concepts to solve problems. Case studies from the polymer and pharmaceutical industries underline the relevance of the discipline to everyday life. One four-hour laboratory per week. PREREQUISITES: CHEM 250 *Units: 6.*

*Prerequisite: CHEM 250*

### **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. PREREQUISITES: CHEM 250 *Units: 6.*

*Prerequisite: CHEM 250*

### **BIOL 325: CELL BIOLOGY**

Survey of the structure and function of eukaryotic cells, the basic functional unit of life. Correlation of cellular structures including organelles, proteins, and membranes with functions such as cellular communication, division, transport, movement, and secretory pathways will be analyzed. Lecture and laboratory. PREREQUISITES: BIOL 130 and BIOL 150, BIOL 170 recommended *Units: 6.*

*Prerequisite: BIOL 130 and BIOL 150, BIOL 170 recommended*

### **BIOL 340: TOPICS IN NEUROSCIENCE**

A study of the nervous system from the perspectives of psychology and biology. 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 when topic is different.

*Topic for Fall 2022: Aging and the Brain*

Prerequisites: CHEM 116, BIOL 150 and one course in psychology; or PSYC 360 and one course in biology; or consent of instructor

With the advancement of medicine, our population continues to grow older, and the prevalence of age-related

diseases is on the rise. In particular, the brain undergoes many molecular changes with aging that makes it susceptible to disease, such as dementias and Alzheimer's disease. In this course, we will explore the mechanisms of aging and their impact on the brain, disease manifestations related to aging in the brain, and the current medical treatments for age-related brain disorders. *Units: 6.*

*Also listed as Psychology 580*

*Prerequisite: CHEM 116, BIOL 150 and either NESC 200 or PSYC 384, or consent of instructor*

### **CHEM 340: BIOCHEMISTRY I**

An introduction to the study of biological processes at the molecular level with emphases on protein structure and function, enzyme mechanism and kinetics, fundamentals of physical biochemistry, and the chemistry of biological molecules, including carbohydrates, lipids, and nucleic acids. PREREQUISITES: CHEM 250 or concurrent enrollment, or consent of instructor *Units: 6.*

*Also listed as Biology 444*

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

### **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. PREREQUISITES: Sophomore standing; at least one prior biology course recommended *Units: 6.*

*Prerequisite: Sophomore standing; at least one prior biology course recommended*

### **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. PREREQUISITES: BIOL 130 and CHEM 115 *Units: 6.*

*Prerequisite: BIOL 130 and CHEM 115*

### **CHEM 370: PHYSICAL CHEMISTRY: THERMODYNAMICS AND KINETICS**

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 catalysis. No laboratory. PREREQUISITES: MATH 155, PHYS 150, CHEM 116; or consent of instructor *Units: 6.*

*Prerequisite: MATH 155, PHYS 150, CHEM 116; 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. PREREQUISITES: Sophomore standing; offered annually in the Fall Term *Units: 1.*

*Prerequisite: Sophomore standing; offered annually in the Fall Term*

### **CHEM 410: INSTRUMENTAL ANALYSIS**

An advanced course in instrumental methods of quantification and identification in modern chemistry. Emphasis on instrument design, operating principles, interpretation of instrumental data, and discrimination between techniques. This course focuses on spectroscopic, chromatographic, and electrochemical techniques and their application in fundamental and applied research. Students will have the opportunity to individually design projects. Three lectures and one laboratory per week. PREREQUISITES: CHEM 210 or consent of instructor *Units: 6.*

*Prerequisite: CHEM 210 or consent of instructor*

### **BIOL 430: IMMUNOLOGY**

This course will cover the basic concepts of immunology, including differentiation of immune cells, antibody structure and function, 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. PREREQUISITES: BIOL 130, BIOL 150, and junior standing; or consent of instructor *Units: 6.*

*Prerequisite: BIOL 130, BIOL 150, and junior standing; 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. PREREQUISITES: CHEM 340 or consent of instructor *Units: 6.*

*Also listed as Biology 455*

*Prerequisite: CHEM 340 or consent of instructor*

### **BIOL 444: BIOCHEMISTRY I**

An introduction to the study of biological processes at the molecular level with emphases on protein structure and function, enzyme mechanism and kinetics, fundamentals of physical biochemistry, and the chemistry of biological molecules, including carbohydrates, lipids, and nucleic acids. PREREQUISITES: CHEM 250 or concurrent enrollment, or consent of instructor *Units: 6.*

*Also listed as Chemistry 340*

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

### **CHEM 450: TOPICS IN ADVANCED ORGANIC CHEMISTRY**

A study of modern topics in organic chemistry, emphasizing current literature. Topics may vary from year to year, but the class typically covers organic synthesis in depth. Students will often use the literature and their own expanding understanding of chemical reactivity to design synthetic routes to complex drugs and natural products. No formal laboratory; lab exercises may occasionally substitute for lectures. *Units: 6.*

*Prerequisite: CHEM 252 or consent of instructor*

### **BIOL 453: DEVELOPMENTAL BIOLOGY**

An experimental approach to animal development with laboratory and lecture emphasis on molecular and cellular processes of embryogenesis. Includes discussions of pattern formation, differentiation, cell interactions, gametogenesis and fertilization. Lecture and laboratory. PREREQUISITES: BIOL 150; and one of the following (or concurrent enrollment): BIOL 354, BIOL 444/CHEM 340, BIOL 260, or BIOL 325 *Units: 6.*

*Prerequisite: BIOL 150; and one of the following (or concurrent enrollment): BIOL 354, BIOL 444/CHEM 340, BIOL 260, or BIOL 325*

#### **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, constructs 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. PREREQUISITES: Junior standing, or consent of instructor *Units: 2.*

*Prerequisite: Junior standing, 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.*

*Prerequisite: PHYS 260, MATH 250*

#### **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 projects and papers. Successful completion of BIOL 650 includes participation in BioFest, a symposium of biology senior experience projects during spring term.

PREREQUISITES: Major in biology or biochemistry, or in neuroscience with departmental approval; and senior class standing or departmental approval *Units: 1 OR 5.*

*Prerequisite: Major in biology or biochemistry, or in neuroscience with departmental approval; and senior class standing or departmental approval*

#### **CHEM 680: SENIOR SEMINAR**

A seminar course for senior majors, culminating in an individual seminar presentation by each student. *Units: 3.*

# BIOLOGY

<b>Professors:</b>	B. De Stasio ( <i>Dennis and Charlot Nelson Singleton Professor of Biological Sciences</i> ) (on leave term(s) I), E. De Stasio ( <i>The Raymond H. Herzog Professor of Science</i> ) (on leave term(s) I), J. Sedlock
<b>Associate professors:</b>	K. Dickson (on leave term(s) II, III), A. Hakes, J. Humphries ( <i>chair</i> ), B. Piasecki, N. Wall (on leave term(s) III)
<b>Assistant professor:</b>	I. Del Toro
<b>Visiting assistant professors:</b>	S. Davis, M. Mey
<b>Instructor:</b>	M. Murie ( <i>Instructor of Biology</i> )
<b>Lecturer:</b>	R. Theisen ( <i>Grant Evaluation Analyst Coord</i> )

Students come to Lawrence with varied interests in the life sciences, thus course offerings in biology span the breadth of this exciting discipline and the biology major is flexible. Though each student may create a unique path to completing a major in biology, we encourage students to sample courses across the breadth of the field, including courses in ecology, organismal biology, and molecular genetics. The flexibility of the major allows students to include off-campus study into the undergraduate experience, whether that be the Lawrence Marine Term or an experience that does not include the study of biology.

The department encourages an open-ended, original, experimental approach to life science. The research-rich approach begins in the introductory course sequence that students can enter with either BIOL 130: *Cellular Form and Function* or BIOL 135: *Ecology, Evolution, and Society*. In BIOL 130: *Cellular Form and Function*, in which all department faculty members participate, students design, conduct, and interpret their own research projects and present their results at a professional-style symposium at the end of the term. Both BIOL 135: *Ecology, Evolution, and Society* and BIOL 150: *Organismal Form and Function*, include three open-ended research modules in the laboratory portion of the course, and BIOL 135 also introduces students to field-based research. BIOL 280: *Experimental Design and Statistics* builds upon the research-rich introductory sequence and focuses on experimental design and statistical analysis of data.

Experimental work becomes progressively more sophisticated and creative in advanced courses. All courses are designed to develop students' insights and capacity to synthesize information, and they include discussions, readings, field trips, lab work, and interactive class work in those areas most closely related to the competence of the faculty. Most courses feature intensive laboratory or field instruction in which students use advanced research equipment to explore modern biological concepts.

All biology faculty members conduct active research programs and employ students during the summer as research assistants, as well as supervise students undertaking independent study research for credit during the academic year. Motivated students may approach faculty about laboratory or field research after their first or second year of study. 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, host-parasite and plant/animal interactions, gene expression, and molecular mechanisms of vertebrate development. Recent advances in biological research are presented in a series of talks by faculty and by scientists from other universities. All students complete a project (research, curriculum development, outreach, or a creative project) of their own design as part of our *Senior Experience* program and they present their work at our annual BioFest celebration of *Senior Experience* (see

below for more details).

Students who have strong secondary interests in chemistry, geosciences, or physics may construct majors involving biology and one of the other three natural sciences, using the interdisciplinary major in the [natural sciences](#) or the [biochemistry](#) major.

## Required for the major in biology

Students who major in biology will learn to explain both theory of and evidence for basic biological principles including energy metabolism, inheritance, evolution, physiology, and ecosystem structure and function. They will demonstrate critical analysis of primary research literature and conduct original research.

The major in biology requires:

1. The following biology courses:
  - a. BIOL 130: *Cellular Form and Function*
  - b. BIOL 135: *Ecology, Evolution, and Society*
  - c. BIOL 150: *Organismal Form and Function*
2. BIOL 280: *Experimental Design and Statistics*
3. CHEM 116: *Principles of Chemistry: Energetics and Dynamics*
4. At least six six-unit courses in biology numbered 200 or above (excluding *Senior Experience* courses), of which at least four must be laboratory courses
5. Completion of the biology *Senior Experience*, including:
  - a. 2 units of BIOL 501: *Professional Development in the Life Sciences*
  - b. 1 unit of BIOL 600: *Recent Advances in Biology Seminar*
  - c. A student-directed project
  - d. 5 units of BIOL 650: *Biology Senior Capstone I*
  - e. 1 unit of BIOL 651: *Biology Senior Capstone II*

Note: 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 those can be counted toward the upper-level laboratory requirement. Online coursework cannot be transferred to earn biology credit.

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

Biology students who have strong secondary interests in physics or geosciences may construct a major involving biology and geosciences 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 biology as the primary discipline are:

1. The following biology courses:
  - a. BIOL 130: *Cellular Form and Function*
  - b. BIOL 150: *Organismal Form and Function*
  - c. BIOL 280: *Experimental Design and Statistics*
2. The following physics courses:
  - a. PHYS 141: *Principles of Classical, Relativistic, and Quantum Mechanics* and PHYS 151: *Principles of Classical Physics*; or
  - b. PHYS 151: *Principles of Classical Physics* and PHYS 160: *Principles of Modern Physics*
3. The following courses if geosciences is the secondary discipline:
  - a. GEOL 110: *Introductory Geology* or GEOS 110: *Introduction to the Geosciences*
  - b. GEOL/GEOS 210: *History of the Earth and Life*
4. At least 10 six-unit courses in the natural sciences (biology, chemistry, geosciences, 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
5. Completion of the biology *Senior Experience*

## Senior Experience in biology

Required: A student-designed project, 2 units of BIOL 501: *Professional Development in the Life Sciences*, 1 unit of BIOL 600: *Recent Advances in Biology Seminar*, 5 units of BIOL 650: *Biology Senior Capstone I*, 1 unit of BIOL 651: *Biology Senior Capstone*.

Purposeful advising in the spring of the sophomore year and attendance at the spring BioFest is meant to inspire sophomore students to think about what they might want to undertake as their culminating project in biology. During the Fall term of the junior year, students will take BIOL 501: *Professional Development in the Life Sciences* to prepare students for both the Senior Experience and life after Lawrence. 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 Winter term of the senior year and may be based on an internship, summer or academic year research, a tutorial, course work, independent study, or other student activities.

In the senior year, students will take 1 unit of BIOL 600: *Recent Advances in Biology Seminar* in the Fall term, 5 units of BIOL 650: *Biology Senior Capstone I* in the Winter term, and 1 unit of BIOL 651: *Biology Senior Capstone II* in Spring Term for BioFest. The purpose of the BIOL 650 course is to bring to culmination each student's individual *Senior Experience* project and to place that project in an academic context. Each student prepares a paper that places their project into a biological context, compares it to our past and current understanding of the topic using primary literature, and summarizes the student's project or results. Students will begin gathering and organizing academic resources for this paper in BIOL 600. In BIOL 650, students preparing a thesis for honors will prepare a significant portion of their thesis, while a student creating a visual product or curriculum will describe the biological underpinnings of the work and reflect on the production of the work itself, for example. The *Senior Experience* will culminate with a symposium, BioFest, during Spring Term, at which all students will present the results of their projects (or the project itself) as a poster, demonstration, or other visual display.

## Required for the minor in biology

1. The following biology courses:
  - a. BIOL 130: *Cellular Form and Function*
  - b. BIOL 135: *Ecology, Evolution, and Society*
  - c. BIOL 150: *Organismal Form and Function*
2. BIOL 280: *Experimental Design and Statistics* (students majoring in disciplines requiring a research methods and statistics course may request exemption from the BIOL 170 requirement).
3. At least three six-unit courses in biology numbered 200 or above, of which at least two must be laboratory courses.

Note: Only two six-unit courses designated as tutorial, directed study, or independent study may be counted toward the major or minor requirements, and only one of these may be counted toward the upper-level laboratory requirement. On-line coursework cannot be transferred to earn biology credit.

## Teacher certification in biology or broad-field science

Students who seek certification to teach biology at the secondary level should choose a broad range of biology courses that includes ecology, plant and animal organismal biology, and molecular and cellular biology, and should gain experience in both field and laboratory research. Students also have the option of seeking broad-field science certification by completing a minimum of two courses in each of two other science disciplines and at least one course in each of the remaining sciences. A course in environmental science is required. Students who plan to seek teacher certification should review the requirements in the Education section of the catalog and meet with the director of teacher education, preferably before the end of the sophomore year.

## Courses - Biology

### **BIOL 100: *THE BIOLOGY OF HUMAN REPRODUCTION***

An introductory 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 and laboratory. 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 130: *CELLULAR FORM AND FUNCTION CELLULAR FORM AND FUNCTION CELLULAR FORM AND FUNCTION***

An exploration of fundamental cellular processes in an evolutionary context including homeostasis, cell cycle, gene expression, energy transformation, inheritance, and multi-cellular development. Experimental approaches will be emphasized. Lecture and laboratory. PREREQUISITES: First-year or second-year standing; consent of instructor required for juniors and seniors. Simultaneous enrollment in BIOL 130 and BIOL 131 required for first- and second-year students. *Units: 6.*

*Prerequisite: First-year or second-year standing; consent of instructor required for juniors and seniors.*  
*Simultaneous enrollment in BIOL 130 and BIOL 131 required for first- and second-year students.*

### **BIOL 131: BIOLOGY LEARNING TEAMS**

Students will engage in peer-led-team-learning in which small teams of students participate in a variety of learning, team-building activities, and problem-solving using current course content with upper-class facilitators. The course will include discussion of collaboration skills, intersectionality, and college-level learning. Simultaneous enrollment in BIOL 130 is required. BIOL 131 is required of all first- and second-year students in BIOL 130. Enrollment of students beyond their second year is optional. PREREQUISITES: Simultaneous enrollment in BIOL 130 BIOL 131 required for first- and second-year students *Units: 1.*

*Prerequisite: Simultaneous enrollment in BIOL 130 BIOL 131 required for first- and second-year students*

### **BIOL 135: ECOLOGY, EVOLUTION, AND SOCIETY**

This course introduces the mechanisms of biological evolution that have resulted in earth's rich diversity of life. We will explore the ways in which populations change, species interact, communities are structured and ecosystems function through an evolutionary lens. Connections to global crises related to human-driven processes, such as climate change, land use change, and disease spread will make these basic concepts germane to our lives, and underscore the interdependence of human and environmental health. A weekly laboratory will provide opportunities to practice field ecology research and run evolutionary lab experiments. *Units: 6.*

*Also listed as Environmental Science 135*

### **BIOL 150: ORGANISMAL FORM AND FUNCTION**

Development, morphology, physiology, and ecology of plants, animals, fungi and unicellular organisms will be compared in evolutionary context. Phylogenetic relationships, ecological interactions, and ecosystem processes will be explored. Lecture and laboratory. PREREQUISITES: BIOL 130 or departmental examination *Units: 6.*

*Prerequisite: BIOL 130 or departmental examination*

### **BIOL 170: INTEGRATIVE BIOLOGY: EXPERIMENTAL DESIGN AND STATISTICS**

An introduction to experimental and sampling design in the fields of biology and biochemistry, as well as methods of data analysis and interpretation. The connection between statistical analysis and experimental design will be emphasized. Topics include descriptive, exploratory, and confirmatory statistical analyses. Lecture and computer laboratory. PREREQUISITES: BIOL 150 or consent of instructor *Units: 6.*

*Prerequisite: BIOL 150 or consent of instructor*

### **BIOL 191: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **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. PREREQUISITES: BIOL 150 *Units: 6.*

*Also listed as Environmental Studies 210*

*Prerequisite: BIOL 150*

### **BIOL 211: BOTANY**

An introduction to the study of plants with an emphasis on their structure, development, physiology, and diversity. Although this course is lecture-based, students will frequently interact with plants from the Lawrence University greenhouse. *Units: 6.*

### **BIOL 221: ENTOMOLOGY**

Topics covered will include a survey of all of the clades of insects with information on the systematics, diversity, ecology, life history, behavior and unique characteristics of each lineage. Lecture material will be augmented with required field trips to collect local species (terrestrial and aquatic) and the creation of a personal collection of species following the format as is customary for museum collections. PREREQUISITES: BIOL 150 and sophomore standing *Units: 6.*

*Prerequisite: BIOL 150 and 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, and host behavior. The laboratory component of the course will include both live and preserved specimens. PREREQUISITES: BIOL 150 *Units: 6.*

*Prerequisite: BIOL 150*

### **BIOL 225: MICROBIOLOGY (LECTURE ONLY)**

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. Lecture Only. PREREQUISITES: BIOL 130 and BIOL 150, CHEM 116 recommended *Units: 6.*

*Prerequisite: BIOL 130 and BIOL 150, CHEM 116 recommended*

### **BIOL 226: 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. PREREQUISITES: BIOL 130 and BIOL 150, CHEM 116 recommended *Units: 6.*

*Prerequisite: BIOL 130 and BIOL 150, CHEM 116 recommended*

### **BIOL 229: GENERAL ECOLOGY (LECTURE ONLY)**

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

*Also listed as Environmental Studies 229*

### **BIOL 230: GENERAL ECOLOGY**

An introduction to the interactions between organisms and the environment. Explores the role of physical, chemical and biotic processes—including human activities—in determining the structure and function of populations, communities, and ecosystems. Topics 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 235: EVOLUTIONARY BIOLOGY**

A study of biological evolution, including natural selection, adaptation, the evolution of sex, speciation, extinction, and constraints on evolutionary change. Reading primary literature is emphasized. Two lectures and one discussion per week. PREREQUISITES: BIOL 130 or ANTH 140 *Units: 6.*

*Also listed as Environmental Studies 213*

*Prerequisite: BIOL 130 or ANTH 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. PREREQUISITES: BIOL 150 *Units: 6.*

*Prerequisite: BIOL 150*

### **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. PREREQUISITES: BIOL 150 *Units: 6.*

*Prerequisite: BIOL 150*

### **BIOL 245: CONSERVATION BIOLOGY**

This course explores scientific concepts related to the conservation and restoration of 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. PREREQUISITES: BIOL 230 or BIOL 135 *Units: 6.*

*Also listed as Environmental Studies 245*

*Prerequisite: BIOL 230 or BIOL 135*

### **BIOL 260: GENETICS**

A lecture and laboratory study of the principles of inheritance, gene expression, introductory genomics, sex determination, and the concepts of historical and modern eugenics and genetic engineering.

PREREQUISITES: Sophomore standing and BIOL 130 and BIOL 170 (or concurrent enrollment) or ANTH 140  
*Units: 6.*

*Prerequisite: Sophomore standing and BIOL 130 and BIOL 170 (or concurrent enrollment) or ANTH 140*

### **BIOL 265: BIOGEOCHEMISTRY**

This course explores fundamental cycles between earth's major reservoirs of nutrients such as nitrogen, phosphorus, carbon and water. Through lecture and group presentations, students will gain a solid understanding of the fundamentals of biogeochemical cycles and the mechanism underlying the biological transformations of those elements. Lecture and laboratory. PREREQUISITES: BIOL 130 or GEOL 110 *Units: 6.*

*Also listed as Geosciences 265, Environmental Studies 265*

*Prerequisite: BIOL 130 or GEOL 110*

### **BIOL 275: INTRODUCTION TO BIOPHYSICS**

Biophysics explores processes at the interface between biology and physics. This course uses physical principles to build mathematical and computational models of living systems. Students will learn to create models, compare models with experimental data, and refine their understanding of the living systems using these physics-based models. PREREQUISITES: Physics 151 or Biology 170 *Units: 6.*

*Also listed as Physics 275*

*Prerequisite: Physics 151 or Biology 170*

### **BIOL 280: EXPERIMENTAL DESIGN AND STATISTICS**

An introduction to experimental and sampling design in the fields of biology and biochemistry, as well as methods of data analysis and interpretation. The connection between statistical analysis and experimental design will be emphasized. Topics include descriptive, exploratory, and confirmatory statistical analyses. Lecture and computer laboratory. PREREQUISITES: BIOL 150 or consent of instructor *Units: 6.*

*Prerequisite: BIOL 150 or consent of instructor*

### **BIOL 310: HUMAN ANATOMY**

A course in human anatomy only intended for students entering the allied health professions (e.g. nursing, PA, PT, athletic training) or forensic anthropology. Students learn detailed anatomy using full-size human models. Students are expected to learn structures of the skeletal, muscular, nervous (sensory included), circulatory, digestive, respiratory, urogenital, and endocrine systems. Emphasis is on the anatomy, particularly in the laboratory component of the course, but basic physiology is also covered. PREREQUISITES: BIOL 150 or ANTH 140 *Units: 6.*

*Prerequisite: BIOL 150 or ANTH 140*

### **BIOL 325: CELL BIOLOGY**

Survey of the structure and function of eukaryotic cells, the basic functional unit of life. Correlation of cellular structures including organelles, proteins, and membranes with functions such as cellular communication, division, transport, movement, and secretory pathways will be analyzed. Lecture and laboratory.

PREREQUISITES: BIOL 130 and BIOL 150, BIOL 170 recommended *Units: 6.*

*Prerequisite: BIOL 130 and BIOL 150, BIOL 170 recommended*

### **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. PREREQUISITES: BIOL 150 or BIOL 170 (or concurrent enrollment) or BIOL 230 *Units: 6.*

*Also listed as Environmental Studies 310*

*Prerequisite: BIOL 150 or BIOL 170 (or concurrent enrollment) or BIOL 230*

### **BIOL 335: PLANT ECOLOGY**

This course emphasizes core concepts in ecology and evolution from the unique perspective of plants. Students will explore the interactions between plants and their environment over a range of scales; from individuals to populations and communities. Lecture and laboratory. PREREQUISITES: BIOL 170 *Units: 6.*

*Also listed as Environmental Studies 340*

*Prerequisite: BIOL 170*

### **BIOL 340: TOPICS IN NEUROSCIENCE**

A study of the nervous system from the perspectives of psychology and biology. 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 when topic is different.

*Topic for Fall 2022: Aging and the Brain*

Prerequisites: CHEM 116, BIOL 150 and one course in psychology; or PSYC 360 and one course in biology; or consent of instructor

With the advancement of medicine, our population continues to grow older, and the prevalence of age-related diseases is on the rise. In particular, the brain undergoes many molecular changes with aging that makes it susceptible to disease, such as dementias and Alzheimer's disease. In this course, we will explore the mechanisms of aging and their impact on the brain, disease manifestations related to aging in the brain, and the current medical treatments for age-related brain disorders. *Units: 6.*

*Also listed as Psychology 580*

*Prerequisite: CHEM 116, BIOL 150 and either NESC 200 or PSYC 384, or consent of instructor*

### **BIOL 345: TERRESTRIAL WILDLIFE 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. PREREQUISITES: BIOL 150 or BIOL 170, and sophomore standing *Units: 6.*

*Also listed as Environmental Studies 345*

*Prerequisite: BIOL 150 or BIOL 170, 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. PREREQUISITES: BIOL 130 and CHEM 115 *Units: 6.*

*Prerequisite: BIOL 130 and CHEM 115*

### **BIOL 360: INTRODUCTION TO BIOINFORMATICS**

An introduction to the methods and software used to analyze biological data. Through lecture and guided tutorials, students will learn the structure and organization of biological databases, explore methods for examining genomic and proteomic data sets, and examine specific case studies relating to evolution, drug discovery and human variation. PREREQUISITES: BIOL 260 *Units: 6.*

*Prerequisite: BIOL 260*

### **BIOL 370: HUMAN PHYSIOLOGY**

An examination of how the body maintains homeostasis. The various physiological systems (e.g., respiratory and cardiovascular) will be studied at multiple levels of organization, from molecular and cellular to the macroscopic. This course is primarily aimed at students entering the health sciences. The course will have both lectures and a laboratory component. PREREQUISITES: BIOL 150 *Units: 6.*

*Prerequisite: BIOL 150*

### **BIOL 375: BIOSTATISTICS**

This analytical and writing course trains students on the use of advanced analytical methods common in biological data analysis. Students complete analyses in the R programming software and work on individual datasets. Extensive writing about analytical methods, appropriate applications of analyses, and interpretations of these analyses from a large portion of this course. Lecture only with a term-long project required. PREREQUISITES: BIOL 170 or consent of instructor. *Units: 6.*

*Prerequisite: BIOL 170 or consent of instructor.*

### **BIOL 380: ECOLOGICAL MODELING**

An integrated lecture and computer laboratory 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, biogeochemical cycling, and mass balance in ecosystems. PREREQUISITES: At least one of the following: BIOL 229, BIOL 230, BIOL 245, BIOL 330, BIOL 335 or BIOL 345 *Units: 6.*

*Also listed as Environmental Studies 380*

*Prerequisite: At least one of the following: BIOL 229, BIOL 230, BIOL 245, BIOL 330, BIOL 335 or BIOL 345*

### **BIOL 390: TUTORIAL STUDIES IN BIOLOGY**

Individual investigations of problems in biology. PREREQUISITES: Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

### **BIOL 391: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **BIOL 399: INDEPENDENT STUDY IN BIOLOGY**

Individual, in-depth investigation of a specific biological problem. Students contemplating an honors project should register for this course. PREREQUISITES: Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

### **BIOL 420: THE GEOGRAPHY OF LIFE: BIODIVERSITY IN A CHANGING PLANET**

Earth is a dynamic and changing planet, comprised of tightly linked ecosystems and organisms. In this course we explore relationships between the biotic and abiotic drivers that influence the distribution of global diversity. We use large-scale datasets to develop practical skills for monitoring the responses of biodiversity to environmental change. PREREQUISITES: BIOL 150 and BIOL 170; preferred but not required: BIOL 230 and BIOL 235 *Units: 6.*

*Also listed as Environmental Studies 420*

*Prerequisite: BIOL 150 and BIOL 170; preferred but not required: BIOL 230 and BIOL 235*

### **BIOL 430: IMMUNOLOGY**

This course will cover the basic concepts of immunology, including differentiation of immune cells, antibody structure and function, 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. PREREQUISITES: BIOL 130, BIOL 150, and junior standing; or consent of instructor *Units: 6.*

*Prerequisite: BIOL 130, BIOL 150, and junior standing; or consent of instructor*

### **BIOL 431: IMMUNOLOGY (LECTURE ONLY)**

This course will cover the basic concepts of immunology, including differentiation of immune cells, antibody structure and function, 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. Lecture only. PREREQUISITES: Junior standing or consent of instructor *Units: 6.*

*Prerequisite: Junior standing or consent of instructor*

### **BIOL 433: ECOLOGICAL ENERGETICS (LECTURE ONLY)**

Study of the transfer and transformation of energy or energy-containing materials between and within organisms and populations. Discussions will cover food web structure and function across marine, freshwater and terrestrial environments. Part of the Marine Biology Term. Lecture only. PREREQUISITES: BIOL 330, concurrent enrollment in BIOL 505 and 226 and consent of instructor *Units: 6.*

*Also listed as Environmental Studies 411*

*Prerequisite: BIOL 330, concurrent enrollment in BIOL 505 and 226 and consent of instructor*

#### **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. PREREQUISITES: BIOL 330, concurrent enrollment in BIOL 505 and 226 and consent of instructor *Units: 6.*

*Also listed as Environmental Studies 410*

*Prerequisite: BIOL 330, concurrent enrollment in BIOL 505 and 226 and consent of instructor*

#### **BIOL 444: BIOCHEMISTRY I**

An introduction to the study of biological processes at the molecular level with emphases on protein structure and function, enzyme mechanism and kinetics, fundamentals of physical biochemistry, and the chemistry of biological molecules, including carbohydrates, lipids, and nucleic acids. PREREQUISITES: CHEM 250 or concurrent enrollment, or consent of instructor *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.

*Topic for Fall 2022: Urban Ecology*

*Prerequisites: BIOL 150*

Cities are alive with multiple complex systems working together to maintain services that we depend on. There is always a struggle that exists between providing human services and maintaining urban ecological systems. In this course we explore how biodiversity uses urban landscapes and how to manage these landscapes to try and maintain balance in urban systems. We will travel to various urban greenspaces, explore ecological management strategies, and meet with professionals working in this field. We will take deep explorations into human greenspace use, waste management and environmental services that directly influence how urban systems function. We will explore the ecological principles at play in regulating and conserving biodiversity in these living landscapes of cities. *Prerequisite BIOL 150 Units: 6.*

*Prerequisite: BIOL 150*

#### **BIOL 453: DEVELOPMENTAL BIOLOGY**

An experimental approach to animal development with laboratory and lecture emphasis on molecular and cellular processes of embryogenesis. Includes discussions of pattern formation, differentiation, cell interactions, gametogenesis and fertilization. Lecture and laboratory. PREREQUISITES: BIOL 150; and one of the following (or concurrent enrollment): BIOL 354, BIOL 444/CHEM 340, BIOL 260, or BIOL 325 *Units: 6.*

*Prerequisite: BIOL 150; and one of the following (or concurrent enrollment): BIOL 354, BIOL 444/CHEM 340,*

*BIOL 260, or BIOL 325*

### **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. PREREQUISITES: CHEM 340 or consent of instructor *Units: 6.*

*Also listed as Chemistry 440*

*Prerequisite: CHEM 340 or consent of instructor*

### **BIOL 465: *ADVANCED BIOTECHNOLOGY***

An advanced course that examines the ways in which fundamental principles of biochemistry and molecular biology are transformed into technologies that revolutionize basic science, industrial processes, medicine, and agriculture. Lectures, discussions and laboratory work will focus on current primary literature and novel research questions. PREREQUISITES: CHEM 340, BIOL 354, or consent of instructor *Units: 6.*

*Prerequisite: CHEM 340, BIOL 354, or 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. PREREQUISITES: BIOL 330 and concurrent enrollment in BIOL 226 and BIOL 434 *Units: 6.*

*Also listed as Environmental Studies 505*

*Prerequisite: BIOL 330 and concurrent enrollment in BIOL 226 and BIOL 434*

### **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. PREREQUISITES: PHYS 151, and one of PHYS 230, CHEM 252, CHEM 340, or BIOL 354 *Units: 6.*

*Also listed as Physics 570*

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

### **BIOL 590: *TUTORIAL STUDIES IN BIOLOGY***

Individual investigations of problems in biology. PREREQUISITES: Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

### **BIOL 591: *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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **BIOL 599: INDEPENDENT STUDY IN BIOLOGY**

Individual, in-depth investigation of a specific biological problem. Students contemplating an honors project should register for this course. PREREQUISITES: Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

### **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. PREREQUISITES: Senior standing and declared major in biology, or consent of instructor *Units: 1.*

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

### **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 projects and papers. Successful completion of BIOL 650 includes participation in BioFest, a symposium of biology senior experience projects during spring term.

PREREQUISITES: Major in biology or biochemistry, or in neuroscience with departmental approval; and senior class standing or departmental approval *Units: 1 OR 5.*

*Prerequisite: Major in biology or biochemistry, or in neuroscience with departmental approval; and senior class standing or departmental approval*

### **BIOL 651: BIOLOGY SENIOR CAPSTONE II**

BIOL 651 is the culmination of the biology senior experience in which students prepare and present their final project (e.g., scientific poster, video, educational application) at Biofest. Students will receive explicit instruction on effective visual communication. Requirements include the completion of a biology senior experience product and participation in Biofest. PREREQUISITES: BIOL 650 *Units: 1.*

*Prerequisite: BIOL 650*

### **BIOL 690: TUTORIAL STUDIES IN BIOLOGY**

Individual investigations of problems in biology. PREREQUISITES: Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

### **BIOL 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **BIOL 699: INDEPENDENT STUDY IN BIOLOGY**

Individual, in-depth investigation of a specific biological problem. Students contemplating an honors project should register for this course. PREREQUISITES: Counter Registration Required *Units: 1 TO 98*.

*Prerequisite: Counter Registration Required*

# BIOMEDICAL ETHICS

<b>Professor:</b>	E. De Stasio ( <i>Biology, The Raymond H. Herzog Professor of Science</i> ) (on leave term(s) I)
<b>Associate professors:</b>	I. Albrecht ( <i>Philosophy</i> ) (on leave term(s) I), M. Ansfield ( <i>Psychology</i> ), D. Fitz ( <i>Economics, chair terms II and III</i> ), B. Jenike ( <i>Anthropology, Edward F. Mielke Professor of Ethics in Medicine, Science and Society, chair term I</i> ) (on leave term(s) II, III), M. Jenike ( <i>Anthropology</i> )
<b>Assistant professors:</b>	H. Caruthers ( <i>Economics</i> ), J. Smith ( <i>Ethnic Studies</i> )
<b>Instructor:</b>	A. Elliott ( <i>Philosophy, Uihlein Fellow of Ethics</i> )

Drawing from the humanities, social sciences, and natural sciences, the interdisciplinary biomedical ethics minor examines the broader biosocial and environmental contexts in which the health sciences are practiced. Social contexts include structural health disparities, local considerations like cultural values and beliefs, and particular public policies, infrastructure, and institutions, as well as universal considerations such as respect for persons. Overall, students will learn to question norms of health and biomedical assumptions and to seek new understandings of how social, biosocial, technological, and environmental factors contribute to good or poor health outcomes in both local and global contexts.

Biomedical ethics minors will learn to examine the principles of autonomy and informed consent and be able to recognize complicating factors in the practice of medicine. They will learn, through multiple disciplinary analytical frameworks, how social, biosocial and environmental factors contribute to the complexities of population health. Finally, they will be able to critically consider the application of biomedicine and biomedical technologies in both local and global contexts.

This minor has been designed to appeal to Lawrence students planning further work in medicine, nursing, genetic counseling, public health, global health, social work and other areas of study in or related to health and health care as well as students wishing to undertake graduate work in applied ethics.

## Required for the minor in biomedical ethics

Students who minor in biomedical ethics will learn to examine the principles of autonomy and informed consent and be able to recognize complicating factors in the practice of medicine. They will learn, through multiple disciplinary analytical frameworks, how social, biosocial and environmental factors contribute to the complexities of population health. Finally, they will be able to critically consider the application of biomedicine and biomedical technologies in both local and global contexts.

The minor in biomedical ethics requires the following:

1. BIET 120/PHIL 120: *Applied Ethics: Introduction to Biomedical Ethics*
2. One of the following:
  - a. BIOL 100: *The Biology of Human Reproduction*,
  - b. BIOL 103: *Biotechnology and Society*,
  - c. BIOL 130: *Integrative Biology: Cells to Organisms*, or
  - d. ANTH 140: *Biological Anthropology*

3. One of the following:
  - a. ECON 200: *Economic Development*,
  - b. ECON 204: *Effective Altruism*,
  - c. ECON 271: *Public Economics*, or
  - d. GOVT 380: *Introduction to Public Policy* (biomedical ethics minors can take a concurrent tutorial in *Health Policy* while attending GOVT 380)
4. One of the following:
  - a. ANTH 342: *Medical Anthropology*
  - b. ETST 303: *Race, Ethnicity and Health*, or
  - c. PSYC 245: *Health Psychology*
5. One of the following:
  - a. BIET 370/PHIL 370: *Advanced Studies in Bioethics*,
  - b. ANTH 542: *Anthropology and Public Health*,
  - c. ANTH 551: *Anthropology of Biomedicine*,
  - d. ANTH 552: *Disability and Culture*, or
  - e. an approved independent study project on some aspect of biomedical ethics, public health or health policy. Possible contexts for projects include an academic internship, a tutorial, an independent study course, or a health-related project in conjunction with an off-campus program. Independent study projects must be approved by the advisory committee.
6. Two additional 6-unit courses from the list below or other relevant courses with approval of the program director.

- ANTH 314: *Global Health*
- ANTH 340: *Human Biology, Evolution, and Health*
- ANTH 342: *Medical Anthropology*
- ANTH 377: *Culture and Aging*
- ANTH 542: *Anthropology and Public Health*
- ANTH 551: *Anthropology of Biomedicine*
- ANTH 552: *Disability and Culture*
- BIOL 100: *The Biology of Human Reproduction*
- BIOL 103: *Biotechnology and Society*
- BIOL 260: *Genetics*
- BIOL 354: *Molecular Biology*
- BIOL 465: *Advanced Biotechnology*
- BIOL 453: *Developmental Biology*
- ECON 200: *Economic Development*
- ECON 203: *Latin American Economic Development*
- ECON 204: *Effective Altruism*
- ECON 271: *Public Economics*
- ECON 290: *The Economics of Medical Care*
- ETST 110: *Introduction to Ethnic Studies*
- ETST 301: *Theories of Race and Ethnicity*
- ETST 303: *Race, Ethnicity and Health*
- GEOS 213: *Geology and Health*
- GOVT 380: *Introduction to Public Policy*
- GOVT 465: *Environmental Politics*

- PHIL 320: *Ethics*
- PHIL 350: *Political Philosophy*
- PHIL 360: *Environmental Ethics*
- PHIL 370: *Advanced Studies in Bioethics*
- PHIL 380: *Ethics of Technology*
- PHIL 430: *Philosophy of Law*
- PSYC 245: *Health Psychology*
- PSYC 250: *Psychopathology*
- PSYC 285: *Cross-Cultural Psychology*
- PSYC 350: *Psychopharmacology and Behavior*

## Courses - Biomedical Ethics

### **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. PREREQUISITES: Recommended for freshmen and sophomores *Units: 6*.

*Also listed as Philosophy 120*

*Prerequisite: Recommended for freshmen and sophomores*

### **BIET 191: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98*.

*Prerequisite: Counter Registration Required.*

### **BIET 205: SCIENCE IN SOCIETY: THE NOBEL CONFERENCE**

This course will use online and archived resources of the annual Nobel Conference at Gustavus Adolphus College to develop an understanding of natural and social scientific questions of significance in the contemporary world, and to consider the moral and societal impact of work being done in these areas. Students will attend the current conference (virtually or in-person) and work in groups to analyze past conferences. PREREQUISITES: Sophomore Standing *Units: 6*.

*Prerequisite: Sophomore Standing*

### **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. PREREQUISITES: PSYC 100 or sophomore standing *Units: 6*.

*Also listed as Psychology 245*

*Prerequisite: PSYC 100 or sophomore standing*

**BIET 291: HEALTH POLICY: U.S. & U.K.**

This course compares U.K. and U.S. health systems, markets, and public health policies. In particular, the course will analyze trade-offs made in each country among access to care, the cost of care and the quality of care as well as how resources are generated and allocated for each system. PREREQUISITES: Only open to students attending the London Centre. *Units: 6.*

*Also listed as Economics 291*

*Prerequisite: Only open to students attending the London Centre.*

**BIET 370: ADVANCED STUDIES IN BIOETHICS**

A seminar examining one particular issue or set of issues in bioethics. PREREQUISITES: PHIL 120 or two courses in philosophy *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. PREREQUISITES: One course in philosophy, junior standing, or consent of the instructor *Units: 6.*

*Also listed as Philosophy 380*

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

**BIET 390: TUTORIAL STUDIES IN BIOMEDICAL ETHICS**

PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

**BIET 391: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

**BIET 399: INDEPENDENT STUDY IN BIOMEDICAL ETHICS**

PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

**BIET 590: TUTORIAL STUDIES IN BIOMEDICAL ETHICS**

PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

**BIET 591: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

**BIET 599: INDEPENDENT STUDY IN BIOMEDICAL ETHICS**

PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

**BIET 690: TUTORIAL STUDIES IN BIOMEDICAL ETHICS**

PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

**BIET 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

**BIET 699: INDEPENDENT STUDY IN BIOMEDICAL ETHICS**

PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

# CHEMISTRY

<b>Professor:</b>	S. Debbert
<b>Associate professors:</b>	D. Donohoue ( <i>chair</i> ), A. Fleshman ( <i>on leave term(s) I</i> )
<b>Assistant professors:</b>	K. Culhane, G. Sazama
<b>Instructors:</b>	M. Clement, T. Quincy

Chemists, biochemists, and chemical engineers contribute to the development and utilization of the materials, medicines, foods, and fuels that are the hallmarks of modern life. They also contribute to the understanding and protection of the natural environment. Working in concert with biologists, geologists, physicists, psychologists, and others, chemists work toward the solution of many of society's most pressing problems—challenges to physical and mental health, pollution and its effects, resource recovery, and energy production and conservation among them.

The American Chemical Society certified chemistry major 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, yet small enough that students can build close working relationships with all the faculty members. Our faculty are all actively engaged in their own research programs, primarily using Lawrence's own wide array of instrumentation; these programs create ample independent research opportunities for students, either during the school year or the summer months. We see these research experiences as a critical part of our curriculum, as they provide students with the analytical techniques, problem-solving strategies, and critical thinking skills necessary for success in the physical, medical or life sciences. Our goals are to engage students from diverse backgrounds with 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 post-baccalaureate and professional opportunities.

## ADVANCED PLACEMENT

Students who have had the equivalent of a college general chemistry course are encouraged to take the Advanced Placement (AP) Examination in Chemistry administered by the Educational Testing Service. Students with sufficiently high AP exam scores will receive six units of college credit for CHEM 115, and will typically be advised to enroll in CHEM 116.

Students that have not taken or passed the AP Chemistry exam may also be placed in CHEM 116, depending on their score on our online placement test; in this case, no course credit for CHEM 115 would be awarded. In any case, instructor approval is required for our general chemistry courses, and students are encouraged to reach out to a chemistry faculty member with any questions about the courses. For more information about placement in our introductory chemistry courses, please visit the Introductory Chemistry and Advanced Placement page at our departmental website: <http://go.lawrence.edu/4420>.

## Required for the major in chemistry

Students who major in chemistry will explain and practice theories, concepts, and models from each of the disciplines within chemistry, and they will demonstrate depth of expertise in a particular chemical discipline or topic. They will also demonstrate safe and effective laboratory techniques and conduct experiments using both classical and instrumental analysis methods, and they will analyze and interpret chemical data and draw sound conclusions. And by implementing the scientific method, they will apply foundational and advanced chemical concepts in new areas of inquiry. As they develop their knowledge and skills, students will search, comprehend, summarize, discuss, and critically analyze the primary literature, and they will clearly communicate scientific concepts and reasoning in both written and oral forms to multiple audiences. They will also work effectively and inclusively as part of a group to complete a scientific task or project through project management, cooperative action, and positive interpersonal interactions, and they will explain and adhere to the relevant professional standards (ACS, NIH, OSHA, etc.) of safety, honesty, and integrity in scientific work.

The major in chemistry requires the following:

1. Introductory principles
  - a. CHEM 115: *Principles of Chemistry: Structure and Reactivity* and CHEM 116: *Principles of Chemistry: Energetics and Dynamics*, or the equivalent
  - b. MATH 140: *Calculus 1* and MATH 155: *Multivariable Calculus*, or the equivalent
  - c. PHYS 141: *Principles of Classical, Relativistic, and Quantum Mechanics* and PHYS 151: *Principles of Classical Physics*
2. Core competencies
  - a. CHEM 210: *Analytical Chemistry* and CHEM 211: *Statistics in Analytical Chemistry* (3 units)
  - b. CHEM 250: *Organic Chemistry I*
  - c. CHEM 252: *Organic Chemistry II*
  - d. CHEM 320: *Inorganic Chemistry*
  - e. CHEM 340: *Biochemistry*
  - f. CHEM 370: *Physical Chemistry: Thermodynamics and Reaction Kinetics*
  - g. CHEM 470: *Physical Chemistry: Quantum Chemistry and Spectroscopy*
  - h. Two additional chemistry classes at or above the 400 level. At least one of these classes must be a lab class.
3. Six units of credit earned in the following chemistry *Senior Experience* courses:
  - a. CHEM 380: *Seminar: Perspectives on Chemistry* (1 unit)
  - b. CHEM 480: *Seminar: Chemical Literature* (2 units)
  - c. CHEM 680: *Senior Seminar* (3 units)

## Required for the interdisciplinary major in natural sciences in chemistry and physics or geosciences

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:
  - a. CHEM 115: *Principles of Chemistry: Structure and Reactivity* and CHEM 116: *Principles of Chemistry: Energetics and Dynamics*, or the equivalent
  - b. GEOS 110: *Introduction to the Geosciences* and GEOS 210: *History of the Earth and Life*
  - c. PHYS 141: *Principles of Classical, Relativistic, and Quantum Mechanics* and PHYS 151: *Principles of Classical Physics*
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 the following chemistry *Senior Experience* courses:
  - a. CHEM 380: *Seminar: Perspectives on Chemistry* (1 unit)
  - b. CHEM 480: *Seminar: Chemical Literature* (2 units)
  - c. CHEM 680: *Senior Seminar* (3 units)

## Senior Experience in chemistry

The chemistry department's capstone sequence consists of a series of three seminars:

1. 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.
2. 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 fields of interest to them. In this seminar, they learn the character and organization of the chemical literature and become familiar with search strategies. Students select topics and, guided by the instructor, conduct a literature search for key papers, construct a bibliography, and prepare presentations highlighting key research findings. 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.
3. 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.

## Required for the minor in chemistry

1. Introductory principles
  - a. CHEM 115: *Principles of Chemistry: Structure and Reactivity* and CHEM 116: *Principles of Chemistry: Energetics and Dynamics*, or the equivalent
2. Core competencies
  - a. CHEM 210: *Analytical Chemistry* and CHEM 211: *Statistical Methods in Analytical Chemistry* (3 units)
  - b. CHEM 250: *Organic Chemistry I*
  - c. CHEM 320: *Inorganic Chemistry*
  - d. CHEM 370: *Physical Chemistry: Thermodynamics and Reaction Kinetics* or CHEM 470: *Physical Chemistry: Quantum Chemistry and Spectroscopy*
  - e. Two additional chemistry classes, one of which must be at or above the 400 level.
3. At least three units of credit earned in the following chemistry seminar courses:
  - a. CHEM 380: *Seminar: Perspectives on Chemistry* (1 unit)
  - b. CHEM 480: *Seminar: Chemical Literature* (2 units)
  - c. CHEM 680: *Senior Seminar* (3 units)

## Teacher certification in chemistry or broad-field science

Students can seek teacher certification to teach chemistry at the secondary level. Certification requires a major in chemistry with courses in other science subjects. Students also have the option of seeking broad-field science certification by completing a minimum of two courses in each of two other science disciplines and at least one course in each of the remaining sciences. Students who plan to seek teacher certification should review the requirements in the Education section of the catalog and meet with the director of teacher education, preferably before the end of the sophomore year.

## Courses - Chemistry

### 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 113: *MATHEMATICAL PRACTICES IN CHEMISTRY*

As a chemist, an in-depth understanding of basic mathematical concepts, including numerical calculations, algebraic functions, and data handling, is necessary for success. This course offers the opportunity to explore the mathematical ideas needed to understand chemistry. In this course, you will practice mathematical ideas, apply them to chemical contexts, and explore common mathematical misconceptions. No chemistry background is required for this course. *Units: 3.*

### 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. See the chemistry

department's web page for placement examination information. PREREQUISITES: Placement examination  
*Units: 6.*

*Prerequisite: Placement examination*

### **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 for students who have not completed CHEM 115. See the chemistry department's web page for placement examination information. PREREQUISITES: CHEM 115 or placement examination  
*Units: 6.*

*Prerequisite: CHEM 115 or placement examination*

### **CHEM 191: *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. Student Initiated Course form required to register for this course. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **CHEM 195: *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. PREREQUISITES: Sophomore standing; Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: Sophomore standing; Counter Registration Required*

### **CHEM 210: *ANALYTICAL CHEMISTRY***

A course in the quantitative description of chemical equilibria in solution (acid-base, complexation, redox, solubility) using classical, separation, electrochemical, and spectrochemical methods of analysis. This course covers methods of quantification, statistics, and data analysis as applied to modern chemistry. Students will have the opportunity to individually design projects. Three lectures and two laboratory periods per week. PREREQUISITES: CHEM 116, placement exam, or consent of instructor; concurrent enrollment in CHEM 211 required *Units: 6.*

*Also listed as Environmental Studies 250*

*Prerequisite: CHEM 116, placement exam, or consent of instructor; concurrent enrollment in CHEM 211 required*

### **CHEM 211: *STATISTICAL METHODS IN ANALYTICAL CHEMISTRY***

This course covers methods of statistics and data analysis as applied to modern chemistry. Students in this course will develop a working knowledge of the basic and advanced capabilities of the spreadsheet program

Microsoft Excel. Topics explored include descriptive statistics, hypothesis testing, correlation, regression, and tests of significance. This course is taught in an exercise-oriented approach where we use real data collected during CHEM 210. **PREREQUISITES:** CHEM 116, placement exam, or consent of instructor; concurrent enrollment in CHEM 210 is required *Units: 3.*

*Prerequisite: CHEM 116, placement exam, or consent of instructor; concurrent enrollment in CHEM 210 is required*

### **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. **PREREQUISITES:** CHEM 116 or consent of the instructor. *Units: 6.*

*Also listed as Environmental Studies 222*

*Prerequisite: CHEM 116 or consent of the instructor*

### **CHEM 225: NANOSCIENCE AND NANOTECHNOLOGY**

This course provides an introduction to the novelty, challenge, and excitement of nanoscale science and technology. Emphasis on the physical and chemical properties and phenomena at the nanoscale and their influence in chemistry, biochemistry, and environmental chemistry. Opportunities for individually designed projects. No formal laboratory. **PREREQUISITES:** At least one introductory course sequence in either chemistry (115, 116) or physics (150, 160 or 120, 130) *Units: 6.*

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

### **CHEM 250: ORGANIC CHEMISTRY I**

A study of the relationship between structure and function in organic compounds. Basic topics such as molecular orbital theory, conformational equilibria, stereochemistry, and nucleophilic substitution are covered. Students also learn to use instrumental analysis (NMR, IR, GC-MS) to identify and characterize compounds. One four-hour laboratory per week. **PREREQUISITES:** CHEM 116 or 119 or consent of instructor *Units: 6.*

*Prerequisite: CHEM 116 or 119 or consent of instructor*

### **CHEM 252: ORGANIC CHEMISTRY II**

A study of organic reactions and their mechanisms. The focus of the class is synthesis, both in the concrete sense of building molecules and in the abstract sense of pulling together disparate concepts to solve problems. Case studies from the polymer and pharmaceutical industries underline the relevance of the discipline to everyday life. One four-hour laboratory per week. **PREREQUISITES:** CHEM 250 *Units: 6.*

*Prerequisite: CHEM 250*

### **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. **PREREQUISITES:** CHEM 250 *Units: 6.*

*Prerequisite: CHEM 250*

### **CHEM 340: BIOCHEMISTRY I**

An introduction to the study of biological processes at the molecular level with emphases on protein structure and function, enzyme mechanism and kinetics, fundamentals of physical biochemistry, and the chemistry of biological molecules, including carbohydrates, lipids, and nucleic acids. PREREQUISITES: CHEM 250 or concurrent enrollment, or consent of instructor *Units: 6.*

*Also listed as Biology 444*

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

### **CHEM 350: BIOORGANIC AND MEDICINAL CHEMISTRY**

Bioorganic chemistry is the study of the organic chemistry underlying biological processes; topics such as the organic chemistry of metabolic processes and the laboratory synthesis of biomolecules will be covered. We will also study the organic chemistry of drug discovery and development, guided by both pharmaceutical case studies and modern medicinal chemistry literature. PREREQUISITES: CHEM 252 or consent of instructor *Units: 6.*

*Prerequisite: CHEM 252 or consent of instructor*

### **CHEM 370: PHYSICAL CHEMISTRY: THERMODYNAMICS AND KINETICS**

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 catalysis. No laboratory. PREREQUISITES: MATH 155, PHYS 150, CHEM 116; or consent of instructor *Units: 6.*

*Prerequisite: MATH 155, PHYS 150, CHEM 116; 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. PREREQUISITES: Sophomore standing; offered annually in the Fall Term *Units: 1.*

*Prerequisite: Sophomore standing; offered annually in the Fall Term*

### **CHEM 390: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **CHEM 391: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **CHEM 395: 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. PREREQUISITES: Sophomore standing; Counter Registration Required *Units: 1 TO 98*.

*Prerequisite: Sophomore standing; Counter Registration Required*

### **CHEM 399: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98*.

*Prerequisite: Counter Registration Required.*

### **CHEM 410: INSTRUMENTAL ANALYSIS**

An advanced course in instrumental methods of quantification and identification in modern chemistry. Emphasis on instrument design, operating principles, interpretation of instrumental data, and discrimination between techniques. This course focuses on spectroscopic, chromatographic, and electrochemical techniques and their application in fundamental and applied research. Students will have the opportunity to individually design projects. Three lectures and one laboratory per week. PREREQUISITES: CHEM 210 or consent of instructor *Units: 6*.

*Prerequisite: CHEM 210 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. PREREQUISITES: CHEM 252, CHEM 370 recommended *Units: 6*.

*Prerequisite: CHEM 252, CHEM 370 recommended*

### **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. PREREQUISITES: CHEM 340 or consent of instructor *Units: 6*.

*Also listed as Biology 455*

*Prerequisite: CHEM 340 or consent of instructor*

### **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. PREREQUISITES: CHEM 340 or BIOL 354 *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 may vary from year to year, but the class typically covers organic synthesis in depth. Students will often use the literature and their own expanding understanding of chemical reactivity to design synthetic routes to complex drugs and natural products. No formal laboratory; lab exercises may occasionally substitute for lectures. *Units: 6.*

*Prerequisite: CHEM 252 or consent of instructor*

#### **CHEM 470: PHYSICAL CHEMISTRY: QUANTUM CHEMISTRY & SPECTROSCOPY**

Develops and explores theoretical methods and models for the quantum description of atoms and molecules as chemical systems; statistical methods that link the macroscopic and molecular levels of these descriptions are also explored, along with the treatment of deviations from equilibrium. No laboratory. PREREQUISITES: MATH 155, PHYS 150, CHEM 116; or consent of instructor *Units: 6.*

*Prerequisite: MATH 155, PHYS 150, CHEM 116; or consent of instructor*

#### **CHEM 476: PHYSICAL CHEMISTRY LABORATORY**

Students will use the laboratory setting to connect quantitative models with observed chemical phenomena using physical chemistry concepts. Lectures will guide students in analyzing their data, and developing the tools needed to communicate their results via research articles and presentations. Experimental topics include thermodynamics, chemical kinetics, quantum mechanics, and spectroscopy. PREREQUISITES: MATH 150, PHYS 151, CHEM 370 or CHEM 470; or consent of instructor *Units: 6.*

*Prerequisite: MATH 150, PHYS 151, CHEM 370 or CHEM 470; or consent of instructor*

#### **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, constructs 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. PREREQUISITES: Junior standing, or consent of instructor *Units: 2.*

*Prerequisite: Junior standing, or consent of instructor*

#### **CHEM 485: ADVANCED CHEMISTRY LABORATORY**

A laboratory course to integrate chemistry perspectives from organic, inorganic, biochemistry, analytical and physical chemistry. Students will practice advanced experimental design, data analysis, synthesis methods, spectroscopic/spectrometric techniques, and computation methods through experiments that overlap the primary chemistry division. Students will write results in the form of research articles and participate in the peer-review process. An additional independent research project involving proposal, experiment, and written article could be used as a foundation for a senior experience project. Two laboratories weekly; no lectures. PREREQUISITES: CHEM 210, 250, and 320 *Units: 6.*

*Prerequisite: CHEM 210, 250, and 320*

### **CHEM 570: TOPICS ADVANCED PHYSICAL CHEM**

A study of advanced physical chemistry topics that are not covered in CHEM 370, 470, and 476. Course will emphasize the physical theories that govern chemical phenomena. Topics may include spectroscopy, electrochemistry, computational chemistry, and polymer/materials chemistry. No formal laboratory, but lab exercises will occasionally substitute lectures. May be repeated for credit when topic is different. *Units: 6.*

*Prerequisite: MATH 150 and CHEM 370 (CHEM 470 preferred), or consent of instructor*

### **CHEM 590: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **CHEM 591: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **CHEM 595: 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. PREREQUISITES: Sophomore standing; Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: Sophomore standing; Counter Registration Required*

### **CHEM 599: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **CHEM 680: SENIOR SEMINAR**

A seminar course for senior majors, culminating in an individual seminar presentation by each student. *Units: 3.*

### **CHEM 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

**CHEM 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

**CHEM 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. PREREQUISITES: Sophomore standing; Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: Sophomore standing; Counter Registration Required*

**CHEM 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

# CHINESE AND JAPANESE

Professor:	K. Sung ( <i>Wendy and K.K. Tse Professor of East Asian Studies, chair term III</i> )
Visiting assistant professor:	A. Adler
Instructors:	Y. Makita, M. Wegehaupt ( <i>East Asian Studies</i> )
Lecturer:	Y. Luo

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.

## Required for the major in Chinese

Students who complete the major in Chinese will demonstrate proficiency in the four language skills (speaking, listening, reading, writing) at the intermediate-high to advanced-low level according to the American Council of Teachers of Foreign Languages (ACTFL) guidelines. They will also demonstrate the ability to read classical Chinese texts and translate appropriately into the vernacular and to work with complex fictional, non-fictional, and filmic texts in Chinese culture, history, and institutions.

The major in Chinese requires the following:

1. Completion of beginning and intermediate Chinese language courses:
  - a. CHJA 101: *Beginning Chinese I*
  - b. CHJA 102: *Beginning Chinese II*
  - c. CHJA 201: *Beginning Intermediate Chinese*
  - d. CHJA 202: *Intermediate Chinese I*
  - e. CHJA 203: *Intermediate Chinese II*
  - f. CHJA 301: *Advanced Intermediate Chinese*
2. Three six-unit courses in advanced Chinese, taught in Chinese: Participation in the Lawrence-affiliated study-abroad program at Associated Colleges in China and successful completion of its fourth-year level courses will fulfill this category. Participation in other off-campus Chinese language programs is to be evaluated for this category by the department faculty.
  - a. CHJA 401: *Advanced Communicative Chinese*
  - b. CHJA 402: *Advanced Readings in Chinese*
  - c. CHJA 590: *Tutorial Studies in Chinese* or CHJA 598: *Internship in Chinese*
3. Three six-unit courses in Chinese literature and linguistics, taught in English, selected from the following. The third course may be substituted by an additional course in category 4.
  - CHJA 255: *Introduction to Chinese Language and Culture*
  - CHJA 310: *Introduction to East Asian Linguistics*
  - CHJA 350: *Modern Chinese Literature and Cinema in Translation*

CHJA 355: *History of the Chinese Language*

- CHJA 370: *Traditional Chinese Literature and Thought*

4. One six-unit courses in Chinese culture, taught in English, selected from the following:

- HIST 308: *Half the Sky: Chinese Women's History*
- HIST 360: *Contemporary China: 1949-2000*
- HIST 361: *Western Encounters with China: Perceptions and Misperceptions*
- HIST 482: *The Art of Healing: A History of Chinese Medicine*
- ARHI 430: *Topics in Asian Art*

5. One senior-level independent study, CHJA 699 (6 units), for the *Senior Experience* in Chinese.

## Senior Experience in Chinese

CHJA 699 is 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.

## Required for the minor in Chinese language

1. Completion of beginning and intermediate Chinese language courses:

- a. CHJA 101: *Beginning Chinese I*
- b. CHJA 102: *Beginning Chinese II*
- c. CHJA 201: *Beginning Intermediate Chinese*
- d. CHJA 202: *Intermediate Chinese I*
- e. CHJA 203: *Intermediate Chinese II*
- f. CHJA 301: *Advanced Intermediate Chinese*
- g. *One advanced language course*

2. An exit proficiency interview

## Required for the minor in Japanese language

1. Completion of beginning and intermediate Japanese language courses:

- a. CHJA 111: *Beginning Japanese I*
- b. CHJA 112: *Beginning Japanese II*
- c. CHJA 211: *Beginning Intermediate Japanese*
- d. CHJA 212: *Intermediate Japanese I*
- e. CHJA 213: *Intermediate Japanese II*
- f. CHJA 311: *Advanced Intermediate Japanese*

2. One advanced language course

3. An exit proficiency interview

## Teacher certification in Chinese (K-12)

Chinese majors can seek certification to teach Chinese at the elementary and secondary levels. To be certified, students must spend a term in a Chinese-speaking country studying the language and culture and must pass an oral and writing proficiency test. Students can add an endorsement in a second area (such as another language or English as a second language) by completing the appropriate minor. Students who plan to seek teacher certification should review the requirements in the Education section of the catalog and meet with the director of teacher education, preferably before the end of the sophomore year.

## 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.

## International study

Opportunities exist to study in both Chinese- and Japanese-speaking areas through affiliated off-campus programs in Beijing, Shanghai, Taipei, and Tokyo (see Off-Campus Programs).

## Courses - Chinese and Japanese

### 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. **PREREQUISITES:** CHJA 101 *Units: 6.*

*Prerequisite:* CHJA 101

### 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. PREREQUISITES: CHJA 111 or equivalent *Units: 6.*

*Prerequisite: CHJA 111 or equivalent*

### **CHJA 191: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **CHJA 195: 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. PREREQUISITES: Study abroad at the third-year level or CHJA 401 and 402 or CHJA 411; Counter Registration Required *Units: 3.*

*Prerequisite: Study abroad at the third-year level or CHJA 401 and 402 or CHJA 411; Counter Registration Required*

### **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. PREREQUISITES: CHJA 102 *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. PREREQUISITES: CHJA 201 *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. PREREQUISITES: CHJA 202 *Units: 6.*

*Prerequisite: CHJA 202*

### **CHJA 204: TOPICS IN CHINESE FOR SPECIAL PURPOSES**

Rotating topics course, with two alternating topics: (1) Material Culture and (2) The Environment, designed to supplement the intermediate Chinese course if taken concurrently, and to prepare students for internships and field experiences in China. Repeatable when topic is different. *Units: 3.*

*Prerequisite: CHJA 201 and consent of instructor*

### **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. PREREQUISITES: CHJA 112 *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. PREREQUISITES: CHJA 211 or consent of instructor  
*Units: 6.*

*Prerequisite: CHJA 211 or consent of instructor*

### **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. PREREQUISITES: CHJA 212 or consent of instructor  
*Units: 6.*

*Prerequisite: CHJA 212 or consent of instructor*

### **CHJA 255: CHINESE LANGUAGE AND CULTURE**

A survey of the Chinese language family, its linguistic structure, dialectal variations, writing system, speech registers, interaction with other languages and the internet world, and its role in reflecting cultural and societal aspects such as social class, familial hierarchy, age and gender, and Confucianism. Taught in English. PREREQUISITES: CHJA 101 or consent of instructor  
*Units: 6.*

*Also listed as Linguistics 255*

*Prerequisite: CHJA 101 or consent of instructor*

### **CHJA 265: 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. PREREQUISITES: Sophomore standing; CHJA 112 recommended  
*Units: 6.*

*Also listed as Linguistics 265, East Asian Studies 265*

*Prerequisite: Sophomore standing; CHJA 112 recommended*

### **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. PREREQUISITES: CHJA 203 or consent of instructor  
*Units: 6.*

*Prerequisite: CHJA 203 or consent of instructor*

### **CHJA 310: 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. PREREQUISITES: LING 150 and sophomore standing  
*Units: 6.*

*Also listed as East Asian Studies 310, Linguistics 310*

*Prerequisite: LING 150 and sophomore standing*

### **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. PREREQUISITES: CHJA 213 or consent of instructor *Units: 6.*

*Prerequisite: CHJA 213 or consent of instructor*

### **CHJA 332: SURVEY OF MODERN JAPANESE LITERATURE AND FILM (IN ENGLISH)**

This course introduces students to seminal works of Japanese literature and film from 1868 to the present, as a way to think about the transformation of Japan from a traditional society to a modern nation state. *Units: 6.*

*Also listed as East Asian Studies 332*

### **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. PREREQUISITES: Sophomore standing; EAST 150 recommended *Units: 6.*

*Also listed as East Asian Studies 350, Film Studies 350*

*Prerequisite: Sophomore standing; EAST 150 recommended*

### **CHJA 355: HISTORY OF THE CHINESE LANGUAGE (IN ENGLISH)**

This course covers the history of the Chinese language, including the structural characteristics of the language, invention and evolution of the writing system, general survey of the major dialects, diachronic changes, spread and influence of the Chinese lexicon in East Asia, birth of the common language putonghua, evaluation of traditional versus simplified characters, and challenges of the language in the modern era. PREREQUISITES: Sophomore standing; one year of Chinese recommended *Units: 6.*

*Also listed as East Asian Studies 355*

*Prerequisite: Sophomore standing; one year of Chinese recommended*

### **CHJA 360: CHINESE CONTEMPORARY FILM IN ENGLISH**

Using feature films and documentaries from the so-called Fifth [1982-] and Sixth Generations [beginning in the 1990s] of film directors in China, this course provides a visual record of the immense political, economic, and social changes in China since the Reform and Opening up period at the end of the Cultural Revolution. Taught in English. PREREQUISITES: Sophomore standing; EAST 150 or EAST 420 recommended *Units: 6.*

*Also listed as Film Studies 360, East Asian Studies 360*

*Prerequisite: Sophomore standing; EAST 150 or EAST 420 recommended*

### **CHJA 365: HISTORY OF THE JAPANESE LANGUAGE (IN ENGLISH)**

This course explores the history of the Japanese language, including theories of its origin, the importation of the Chinese characters, Kanji, the invention of the Japanese syllabaries, Kana, the development of the writing system, lexical influence of loan words, and the evolution of both written and spoken forms in modern Japanese. The course also investigates two other languages in Japan, the Ainu and the Ryukyu languages. PREREQUISITES: Sophomore standing; one year of Japanese recommended *Units: 6*.

*Also listed as Linguistics 365, East Asian Studies 377*

*Prerequisite: Sophomore standing; one year of Japanese recommended*

### **CHJA 370: CHINESE TRADITIONAL LITERATURE AND THOUGHT (IN ENGLISH)**

An introduction to the texts and schools comprising traditional Chinese literature and thought. Reading across time and genre, from ancient classics such as *Shijing* to Tang poetry, to later Ming novels *Water Margin* and *Romance of the Three Kingdoms*, students will explore the breadth of the Chinese literary tradition while engaging with primary texts from the Confucian, Buddhist and Daoist traditions that shaped it. Lecture, discussion and exams. *Units: 6*.

*Also listed as East Asian Studies 370*

### **CHJA 371: TRADITIONAL JAPANESE LITERATURE AND THOUGHT**

With lectures and discussion, the course introduces students to the canon of texts comprising classical Japanese literature and thought. Reading across time and genre, we look at myth-histories, poetry compilations, Chinese-inspired literature, the birth of fiction and women's literature. Monks and warriors expand our scope into the areas of religion, philosophy, and military theory and we culminate with an introduction to the dramatic arts of the Muromachi. *Units: 6*.

*Also listed as East Asian Studies 371*

### **CHJA 390: TUTORIAL STUDIES IN CHINESE OR JAPANESE**

Individualized advanced study under regular staff direction on topics not covered in lower-level courses. PREREQUISITES: Counter Registration Required *Units: 1 TO 98*.

*Prerequisite: Counter Registration Required*

### **CHJA 391: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98*.

*Prerequisite: Counter Registration Required.*

### **CHJA 395: 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. PREREQUISITES: Study abroad at the third-year level or CHJA 401 and 402 or CHJA 411; Counter Registration Required *Units: 3*.

*Prerequisite: Study abroad at the third-year level or CHJA 401 and 402 or CHJA 411; Counter Registration Required*

### **CHJA 399: INDEPENDENT STUDY IN CHINESE OR JAPANESE**

Individualized advanced research under staff guidance to prepare a substantial paper, usually for submission for honors. PREREQUISITES: Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

### **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. PREREQUISITES: CHJA 301 or consent of instructor *Units: 6.*

*Prerequisite: CHJA 301 or consent of instructor*

### **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. PREREQUISITES: CHJA 301 or consent of instructor *Units: 6.*

*Prerequisite: CHJA 301 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. PREREQUISITES: CHJA 311 or consent of instructor *Units: 6.*

*Prerequisite: CHJA 311 or consent of instructor*

### **CHJA 590: TUTORIAL STUDIES IN CHINESE OR JAPANESE**

Individualized advanced study under regular staff direction on topics not covered in lower-level courses. PREREQUISITES: Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

### **CHJA 591: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **CHJA 595: 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. PREREQUISITES: Study abroad at the third-year level or CHJA 401 and 402 or CHJA 411; Counter Registration Required *Units: 3.*

*Prerequisite: Study abroad at the third-year level or CHJA 401 and 402 or CHJA 411; Counter Registration Required*

#### **CHJA 599: INDEPENDENT STUDY IN CHINESE OR JAPANESE**

Individualized advanced research under staff guidance to prepare a substantial paper, usually for submission for honors. PREREQUISITES: Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

#### **CHJA 690: TUTORIAL STUDIES IN CHINESE OR JAPANESE**

Individualized advanced study under regular staff direction on topics not covered in lower-level courses. PREREQUISITES: Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

#### **CHJA 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

#### **CHJA 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. PREREQUISITES: Study abroad at the third-year level or CHJA 401 and 402 or CHJA 411; Counter Registration Required *Units: 3.*

*Prerequisite: Study abroad at the third-year level or CHJA 401 and 402 or CHJA 411; Counter Registration Required*

#### **CHJA 699: INDEPENDENT STUDY IN CHINESE OR JAPANESE**

Individualized advanced research under staff guidance to prepare a substantial paper, usually for submission for honors. PREREQUISITES: Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

# CLASSICS

**Associate professor:** R. McNeill (*Ottilia Buerger Professor of Classical Studies, I and II and III and III*)

**Instructor:** M. Wheelock-Johnson

Classics is dedicated to study of the literature, history, art, and thought of ancient Greece and Rome. As such it is an inherently interdisciplinary field, grounded in the critical reading of Greek and Latin texts but involving examination of all aspects of Greek and Roman civilization from multiple perspectives. The program of the Classics Department at Lawrence University emphasizes the study of Greek and Roman literature and history, supported by multidisciplinary engagement with topics drawn from a range of related academic fields, as a basis for the exploration of Greek and Roman culture, the Greco-Roman classical tradition, and the many interactions of the Greeks and Romans with other peoples of the ancient world in the Mediterranean region and beyond.

## Required for the minor in Classical Studies

Required for the minor in Classical Studies: 6-9 courses depending on Latin ability, as determined by prior language study and/or placement exam. For further information about the placement exam, see below.

1. Completion of beginning and intermediate Latin language courses.

- CLAS 100: *Beginning Latin 1* (or equivalent)
- CLAS 110: *Beginning Latin 2* (or equivalent)
- CLAS 220: *Intermediate Latin* (or equivalent)

2. At least one course (6 units) in Latin literature at the 300- or 400-level.

These are paired courses (300- and 400-level meeting jointly) with texts read in Latin. All have a prerequisite of CLAS 220 (or equivalent).

- CLAS 301/401: *Topics in Latin Literature*
- CLAS 302/402: *Ovid*
- CLAS 303/403: *Catullus and Horace*
- CLAS 304/404: *Virgil*
- CLAS 306/406: *The Roman Novel*
- CLAS 307/407: *Cicero*
- CLAS 308/408: *Roman Historians*

3. At least three courses (18 units) in Greek and Roman history, culture, and civilization. At least one of these courses (6 units) must be taken at the 300-level or above.

Students may fulfill this requirement by choosing from the following list of courses. These are courses in which all texts are read in English translation.

- CLAS 150: *Survey of Greek History*
- CLAS 160: *Survey of Roman History*
- CLAS 250: *Classical Mythology*
- CLAS 260: *Classical Literature in Translation*
- CLAS 280: *Warfare in Classical Antiquity*
- CLAS 300: *Periclean Athens*
- CLAS 305: *Fall of the Roman Republic*
- CLAS 310: *Augustan Rome*
- CLAS 363: *Greek and Roman Drama in Translation*
- CLAS 370: *Greek and Roman Epic in Translation*
- CLAS 421: *Topics in Greek Literature*

#### 4. Two elective courses (12 units).

Students may fulfill this requirement by choosing two additional approved courses in Classics (CLAS) or related fields. At least one of these courses (6 units) must be taken at the 200-level or above.

Electives may be chosen from any of the following categories. Students are not limited to any one category in making their choices.

##### a. Courses in Latin literature.

For the list of eligible courses, see under requirement #2 above.

##### b. Courses in Greek and Roman history, culture, and civilization.

For the list of eligible courses, see under requirement #3 above.

##### c. Courses in related fields.

Students may also choose their electives from the following list of approved courses originating in other departments:

- ARHI 135 (CLAS 135): *Temples and Togas*
- ARHI 206: *Mosques and Minotaurs*
- ARHI 215: *Parchment, Power, and Play*
- ARHI 301: *Topics in Ancient Art*
- ENG 527: *History of the Book*
- GOVT 200: *Politics and Human Nature*
- HIST 105: *Cultures of the Silk Road*
- PHIL 200: *History of Philosophy: Plato and Aristotle*
- RLST 290: *Religion in Ancient Egypt*
- RLST 285 *Hebrew Prophets*
- RLST 316: *Greek and Arabic Philosophical Traditions*
- RLST 365: *Mediterranean Cities*

## Latin placement exam

Students who have prior experience with Latin and who wish to begin taking Latin at Lawrence at the intermediate or advanced level should complete the online Latin placement exam via Canvas. Students may take the exam at any time, but should plan to do so well in advance of the term in which they expect to take their first Latin course. Students wishing to take this exam should contact the department chair.

The online Latin placement exam consists of parsing/form identifications, a short sight translation passage, and grammar questions about the passage.

The Classics Department will grade online Latin placement exams as they are received, and will notify students of their placement as quickly as possible. While each student's language experience will be judged on a case-by-case basis, here are some general guidelines:

1-2 years of high school experience: start at the 100-level

2-3 years of high school experience: start at the 200-level

3-4 years of high school experience: start at the 300-level

## foreign language competency general education requirement

Students may fulfill the university's foreign language competency requirement by taking Latin at the intermediate level (CLAS 220) or any 300- or 400-level course in Latin literature.

Any student who wishes to satisfy the foreign language competency requirement in Latin via examination must take the Latin placement exam in person under proctored conditions. Students must achieve a grade in the A-range (90% or above) on the proctored Latin placement exam in order to satisfy the foreign language requirement. The proctored Latin placement exam is offered annually during Week 1 of the Fall Term. Students who wish to take this exam must notify the department chair by no later than 5:00 p.m. on the Friday of Welcome Week.

## The major in Classics

The major in Classics has been suspended. Beginning in the 2022-23 academic year, entering students may not declare a major in Classics. Students who have already declared a major in Classics may continue under the requirements listed in their course catalog of record (typically their matriculation year). Students who matriculated in the 2021-22 academic year or earlier may be able to declare and complete a major in Classics under its previous requirements; interested students should contact the department chair for further information.

## Senior Experience in Classics

Note: The following information is intended for those students who are planning to complete their declared major in Classics during the 2022-23 academic year, or who may be eligible to complete the major under its previous requirements (see above).

The Senior Experience in Classics consists of a self-designed project that enables each student to explore a topic of individual interest within the field. During the senior year, one term of independent study (6 units) is required to complete this project.

Classics majors must choose a topic and advisor for their Senior Experience project no later than the end of the Spring Term of the junior year. The due date for submission of the final version of the project will be determined in consultation with the advisor, but should normally be no later than the end of the Winter Term of the senior year.

The Senior Experience in Classics may be fulfilled in a variety of ways, in consultation with the department faculty. Scholarly, creative, pedagogical, and experiential projects are all viable options. Past Senior Experience projects have included: research papers on topics ranging from the interaction of speech and identity in Homer's *Iliad* to Hannibal's military strategy in Italy during the Second Punic War; choreographing and staging a mixed-media dance performance that incorporated the recitation of passages of Greek and Roman lyric poetry; designing a stage set and lighting for a production of Euripides' *Medea*; and using computer rendering software to create an explorable three-dimensional model of the Temple of Apollo Epikourios at Bassae in Greece.

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

## The minors in Greek and Latin

The minors in Greek and Latin are suspended. Entering students may not declare a minor in Greek or Latin during the 2022-23 academic year. Returning students who have already declared a minor in Latin, or who will meet the previous requirements for this minor by the end of the 2022-23 academic year, may complete the minor under the requirements listed in their course catalog of record (typically the catalog for their matriculation year).

## International study

The undergraduate classics programs at the Intercollegiate Center for Classical Studies in Rome (ICCS-Rome), the American University of Rome (ISA Rome), and the College Year in Athens (CYA) are affiliated and approved options for study abroad in classics. Consult the department chair for more details.

## Courses - Classics

### **CLAS 100: *BEGINNING LATIN 1***

An introductory course emphasizing the basic forms and syntax of the Latin language. *Units: 6.*

### **CLAS 101: *INTRODUCTION TO CLASSICS***

An introduction to Greek and Roman civilization. Through lecture and discussion students will engage with ancient textual sources (in translation) on such topics as ancient politics, philosophy, military history, poetry, theatre, social history, oratory, and art history. Students will learn about the variety of methodologies and sources of evidence used by Classicists to understand the ancient world. *Units: 6.*

### **CLAS 110: *BEGINNING LATIN 2***

A continuation from CLAS 100 with emphasis on the more advanced syntactic structures of the Latin language. **PREREQUISITES:** CLAS 100 or two years of high school Latin *Units: 6.*

*Prerequisite: CLAS 100 or two years of high school Latin*

### **CLAS 120: *INTENSIVE BEGINNING LATIN***

An accelerated introductory course emphasizing the forms and basic syntax of Latin. Taken together, CLAS 120 and 220 provide students with the ability to read both classical and medieval Latin prose and poetry. *Units: 6.*

### **CLAS 125: *INTENSIVE BEGINNING GREEK***

An accelerated introductory course emphasizing the basic systematic structure of Greek. Taken together, CLAS 125 and 225 provide students with the ability to read both classical and Koine Greek. *Units: 6.*

### **CLAS 135: *TEMPLES AND TOGAS: ARTS OF THE ANCIENT WORLD***

This introductory class examines the art and architecture of ancient Greece and Rome, spanning from the Minoans on Crete to the Arch of Titus in the Roman Forum. Students will learn about the progression of styles, functions, and historical meanings of these objects as they are introduced to basic art historical methods. *Units: 6.*

*Also listed as Art History 135*

### **CLAS 150: *SURVEY OF GREEK HISTORY***

A study of ancient Greek history from the Bronze Age to 146 B.C.E. 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. All texts in English. *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 the reign of Constantine. Emphasis on political and cultural developments and the acquisition and maintenance of empire. Readings may

include Livy, Tacitus, Suetonius, and the *Historia Augusta*. All texts in English. *Units: 6.*

*Also listed as History 185*

### **CLAS 191: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **CLAS 220: INTENSIVE INTERMEDIATE LATIN**

A continuation from CLAS 110 with emphasis on developing experience with reading and translating connected passages of Latin prose and poetry. Successful completion of CLAS 220 fulfills the foreign language general education requirement for the B.A. PREREQUISITES: CLAS 110 or three years of high school Latin. *Units: 6.*

*Prerequisite: CLAS 110 or three years of high school Latin.*

### **CLAS 225: INTENSIVE INTERMEDIATE GREEK**

A continuation of CLAS 125 with emphasis on developing experience with reading connected passages of literary discourse, including sections from a variety of texts and authors. Successful completion fulfills the language general education requirement for the B.A. PREREQUISITES: CLAS 125 or its equivalent *Units: 6.*

*Prerequisite: CLAS 125 or its equivalent*

### **CLAS 250: CLASSICAL MYTHOLOGY**

A study of classical mythology through examination of the literary mythical narratives of Greece and Rome. We will consider the form, content, and themes of these stories in order to explore the cultural significance of myth and the various ways in which myths can be interpreted. All texts in English. *Units: 6.*

### **CLAS 260: ANCIENT VOICES: CLASSICAL LITERATURE IN TRANSLATION**

A study of specific texts selected from the corpus of Greek and Latin prose and poetry, read in English translation. Each iteration of the course will focus on a particular genre or theme in classical literature. Possible topics include: the ancient novel, death and the underworld, and Greek and Roman love poetry. *Units: 6.*

### **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. All texts in English. *Units: 6.*

*Also listed as History 241*

### **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.E.). 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. All texts in English. PREREQUISITES: Sophomore standing or

consent of instructor *Units: 6.*

*Also listed as History 235*

*Prerequisite: Sophomore standing or consent of instructor*

### **CLAS 301: TOPICS IN LATIN LITERATURE**

Close reading and study of texts selected from the corpus of Latin literature. The course will focus on a different genre, author, or theme in Latin poetry or prose each year it is offered. Possible topics include Roman satire, Roman comedy and tragedy, love elegy, and epistolary writing. Meets concurrently with CLAS 401. Not open to students who have received credit for the current topic under CLAS 401 or who need to receive credit for CLAS 401. May be repeated when the topic is different. *Units: 6.*

*Prerequisite: CLAS 220 or three years of high school Latin*

### **CLAS 302: OVID**

Close reading and study of Ovid's poetry in Latin, as represented by a book of the *Metamorphoses* or selections from the *Amores* and *Ars Amatoria*. Discussion will be supplemented with additional primary readings in English translation and secondary scholarship. Meets concurrently with CLAS 402. Not open to students who have received credit for CLAS 402 or CLAS 410, or who need to receive credit for CLAS 402. PREREQUISITES: CLAS 220 or three years of high school Latin. *Units: 6.*

*Prerequisite: CLAS 220 or three years of high school Latin.*

### **CLAS 303: CATULLUS AND HORACE**

Careful reading and concentrated study of selected poems by Catullus and Horace in Latin. Discussion will be supplemented with additional readings in English translation and secondary scholarship. Meets concurrently with CLAS 403. Not open to students who have received credit for CLAS 403 or CLAS 425, or who need to receive credit for CLAS 403. PREREQUISITES: CLAS 220 or three years of high school Latin *Units: 6.*

*Prerequisite: CLAS 220 or three years of high school Latin*

### **CLAS 304: VIRGIL**

Close reading of extended selections from Virgil in Latin, primarily drawn from the *Aeneid*, supplemented with additional readings in English translation and secondary scholarship. Emphasis on Virgil's poetic technique as well as the political and cultural significance of his poetry. Meets concurrently with CLAS 404. Not open to students who have received credit for CLAS 404 or CLAS 440, or who need to receive credit for CLAS 404. PREREQUISITES: CLAS 220 or three years of high school Latin *Units: 6.*

*Prerequisite: CLAS 220 or three years of high school Latin*

### **CLAS 305: THE FALL OF THE ROMAN REPUBLIC**

A study of the final decades of the Roman Republic from the sixth consulship of Marius to the assassination of Caesar (100 to 44 B.C.E.), focusing on political, social, and cultural changes during this tumultuous period. Topics include: Roman politics, social class and identity, and Republican art, literature, and thought. All texts in English. PREREQUISITES: Sophomore standing or consent of instructor *Units: 6.*

*Also listed as History 242*

*Prerequisite: Sophomore standing or consent of instructor*

### **CLAS 306: *THE ROMAN NOVEL***

Close reading and study of selected passages in Latin from the *Satyricon* of Petronius and the *Metamorphoses* (also known as *The Golden Ass*) of Apuleius, the two surviving examples of the ancient Roman novel. Meets concurrently with CLAS 406. Not open to students who have received credit for CLAS 406 or who need to receive credit for CLAS 406. PREREQUISITES: CLAS 220 or three years of high school Latin *Units: 6*.

*Prerequisite: CLAS 220 or three years of high school Latin*

### **CLAS 307: *CICERO***

Close reading of a selection from the works of Cicero in Latin, supplemented with additional readings in English translation and secondary scholarship. Texts may include the *Pro Caelio*, the *Pro Archia*, and the Catilinarian Orations. Meets concurrently with CLAS 407. Not open to students who have received credit for CLAS 407 or CLAS 435, or who need to receive credit for CLAS 407. PREREQUISITES: Prerequisite: CLAS 220 or three years of high school Latin *Units: 6*.

*Prerequisite: Prerequisite: CLAS 220 or three years of high school Latin*

### **CLAS 308: *ROMAN HISTORIANS***

A study of selections from several Roman historians in Latin, chosen to emphasize specific historical events and persons depicted on Roman coins from the university's Ottilia Buerger Collection. Meets concurrently with CLAS 408. Not open to students who have received credit for CLAS 408 or CLAS 415, or who need to receive credit for CLAS 408. PREREQUISITES: CLAS 220 or three years of high school Latin *Units: 6*.

*Prerequisite: CLAS 220 or three years of high school Latin*

### **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. All texts in English. PREREQUISITES: Sophomore standing or consent of instructor *Units: 6*.

*Also listed as History 240*

*Prerequisite: Sophomore standing or consent of instructor*

### **CLAS 321: *TOPICS IN GREEK LITERATURE***

In this course we will read excerpts from one or more authors in ancient Greek. Our discussion will be supplemented with additional primary readings in English translation and secondary scholarship. Possible topics include: the ancient novel, Greek lyric poetry, and the Homeric hymns. Meets concurrently with CLAS 421. Not open to students who have received credit for the current topic under CLAS 421 or who need to receive credit for CLAS 421. May be repeated when the topic is different. *Units: 6*.

*Prerequisite: CLAS 225 or three years of high school Greek*

### **CLAS 322: *HOMER***

In this course we will read excerpts from the *Iliad* and/or the *Odyssey* in Greek. Our discussion will be supplemented with additional readings in English translation and secondary scholarship. Meets concurrently with CLAS 422. Not open to students who have received credit for CLAS 455 or CLAS 422, or who need to receive credit for CLAS 422. PREREQUISITES: CLAS 225 or three years of high school Greek. *Units: 6*.

*Prerequisite: CLAS 225 or three years of high school Greek.*

### **CLAS 323: GREEK TRAGEDY**

In this course we will read excerpts from one tragedian (e.g. Aeschylus, Sophocles, Euripides) in ancient Greek. Our discussion will be supplemented with additional tragic material in English translation and secondary scholarship. Meets concurrently with CLAS 423. Not open to students who have received credit for CLAS 423 or who need to receive credit for CLAS 423. PREREQUISITES: CLAS 225 or three years of high school Greek  
*Units: 6.*

*Also listed as Theatre Arts 344*

*Prerequisite: CLAS 225 or three years of high school Greek*

### **CLAS 324: GREEK COMEDY**

In this course we will read excerpts from one comedian (e.g. Aristophanes, Menander) in ancient Greek. Our discussion will be supplemented with additional comic material in English translation and secondary scholarship. Meets concurrently with CLAS 424. Not open to students who have received credit for CLAS 424 or who need to receive credit for CLAS 424. PREREQUISITES: CLAS 225 or three years of high school Greek  
*Units: 6.*

*Prerequisite: CLAS 225 or three years of high school Greek*

### **CLAS 326: PLATO**

In this course we will read one Platonic dialogue (e.g., *Symposium*, *Apology*) in Greek. Our discussion will be supplemented with additional Platonic material in English translation and secondary scholarship. Meets concurrently with CLAS 426. Not open to students who have received credit for CLAS 460 or CLAS 426, or who need to receive credit for CLAS 326. PREREQUISITES: CLAS 225 or three years of high school Greek  
*Units: 6.*

*Prerequisite: CLAS 225 or three years of high school Greek*

### **CLAS 327: THE ATTIC ORATORS**

In this course we will read excerpts from one of the fourth-century Athenian orators (e.g., Lysias, Aeschines, Demosthenes) in Greek. Our discussion will be supplemented with additional material in English translation and secondary scholarship. Meets concurrently with CLAS 427. Not open to students who have received credit for CLAS 485 or CLAS 427, or who need to receive credit for CLAS 427. PREREQUISITES: CLAS 225 or three years of high school Greek  
*Units: 6.*

*Prerequisite: CLAS 225 or three years of high school Greek*

### **CLAS 328: GREEK HISTORIANS**

In this course we will read excerpts from one of the Greek historians (e.g., Herodotus, Thucydides, Xenophon) in Greek. Our discussion will be supplemented with additional primary readings in English translation and secondary scholarship. Meets concurrently with CLAS 428. Not open to students who have received credit for CLAS 480 or CLAS 428, or who need to receive credit for CLAS 428. PREREQUISITES: CLAS 225 or three years of high school Greek  
*Units: 6.*

*Prerequisite: CLAS 225 or three years of high school Greek*

### **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. PREREQUISITES: ARHI 100 or sophomore standing *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. PREREQUISITES: ARHI 100 or sophomore standing *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. PREREQUISITES: ARHI 100 or sophomore standing *Units: 6.*

*Also listed as Art History 204*

*Prerequisite: ARHI 100 or sophomore standing*

### **CLAS 363: LAUGHTER AND PAIN: GREEK AND ROMAN DRAMA IN TRANSLATION**

In this course we analyze ancient plays both as great works of literature and as artifacts of a particular artistic, cultural, and political context. Students will read excerpts and complete plays in English from a variety of ancient authors, including (from Classical Athens) Aeschylus, Sophocles, Euripides, Aristophanes, and Menander, and (from late Republican and early Imperial Rome) Plautus, Terence, and Seneca. PREREQUISITES: Sophomore standing or consent of instructor *Units: 6.*

*Also listed as English 263, Theatre Arts 363*

*Prerequisite: Sophomore standing or consent of instructor*

### **CLAS 370: WAR AND HUMANITY: GREEK AND ROMAN EPIC IN TRANSLATION**

An examination of ancient epic literature through the study of Homer's *Iliad* and *Odyssey* and Virgil's *Aeneid*, all read in English translation. Emphasis on the important features and themes of the epic genre, ancient conceptions of the hero, and the literary, cultural, and political resonance of these texts in classical antiquity. PREREQUISITES: Sophomore standing or consent of instructor *Units: 6.*

*Also listed as English 265*

*Prerequisite: Sophomore standing or consent of instructor*

### **CLAS 390: TUTORIAL STUDIES IN CLASSICS**

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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **CLAS 391: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **CLAS 399: INDEPENDENT STUDY IN CLASSICS**

Independent research on topics in Greek and Latin literature, ancient history, ancient philosophy, classical civilization, and/or linguistics, arranged in consultation with the department. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **CLAS 401: TOPICS IN LATIN LITERATURE**

Close reading and study of texts selected from the corpus of Latin literature. Meets concurrently with CLAS 301. Students taking this course at the 400-level will be held to a higher standard of reading, translation, and performance in class and on exams, and will be assigned an additional research paper. Not open to students who have received credit for the current topic under CLAS 301 or who need to receive credit for CLAS 301. May be repeated when the topic is different. *Units: 6.*

*Prerequisite: One 300-level course in Latin or four years of high school Latin*

### **CLAS 402: OVID**

A study of Ovid's poetry, as represented by selections from the *Metamorphoses* or the *Amores* and *Ars Amatoria* (in Latin). Meets concurrently with CLAS 302. Students taking this course at the 400-level will be held to a higher standard of reading, translation, and performance in class and on exams, and will be assigned an additional research paper. Not open to students who have received credit for CLAS 302 or CLAS 410, or who need to receive credit for CLAS 302. PREREQUISITES: One 300-level course in Latin or four years of high school Latin *Units: 6.*

*Prerequisite: One 300-level course in Latin or four years of high school Latin*

### **CLAS 403: CATULLUS AND HORACE**

Careful reading and concentrated study of selected poems by Catullus and Horace (in Latin). Meets concurrently with CLAS 403. Students taking this course at the 400-level will be held to a higher standard of reading, translation, and performance in class and on exams, and will be assigned an additional research paper. Not open to students who have received credit for CLAS 303 or CLAS 425, or who need to receive credit for CLAS 303. PREREQUISITES: One 300-level course in Latin or four years of high school Latin *Units: 6.*

*Prerequisite: One 300-level course in Latin or four years of high school Latin*

### **CLAS 404: VIRGIL**

Close reading and study of extended selections from Virgil (in Latin), primarily drawn from the *Aeneid*. Meets

concurrently with CLAS 304. Students taking this course at the 400-level will be held to a higher standard of reading, translation, and performance in class and on exams, and will be assigned an additional research paper. Not open to students who have received credit for CLAS 304 or CLAS 440, or who need to receive credit for CLAS 304. PREREQUISITES: One 300-level course in Latin or four years of high school Latin *Units: 6*.

*Prerequisite: One 300-level course in Latin or four years of high school Latin*

### **CLAS 406: *THE ROMAN NOVEL***

Close reading and study of selected passages in Latin from the *Satyricon* of Petronius and the *Metamorphoses* of Apuleius. Meets concurrently with CLAS 306. Students taking this course at the 400-level will be held to a higher standard of reading, translation, and performance in class and on exams, and will be assigned an additional research paper. Not open to students who have received credit for CLAS 306 or who need to receive credit for CLAS 306. PREREQUISITES: One 300-level course in Latin or four years of high school Latin *Units: 6*.

*Prerequisite: One 300-level course in Latin or four years of high school Latin*

### **CLAS 407: *CICERO***

Close reading and study of a selection from the works of Cicero (in Latin). Meets concurrently with CLAS 307. Students taking this course at the 400-level will be held to a higher standard of reading, translation, and performance in class and on exams, and will be assigned an additional research paper. Not open to students who have received credit for CLAS 307 or CLAS 435, or who need to receive credit for CLAS 307. PREREQUISITES: One 300-level course in Latin or four years of high school Latin *Units: 6*.

*Prerequisite: One 300-level course in Latin or four years of high school Latin*

### **CLAS 408: *ROMAN HISTORIANS***

A study of selections from several Roman historians (in Latin). Meets concurrently with CLAS 308. Students taking this course at the 400-level will be held to a higher standard of reading, translation, and performance in class and on exams, and will be assigned an additional research paper. Not open to students who have received credit for CLAS 308 or CLAS 415, or who need to receive credit for CLAS 308. PREREQUISITES: One 300-level course in Latin or four years of high school Latin. *Units: 6*.

*Prerequisite: One 300-level course in Latin or four years of high school Latin.*

### **CLAS 421: *TOPICS IN GREEK LITERATURE***

Close reading and study of excerpts from one or more authors in ancient Greek. Meets concurrently with CLAS 321. Students taking this course at the 400-level will be assigned a research paper and will be held to a higher standard in the assessment of their contributions to class translation and discussion and their performance on exams. Not open to students who have received credit for the current topic under CLAS 321 or who need to receive credit for CLAS 321. May be repeated when the topic is different. *Units: 6*.

*Prerequisite: One 300-level course in Greek or four years of high school Greek.*

### **CLAS 422: *HOMER***

Close reading and study of excerpts from the *Iliad* and/or the *Odyssey* in Greek. Meets concurrently with CLAS 322. Students taking this course at the 400-level will be assigned a research paper and will be held to a higher standard in the assessment of their contributions to class translation and discussion and their performance on

exams. Not open to students who have received credit for CLAS 455 or CLAS 322, or who need to receive credit for CLAS 322. PREREQUISITES: One 300-level course in Greek or four years of high school Greek. *Units: 6.*

*Prerequisite: One 300-level course in Greek or four years of high school Greek.*

### **CLAS 423: GREEK TRAGEDY**

In this course we will read excerpts from one tragedian in ancient Greek. Meets concurrently with CLAS 323. Students taking this course at the 400-level will be assigned a research paper and will be held to a higher standard in the assessment of their contributions to class translation and discussion and their performance on exams. Not open to students who have received credit for CLAS 323 or who need to receive credit for CLAS 323. PREREQUISITES: One 300-level course in Greek or four years of high school Greek *Units: 6.*

*Prerequisite: One 300-level course in Greek or four years of high school Greek*

### **CLAS 424: GREEK COMEDY**

In this course we will read excerpts from one comedian in ancient Greek. Meets concurrently with CLAS 324. Students taking this course at the 400-level will be assigned a research paper and will be held to a higher standard in the assessment of their contributions to class translation and discussion and their performance on exams. Not open to students who have received credit for CLAS 324 or who need to receive credit for CLAS 324. PREREQUISITES: One 300-level course in Greek or four years of high school Greek *Units: 6.*

*Prerequisite: One 300-level course in Greek or four years of high school Greek*

### **CLAS 426: PLATO**

Close reading and study of one Platonic dialogue (e.g., *Symposium*, *Apology*) in Greek. Meets concurrently with CLAS 326. Students taking this course at the 400-level will be assigned a research paper and will be held to a higher standard in the assessment of their contributions to class translation and discussion and their performance on exams. Not open to students who have received credit for CLAS 460 or CLAS 326, or who need to receive credit for CLAS 326. PREREQUISITES: One 300-level course in Greek or four years of high school Greek. *Units: 6.*

*Prerequisite: One 300-level course in Greek or four years of high school Greek.*

### **CLAS 427: THE ATTIC ORATORS**

In this course we will read excerpts from one of the fourth-century Athenian orators (e.g., Lysias, Aeschines, Demosthenes) in Greek. Meets concurrently with CLAS 327. Students taking this course at the 400-level will be assigned a research paper and will be held to a higher standard in the assessment of their contributions to class translation and discussion and their performance on exams. Not open to students who have received credit for CLAS 485 or CLAS 327, or who need to receive credit for CLAS 327. PREREQUISITES: One 300-level course in Greek or four years of high school Greek *Units: 6.*

*Prerequisite: One 300-level course in Greek or four years of high school Greek*

### **CLAS 428: GREEK HISTORIANS**

Close reading and study of one of the Greek historians (e.g., Herodotus, Thucydides, Xenophon). Meets concurrently with CLAS 328. Students taking this course at the 400-level will be assigned a research paper and will be held to a higher standard in the assessment of their contributions to class translation and discussion and their performance on exams. Not open to students who have received credit for CLAS 480 or CLAS 328, or

who need to receive credit for CLAS 328. PREREQUISITES: One 300-level course in Greek or four years of high school Greek *Units: 6.*

*Prerequisite: One 300-level course in Greek or four years of high school Greek*

#### **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 when the topic is different. *Units: 6.*

*Also listed as Art History 400*

*Prerequisite: One 200- or 300-level course in art history, one course in classics, or consent of the instructor.*

#### **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: CLAS 220 and 225 or consent of instructor.*

#### **CLAS 590: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

#### **CLAS 591: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

#### **CLAS 599: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

#### **CLAS 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

#### **CLAS 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

**CLAS 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

# COGNITIVE SCIENCE

Professors:	K. Krebsbach ( <i>Mathematics</i> ), B. Williams ( <i>Education</i> )
Associate professor:	M. Phelan ( <i>Philosophy, chair</i> )

Cognitive science is the interdisciplinary study of how the mind works. Cognitive scientists investigate mental representations and processes and their realization in brains and artificial systems. A hallmark of cognitive science is the use of methods from multiple disciplines to address questions about the nature of knowledge, thinking, and learning.

Lawrence offers a cognitive science minor, which students often complete alongside a major in one of the core disciplines of philosophy, psychology, neuroscience, linguistics, or computer science, or alongside an allied discipline such as anthropology, economics, political science, or music theory. Students have the option of expanding the minor into a student-designed major by proposing additional courses and a *Senior Experience* for approval by the instruction committee (see "student-designed majors" in the catalog).

The cognitive science minor is composed of an introductory course and departmental courses organized into five groups: philosophical foundations, computation, neuroscience, cognitive processes, and language. Students take six courses in at least three groups, and five of these courses must be outside the student's major department.

Students who study cognitive science often go on to graduate study in the field or one of its related disciplines, or to applied work in artificial intelligence, natural language processing, or technology design.

## Requirements for the minor in cognitive science

1. COSC 105: *Introduction to Cognitive Science*
2. Six additional courses from at least three of the following groups. Only one course may be in the student's major department (exception: psychology majors may count up to three courses in Brain and Neuroscience).
  - a. Philosophical Foundations
    - PHIL 300: *Epistemology*
    - PHIL 330: *Science vs. Pseudoscience*
    - PHIL 410: *Philosophy of Mind*
    - PHIL 400/LING 400: *Philosophy of Language*
  - b. Formal Systems and Computation
    - PHIL 150: *Symbolic Logic*
    - At most one of the following:
      - CMSC 140: *Introduction to Programming with Python*
      - CMSC 150: *Introduction to Computer Science*
      - CMSC 205/STAT 205: *Data-Scientific Programming*
      - CMSC 210: *Introduction to Scientific Programming*
    - STAT 208/CMSC 208: *Machine Learning*

- STAT 255: *Statistics for Data Science*
- STAT 450: *Bayesian Statistics*
- CMSC 470: *Artificial Intelligence*
- CMSC 515: *Theory of Computation*
- c. Brain and Neuroscience
  - NESC 200: *Introduction to Neuroscience*
  - PSYC 343: *Cognitive Neuroscience*
  - PSYC 347: *Hormones, Brain, and Behavior*
  - PSYC 348: *Biological Psychology*
  - PSYC 365: *Brain and Behavior*
  - PSYC 420: *Clinical and Affective Neuroscience*
  - PSYC 580/BIOL 340: *Topics in Neuroscience*
- d. Cognitive Processes
  - EDST 180/PSYC 180: *Psychology of Learning*
  - ECON 225: *Decision Theory*
  - PSYC 260 or 265: *Developmental Psychology*
  - PSYC 322: *Memory and Learning*
  - PSYC 340 or 342: *Cognitive Psychology*
  - COSC 345/ANTH 345/PSYC 345: *Distributed Cognition and the Extended Mind*
  - PSYC 370: *Perception*
  - ECON 410: *Advanced Game Theory and Applications*
- e. Language
  - LING 150: *Introduction to Linguistics*
  - LING 335: *Lexical Semantics*
  - LING 340: *Syntax*
  - LING 355: *Child Language Acquisition*
  - LING 405/PHIL 405: *How to Do Things With Words*
  - LING 470: *Cognitive Linguistics*
  - COSC 545/LING 545/PSYC 545: *Gesture Studies*

COSC 300: *Topics in Cognitive Science* may be counted in a group above that corresponds to the specific topic, with approval from the director of cognitive science.

## Courses - Cognitive Science

### **COSC 105: *INTRO TO COGNITIVE SCIENCE***

An introduction to the interdisciplinary study of how the mind works. Topics include: the nature of perception; what human language reveals about the mind; the basis of morality and altruism; how sexual selection has shaped human psychology; and the cognitive science of religious and spiritual belief. We will discuss tools, theories, and assumptions from philosophy, psychology, computer science, linguistics, anthropology, behavioral economics, and neuroscience. *Units: 6.*

*Also listed as Philosophy 105*

### **PHIL 105: *INTRODUCTION TO COGNITIVE SCIENCE***

An introduction to the interdisciplinary study of how the mind works. Topics include: the nature of perception;

what human language reveals about the mind; the basis of morality and altruism; how sexual selection has shaped human psychology; and the cognitive science of religious and spiritual belief. We will discuss tools, theories, and assumptions from philosophy, psychology, computer science, linguistics, anthropology, behavioral economics, and neuroscience. *Units: 6.*

*Also listed as Cognitive Science 105*

### **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.*

### **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. PREREQUISITES: Recommended for freshmen and sophomores *Units: 6.*

*Also listed as Linguistics 160*

*Prerequisite: Recommended for freshmen and sophomores*

### **EDST 180: PSYCHOLOGY OF LEARNING**

An introduction to brain structure and development in childhood and adolescence, memory systems and types of learning, and approaches to building knowledge, improving skills, and deepening understanding. Culminating topics include motivation, the nature and development of expertise, and instructional design. *Units: 6.*

*Also listed as Psychology 180*

### **PSYC 180: PSYCHOLOGY OF LEARNING**

An introduction to brain structure and development in childhood and adolescence, memory systems and types of learning, and approaches to building knowledge, improving skills, and deepening understanding. Culminating topics include motivation, the nature and development of expertise, and instructional design. *Units: 6.*

*Also listed as Education Studies 180*

### **CMSC 205: DATA-SCIENTIFIC PROGRAMMING**

An introduction to programming with emphasis on learning from data in order to gain useful insights. Topics focus on elementary programming concepts in the R language and the necessary tools to handle, analyze and interpret data. This course will be taught in a workshop format, and students will complete regular assignments and a final project that provide hands-on programming/analysis experiences. PREREQUISITES: One prior course MATH, STAT, or CMSC course, or BIOL 170, or consent of instructor *Units: 6.*

*Also listed as Statistics 205*

*Prerequisite: One prior course MATH, STAT, or CMSC course, or BIOL 170, or consent of instructor*

### **CMSC 210: 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 Python language, design and implementation of numerical algorithms, and an introduction to symbolic computation. PREREQUISITES: One term of calculus (either MATH 140 or MATH 120), or consent of instructor *Units: 6.*

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

### **ECON 225: DECISION THEORY**

This course will present a thorough introduction to decision theory, the study of how people should or do make decisions. Building on that foundation, game theory, the science of strategy, will be introduced, with economic applications. *Units: 6.*

### **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, social and cognitive development. A variety of theoretical perspectives are covered. PREREQUISITES: PSYC 100 or sophomore standing *Units: 6.*

*Prerequisite: PSYC 100 or sophomore standing*

### **PSYC 265: DEVELOPMENTAL PSYCHOLOGY (WITH LABORATORY)**

Identical in content to Psychology 260, but requiring a weekly three-hour laboratory that involves systematic work with infants and children to learn assessment techniques and experimental methodologies for the study of development. PREREQUISITES: PSYC 100 or sophomore standing *Units: 6.*

*Prerequisite: PSYC 100 or sophomore standing*

### **COSC 300: TOPICS IN COGNITIVE SCIENCE**

An in-depth exploration of a topic in cognitive science. May be repeated when topic is different.

*Topic for Spring 2019: The Making of Scientific Facts*

In this seminar we'll examine scientific facts: what they are and how they are constructed and contested. For background, we'll read physician Ludwik Fleck's *Genesis and Development of a Scientific Fact* (1935), physicist-historian Thomas Kuhn's *The Structure of Scientific Revolutions* (1962), and anthropologist Bruno Latour and sociologist Steve Woolgar's *Laboratory Life: The Construction of Scientific Facts* (1979). We'll explore the practices of scientists at Lawrence and consider the role of facts in disputes over science education and climate change. *Units: 6.*

### **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. PREREQUISITES: One course in philosophy, junior standing, or consent of instructor *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? PREREQUISITES: One course in philosophy, junior standing, or consent of instructor *Units: 6.*

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

### **ANTH 330: LANGUAGE AND CULTURE**

An introduction to the core concepts of linguistic anthropology, definitions of language, basic methods of linguistic anthropology (observation, transcription, analysis, ethnography), power and language, language discrimination, and language ideology theory. Lectures, discussions, and labs. PREREQUISITES: ANTH 110 or ANTH 130 or LING 150 *Units: 6.*

*Also listed as Linguistics 330*

*Prerequisite: ANTH 110 or ANTH 130 or LING 150*

### **LING 330: LANGUAGE AND CULTURE**

An introduction to the core concepts of linguistic anthropology, definitions of language, basic methods of linguistic anthropology (observation, transcription, analysis, ethnography), power and language, language discrimination, and language ideology theory. Lectures, discussions, and labs. PREREQUISITES: ANTH 110 or LING 150 *Units: 6.*

*Also listed as Anthropology 330*

*Prerequisite: ANTH 110 or LING 150*

### **LING 335: LEXICAL SEMANTICS**

This course introduces fundamental concepts and research issues in the linguistic study of word meaning. Topics include: representation of word meaning; relation between lexical, truth-conditional and context-dependent meanings; semantic relations; meaning variation; semantic properties of nouns and verbs (e.g. mass-count distinction, verb classes, aspect, semantic roles); interaction between content and function words. PREREQUISITES: LING 150 *Units: 6.*

*Prerequisite: LING 150*

### **BIOL 340: TOPICS IN NEUROSCIENCE**

A study of the nervous system from the perspectives of psychology and biology. 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 when topic is different.

*Topic for Fall 2022: Aging and the Brain*

Prerequisites: CHEM 116, BIOL 150 and one course in psychology; or PSYC 360 and one course in biology; or consent of instructor

With the advancement of medicine, our population continues to grow older, and the prevalence of age-related diseases is on the rise. In particular, the brain undergoes many molecular changes with aging that makes it susceptible to disease, such as dementias and Alzheimer's disease. In this course, we will explore the mechanisms of aging and their impact on the brain, disease manifestations related to aging in the brain, and the current medical treatments for age-related brain disorders. *Units: 6.*

*Also listed as Psychology 580*

*Prerequisite: CHEM 116, BIOL 150 and either NESC 200 or PSYC 384, or consent of instructor*

### **LING 340: 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. PREREQUISITES: LING 150 or consent of instructor *Units: 6.*

*Prerequisite: LING 150 or consent of instructor*

### **PSYC 340: COGNITIVE PSYCHOLOGY (WITH LABORATORY)**

Lecture-based investigation of the mental processes involved in the acquisition, organization, and use of knowledge. Topics surveyed include attention, memory, imagery, problem solving, and individual differences. One laboratory per week involving demonstrations and experiments. Class learning will be assessed through quizzes and exams; lab work will involve assignments and the option of a written paper or group presentation on a topic of the student's choosing. PREREQUISITES: PSYC 284 or COSC 105 *Units: 6.*

*Prerequisite: PSYC 284 or COSC 105*

### **ANTH 345: DISTRIBUTED COGNITION AND THE EXTENDED MIND**

The new science of the mind treats cognition as a distributed process involving the brain, body, and world. This seminar explores the role of material settings and tools, bodily engagement, social interaction, and cultural processes in human reasoning, problem solving, and learning. Students will write short papers examining aspects of cognitive activity in real-world settings. PREREQUISITES: PHIL 105 recommended *Units: 6.*

*Also listed as Cognitive Science 345, Psychology 345, Education Studies 345*

*Prerequisite: PHIL 105 recommended*

### **COSC 345: DISTRIBUTED COGNITION AND THE EXTENDED MIND**

The new science of the mind treats cognition as a distributed process involving the brain, body, and world. This seminar explores the role of material settings and tools, bodily engagement, social interaction, and cultural processes in human reasoning, problem solving, and learning. Students will write short papers examining aspects of cognitive activity in real-world settings. PREREQUISITES: PHIL 105 recommended *Units: 6.*

*Also listed as Anthropology 345, Psychology 345, Education Studies 345*

*Prerequisite: PHIL 105 recommended*

### **EDST 345: DISTRIBUTED COGNITION AND THE EXTENDED MIND**

The new science of the mind treats cognition as a distributed process involving the brain, body, and world. This seminar explores the role of material settings and tools, bodily engagement, social interaction, and cultural processes in human reasoning, problem solving, and learning. Students will write short papers examining aspects of cognitive activity in real-world settings. PREREQUISITES: PHIL 105 recommended *Units: 6.*

*Also listed as Cognitive Science 345, Anthropology 345, Psychology 345*

*Prerequisite: PHIL 105 recommended*

### **PSYC 345: DISTRIBUTED COGNITION AND THE EXTENDED MIND**

The new science of the mind treats cognition as a distributed process involving the brain, body, and world. This seminar explores the role of material settings and tools, bodily engagement, social interaction, and cultural processes in human reasoning, problem solving, and learning. Students will write short papers examining aspects of cognitive activity in real-world settings. PREREQUISITES: PHIL 105 recommended *Units: 6.*

*Also listed as Cognitive Science 345, Anthropology 345, Education Studies 345*

*Prerequisite: PHIL 105 recommended*

### **PHIL 347: VALUING ART: THE PHILOSOPHY AND PSYCHOLOGY OF AESTHETIC APPRECIATION**

How and why do we value art? Is there an objective standard of taste or is taste relative? How does and aesthetic property--such as beauty--differ from other properties of art--such as being made of stone? What are the roles of emotion and evolution in aesthetic response? These and other questions will be considered in this discussion-oriented class. Appropriate for those interested in philosophy, art history or cognitive science. PREREQUISITES: One course in philosophy or sophomore standing, or consent of instructor *Units: 6.*

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

### **LING 350: 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. PREREQUISITES: LING 150 or consent of instructor *Units: 6.*

*Prerequisite: LING 150 or consent of instructor*

### **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. PREREQUISITES: Sophomore standing; at least one prior biology course recommended *Units: 6.*

*Prerequisite: Sophomore standing; at least one prior biology course recommended*

### **LING 355: CHILD LANGUAGE ACQUISITION**

Every normally developing human acquires language in early childhood. This course explores how this feat is accomplished. We will examine data on children's linguistic knowledge at different developmental stages and what types of theories might explain these data. Students will also have the opportunity to analyze real child language data. PREREQUISITES: LING 150, or PSYC 260 or PSYC 265 *Units: 6.*

*Prerequisite: LING 150, or PSYC 260 or PSYC 265*

### **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. PREREQUISITES: Sophomore standing; at least one biology course recommended *Units: 6.*

*Prerequisite: Sophomore standing; at least one biology course recommended*

### **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. PREREQUISITES: LING 150, PSYC 340, or consent of instructor *Units: 6.*

*Also listed as Psychology 375*

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

### **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. PREREQUISITES: PSYC 100 or sophomore standing *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. PREREQUISITES: LING 150, PSYC 340, or consent of instructor *Units: 6.*

*Also listed as Linguistics 370*

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

### **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. PREREQUISITES: One course in philosophy, junior standing, or consent of instructor; PHIL 150 recommended *Units: 6.*

*Also listed as Philosophy 400*

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

### **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. PREREQUISITES: One course in philosophy, junior standing, or consent of instructor; PHIL 150 recommended *Units: 6.*

*Also listed as Linguistics 400*

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

### **LING 405: *HOW TO DO THINGS WITH WORDS***

An examination of major and cutting edge topics in the philosophy of language and linguistics. Where do word meanings come from? How can one word mean different things in different contexts? How do we promise or make commitments? Why do slurs hurt and jokes amuse? What is the nature of metaphor? Where does the border between what words mean and what speakers mean with words lie? These and other questions will be considered. Appropriate for students with an interest in philosophy, linguistics, or cognitive science. PREREQUISITES: One course in philosophy, junior standing, or consent of the instructor *Units: 6.*

*Also listed as Philosophy 405*

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

### **PHIL 405: *HOW TO DO THINGS WITH WORDS***

An examination of major and cutting edge topics in the philosophy of language and linguistics. Where do word meanings come from? How can one word mean different things in different contexts? How do we promise or make commitments? Why do slurs hurt and jokes amuse? What is the nature of metaphor? Where does the border between what words mean and what speakers mean with words lie? These and other questions will be considered. Appropriate for students with an interest in philosophy, linguistics, or cognitive science. PREREQUISITES: One course in philosophy, junior standing, or consent of the instructor *Units: 6.*

*Also listed as Linguistics 405*

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

### **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. Sufficient mathematical maturity required. PREREQUISITES: MATH 130 or MATH 140; MATH 300 recommended *Units: 6.*

*Prerequisite: MATH 130 or MATH 140; MATH 300 recommended*

### **PHIL 410: PHILOSOPHY OF MIND**

What is the relationship between the mind and the body? What is the nature of conscious experience? How do mental states represent states of the world? Is our common sense conception of mental states and processes compatible with the methods and assumptions of cognitive science? These and other questions in the philosophy of mind will be considered. PREREQUISITES: One course in philosophy, PSYC 340, junior standing, or consent of instructor *Units: 6.*

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

### **LING 420: TOPICS IN LOGIC**

*Units: 6.*

*Also listed as Philosophy 420*

*Prerequisite: PHIL 150 or consent of instructor*

### **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*

### **PSYC 420: CLINICAL AND AFFECTIVE NEUROSCIENCE**

This course focuses on advanced topics in neuroscience involving emotion. We will explore emerging knowledge of the brain's involvement in emotional behaviors, including physiological and psychological states. Course topics include: neural plasticity, human neuroscience methods, emotions, and pathophysiology of affective disorders. PREREQUISITES: NESC 200, PSYC 348, or PSYC 365 *Units: 6.*

*Prerequisite: NESC 200, PSYC 348, or PSYC 365*

### **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*

### **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.

PREREQUISITES: CMSC 250 and CMSC 270 *Units: 6.*

*Prerequisite: CMSC 250 and CMSC 270*

### **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. PREREQUISITES: LING 150 or consent of instructor *Units: 6.*

*Prerequisite: LING 150 or consent of instructor*

### **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.

PREREQUISITES: CMSC 150 and MATH 230 *Units: 6.*

*Prerequisite: CMSC 150 and MATH 230*

### **PSYC 525: *BRAIN AND BEHAVIOR II (NO LAB)***

This course is identical in content to PSYC 530, but it has no laboratory. An examination of the interrelationships between the brain and behavior. Topics include sleep, language, motivation, emotions, learning, and mental disorders. PREREQUISITES: PSYC 360 *Units: 6.*

*Prerequisite: PSYC 360*

### **ANTH 531: *SEMIOTICS***

Semiotics is the study of signs, symbols, and signification in social life. This course will cover semiotic theory, including theorists such as Saussure, Peirce, Jakobson, Lévi-Strauss, Barthes, and Bakhtin, and the application of semiotics to the study of language and social life, conducted through lectures and seminar-style discussions. PREREQUISITES: ANTH 330/LING 330 or ANTH 331 *Units: 6.*

*Also listed as Linguistics 531*

*Prerequisite: ANTH 330/LING 330 or ANTH 331*

### **LING 531: SEMIOTICS**

Semiotics is the study of signs, symbols, and signification in social life. This course will cover semiotic theory, including theorists such as Saussure, Peirce, Jakobson, Lévi-Strauss, Barthes, and Bakhtin, and the application of semiotics to the study of language and social life, conducted through lectures and seminar-style discussions. **PREREQUISITES:** ANTH 330/LING 330 *Units: 6.*

*Also listed as Anthropology 531*

*Prerequisite: ANTH 330/LING 330*

### **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*

### **COSC 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. **PREREQUISITES:** One 200-level course in linguistics or psychology, or consent of the instructor. *Units: 6.*

*Also listed as Psychology 545, Linguistics 545*

*Prerequisite: One 200-level course in linguistics or psychology, or consent of the 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. **PREREQUISITES:** One 200-level course in linguistics or psychology, or consent of the instructor *Units: 6.*

*Also listed as Cognitive Science 545, Psychology 545*

*Prerequisite: One 200-level course in linguistics or psychology, or consent of the 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. **PREREQUISITES:** One 200-level course in linguistics or psychology, or consent of the instructor *Units: 6.*

*Also listed as Cognitive Science 545, Linguistics 545*

*Prerequisite: One 200-level course in linguistics or psychology, or consent of the instructor*

### **PSYC 580: TOPICS IN NEUROSCIENCE**

A study of the nervous system from the perspectives of psychology and biology. 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 when topic is different.

*Topic for Fall 2022: Aging and the Brain*

Prerequisites: CHEM 116, BIOL 150 and either NESC 200 or PSYC 348, or consent of instructor

With the advancement of medicine, our population continues to grow older, and the prevalence of age-related diseases is on the rise. In particular, the brain undergoes many molecular changes with aging that makes it susceptible to disease, such as dementias and Alzheimer's disease. In this course, we will explore the mechanisms of aging and their impact on the brain, disease manifestations related to aging in the brain, and the current medical treatments for age-related brain disorders. *Units: 6.*

*Also listed as Biology 340*

*Prerequisite: CHEM 116, BIOL 150 and either NESC 200 or PSYC 348, or consent of instructor*

**COSC 591: DIRECTED STUDY IN COGNITIVE 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

**COSC 599: INDEPENDENT STUDY IN COGNITIVE SCIENCE**

Individualized advanced research under staff guidance to prepare a substantial paper. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

**COSC 695: INTERSHIP IN COGNITIVE SCIENCE**

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. *Units: 1 TO 98.*

**COSC 699: INDEPENDENT STUDY IN COGNITIVE SCIENCE**

Advanced study, arranged in consultation with the department chair. Students contemplating an honors project should register for this course. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

# COMPUTER SCIENCE

Professor:	K. Krebsbach
Associate professor:	J. Gregg
Assistant professors:	A. Chakraborty, A. Sage
Instructor:	A. Ackles

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.

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

## Required for the major in computer science

The major in computer science prepares students to demonstrate independent learning in the context of an independent project: to establish a project of appropriate scope; to identify appropriate approaches and problem-solving strategies, including the appropriate level of abstraction to apply to the project to design and implement software that satisfies the requirements of the project; and to communicate the results of the project work to others clearly using methods appropriate to the discipline of computer science.

The major in computer science requires the following:

1. The following math courses:
  - a. MATH 140 *Calculus*
  - b. MATH 155 *Multivariable Calculus*
  - c. MATH 230 *Discrete Mathematics*
2. The following computer science courses:
  - a. CMSC 150 *Introduction to Computer Science*
  - b. CMSC 250 *Intermediate Programming Concepts*
  - c. CMSC 270 *Introduction to Data Structures*
  - d. CMSC 510 *Data Structures and Algorithm Analysis*
3. One of the following courses:
  - a. CMSC 205 *Data-Scientific Programming* or
  - b. CMSC 208 *Machine Learning*
4. Three additional six-unit CMSC courses numbered 400 or above, excluding tutorial, directed study, and

independent study courses taken for any reason.

5. The following courses taken in the senior year:

- a. CMSC 698 *Senior Projects* or CMSC 699 *Independent Study in Computer Science* (6 units) if CMSC 698 is not offered
- b. CMSC 600 *Senior Seminar* (3 units)

## Required for the minor in computer science

1. The following math courses:
  - a. MATH 140 *Calculus*
2. The following computer science courses:
  - a. CMSC 150 *Introduction to Computer Science*
  - b. CMSC 250 *Intermediate Programming Concepts*
  - c. CMSC 270 *Introduction to Data Structures*
3. One additional six-unit CMSC course numbered 200 or above
4. One additional six-unit CMSC course numbered 400 or above

## Teacher certification in computer science

Computer science majors can seek certification to teach computer science at the secondary level. Students can add an endorsement in a second area by completing an appropriate minor. Students who plan to seek teacher certification should review the requirements in the Education section of the catalog and meet with the director of teacher education, preferably before the end of the sophomore year.

## Tutorials

Tutorials are opportunities to enhance usual course offerings, not duplicate them. In order to reserve tutorials for this purpose, no tutorials or directed studies are given for courses routinely offered, and the department does not normally permit a tutorial to satisfy a major or minor requirement for graduation.

## Placement

- Advanced placement and six units of Lawrence credit (for CMSC 150) may be obtained by scoring 4 or 5 on the computer science A exam administered by the College Board. Consult the department for details and proper placement.
- Six units of Lawrence credit (but generally no advanced placement) may be obtained by scoring 4 or 5 on the computer science Principles exam administered by the College Board.

## Senior Experience in computer science

Computer science majors complete an independent project during the senior year in either the fall term Senior Projects course (CMSC 698) or, if the Senior Projects course is not offered, in a 6-unit independent study. They present the results of their project in the winter term Senior Seminar (CMSC 600, 3 units). The project must be approved and supervised by a faculty member in the department. Students should consult with department faculty in the spring before their senior year in order to plan for their *Senior Experience*.

## Courses - Computer Science

### CMSC 106: *WEB CLIENT PROGRAMMING*

An introduction to some of the technologies underlying the world wide web, with emphasis on client-side programming. Topics covered include introductions to HTML, CSS, and JavaScript. This course is suitable for students with no prior experience in programming. *Units: 6.*

### CMSC 140: *INTRODUCTION TO PROGRAMMING WITH PYTHON*

An introduction to computer programming for non-majors or other students interested in building basic programming skills. Topics include basic programming constructs such as decision statements, iteration, and functions. Students will complete a number of programming assignments over the course of the term, culminating in a final project. Instruction in the Python language. *Units: 6.*

### 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 191: *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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### CMSC 195: *INTERNSHIP IN COMPUTER SCIENCE*

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. PREREQUISITES: Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

### CMSC 205: *DATA-SCIENTIFIC PROGRAMMING*

An introduction to programming with emphasis on learning from data in order to gain useful insights. Topics focus on elementary programming concepts in the R language and the necessary tools to handle, analyze and interpret data. This course will be taught in a workshop format, and students will complete regular assignments and a final project that provide hands-on programming/analysis experiences. PREREQUISITES: One prior

course MATH, STAT, or CMSC course, or BIOL 170, or consent of instructor *Units: 6.*

*Also listed as Statistics 205*

*Prerequisite: One prior course MATH, STAT, or CMSC course, or BIOL 170, or consent of instructor*

### **CMSC 208: MACHINE LEARNING**

An overview of techniques used to discover structural patterns and make predictions using complex datasets that are prevalent in today's world. The central machine learning tasks of classification, clustering, and regression will be explored, along with methods for training models and evaluating predictions. This course will be taught in a workshop format. Assignments will involve the use of statistical software. PREREQUISITES: CMSC 150, or CMSC 205, or CMSC 210, or consent of instructor *Units: 6.*

*Also listed as Statistics 208, Linguistics 208*

*Prerequisite: CMSC 150, or CMSC 205, or CMSC 210, or consent of instructor*

### **CMSC 210: 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 Python language, design and implementation of numerical algorithms, and an introduction to symbolic computation. PREREQUISITES: One term of calculus (either MATH 140 or MATH 120), or consent of instructor *Units: 6.*

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

### **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. PREREQUISITES: CMSC 150 *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. PREREQUISITES: CMSC 150 and CMSC 250, or consent of instructor *Units: 6.*

*Prerequisite: CMSC 150 and CMSC 250, or consent of instructor*

### **CMSC 390: TUTORIAL STUDIES IN COMPUTER SCIENCE**

PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **CMSC 391: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **CMSC 395: *INTERNSHIP IN COMPUTER SCIENCE***

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. PREREQUISITES: Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

### **CMSC 399: *INDEPENDENT STUDY IN COMPUTER SCIENCE***

PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **CMSC 405: *ADVANCED DATA COMPUTING***

This course builds on CMSC/STAT 205, providing a deeper exploration of statistical computing in R. Topics might include efficient programming techniques, parallelization, statistical algorithms, advanced data visualization, and creation of R packages. Statistical software will be used extensively in this course. The class will be taught in an interactive lab-based format. There will be regular assignments and a project.

PREREQUISITES: CMSC 205 *Units: 6.*

*Also listed as Statistics 405*

*Prerequisite: CMSC 205*

### **CMSC 406: *WEB DEVELOPMENT***

Introduction to client side and server side web development with HTML, CSS, and JavaScript. Topics covered include the use of client side and server side JavaScript frameworks. Students will complete a number of small projects over the course of the term. PREREQUISITES: CMSC 270 *Units: 6.*

*Prerequisite: CMSC 270*

### **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. PREREQUISITES: CMSC 250 *Units: 6.*

*Prerequisite: CMSC 250*

### **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. PREREQUISITES: MATH 155 and CMSC 270 *Units: 6.*

*Prerequisite: MATH 155 and CMSC 270*

### **CMSC 435: *COMPUTER ORGANIZATION & ARCHITECTURE***

The structure and function of computers as viewed from the hardware/software interface. Hardware topics include elementary digital logic, data storage devices, dataflow pathways, and central processor organization with special emphasis on parallelism. Corresponding software topics include data representation and

manipulation, instruction sets, addressing techniques, and program control mechanisms. PREREQUISITES: CMSC 250 and CMSC 270 *Units: 6.*

*Prerequisite: CMSC 250 and CMSC 270*

### **CMSC 445: MOBILE APPLICATION DEVELOPMENT**

Introduction to mobile application development with modern application development frameworks. Frameworks covered may include Swift/iOS, Kotlin/Android or other similar frameworks. Topics covered will include user interfaces for mobile applications and the use of back end services. Students will complete a series of app development projects over the course of the term. PREREQUISITES: CMSC 270 *Units: 6.*

*Prerequisite: CMSC 270*

### **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. PREREQUISITES: CMSC 250 and CMSC 270 *Units: 6.*

*Prerequisite: CMSC 250 and CMSC 270*

### **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. PREREQUISITES: CMSC 250 and CMSC 270 *Units: 6.*

*Prerequisite: CMSC 250 and CMSC 270*

### **CMSC 480: SYSTEMS PROGRAMMING**

A survey of some fundamental aspects of computer operating systems and their impact on the performance of software. Topics include process and memory management, system level input/output, concurrency, and parallel programming. PREREQUISITES: CMSC 270 *Units: 6.*

*Prerequisite: CMSC 270*

### **CMSC 500: SPECIAL TOPICS IN COMPUTER SCIENCE**

An exploration of advanced computing techniques such as artificial life, constraint logic, continuation-passing, lazy evaluation, production systems, and robot programming, to name a few. The choice of topics for any given term will vary according to the interests of the students and faculty. *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. PREREQUISITES: C- or better in CMSC 270, and MATH 220 or MATH 230 *Units: 6.*

*Prerequisite: CMSC 270, and MATH 220 or MATH 230*

**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.

PREREQUISITES: CMSC 150 and MATH 230 *Units: 6.*

*Prerequisite: CMSC 150 and MATH 230*

**CMSC 590: TUTORIAL STUDIES IN COMPUTER SCIENCE**

PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

**CMSC 591: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

**CMSC 595: INTERNSHIP IN COMPUTER SCIENCE**

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. PREREQUISITES: Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

**CMSC 599: INDEPENDENT STUDY IN COMPUTER SCIENCE**

PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

**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 690: TUTORIAL STUDIES IN COMPUTER SCIENCE**

PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

**CMSC 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

**CMSC 695: *INTERNSHIP IN COMPUTER SCIENCE***

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. PREREQUISITES: Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

**CMSC 698: *COMPUTER SCIENCE SENIOR PROJECTS***

Designed as an inclusive alternative to separately-scheduled, required independent studies (CMSC 699). Students in the graduating cohort will present proposals, progress reports, and preliminary results of their self-directed senior projects to be evaluated by their peers while learning about each others' capstone projects in computer science. PREREQUISITES: Instructor Approval required *Units: 6.*

*Prerequisite: Instructor Approval required*

**CMSC 699: *INDEPENDENT STUDY IN COMPUTER SCIENCE***

PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

# EAST ASIAN STUDIES

<b>Professor:</b>	K. Sung ( <i>Chinese and Japanese</i> , Wendy and K.K. Tse Professor of East Asian Studies)
<b>Associate professors:</b>	B. Jenike ( <i>Anthropology</i> , Edward F. Mielke Professor of Ethics in Medicine, Science and Society) (on leave term(s) II, III), C. Kassor ( <i>Religious Studies</i> , chair), B. Vance ( <i>History</i> ) (on leave term(s) II, III)
<b>Assistant professor:</b>	N. Lin ( <i>Art History</i> )
<b>Visiting assistant professor:</b>	A. Adler ( <i>Chinese and Japanese</i> )
<b>Instructor:</b>	M. Wegehaupt

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, art history, history, government, literature, and religious studies. To achieve in-depth and critical understanding of East Asia, the East Asian Studies major combines the study of Chinese or Japanese language to the advanced intermediate level with breadth of coursework on East Asia taught in English. Majors typically further strengthen their Chinese or Japanese language skills by studying in China or Japan through an off-campus program. In addition to improving language skills and filling out the student's program in regionally specific courses, studying abroad in China or Japan enhances the students' academic program through firsthand cultural experience in East Asia.

Beginning with foundational coursework in traditional and modern East Asian history, students gain an understanding of the basic historical development of East Asian political and cultural traditions. Students then draw from this historical knowledge in their subsequent seminars to analyze in depth how these traditions have evolved with modernization, and to examine contemporary areas of social change. Through a disciplinary focus as well as coursework that situates East Asia in a global context, majors also learn how to relate the relevance of the study of China, Japan, or South Korea to a broader international or academic context.

The major in East Asian Studies thus seeks to prepare students intellectually, linguistically, and personally for further graduate work or professional careers as East Asian specialists.

## Required for the major in East Asian studies

Students who major in East Asian studies will demonstrate an understanding of the basic historical development of East Asian political and cultural traditions and use this knowledge to analyze how these traditions, in either China, Japan, or Korea, have evolved with modernization, which may include analysis of contemporary areas of social change. Students will be able to relate the relevance of the study of East Asia to a broader international or academic context. In the culmination of the major, students will critically analyze an aspect of Chinese, Japanese, or Korean history, philosophy, art, culture, society, economics or politics in a clearly written, thesis-driven project, and will utilize some target language sources, as primary or secondary literature, in carrying out their research.

The major in East Asian studies requires the following:

1. At least one language course: CHJA 301: *Advanced Intermediate Chinese* or CHJA 311: *Advanced Intermediate Japanese*, or higher
2. EAST 140/HIST 160: *Traditional East Asian Civilization, 1800 B.C.-1600*
3. EAST 150/HIST 165: *Modern East Asian Civilization, 1600-1990*
4. Three 6-unit elective courses in EAST, one of which must be a mid-level seminar or higher (300-level or higher). One elective course taken on an off-campus program may, upon approval of an EAST faculty advisor, count for one of these three courses.
5. One course that situates East Asian culture in a broader academic, comparative or international context, such as:
  - ANTH 110: *Cultural Anthropology*
  - ANTH 364/EAST 364: *Ethnography of East Asia*
  - ANTH 377: *Culture and Aging*
  - ANTH 552: *Disability and Culture*
  - ARHI 285/EAST 285: *The Transformation of the Modern City: Tokyo, Seoul, and Shanghai (1860-1945)*
  - ARHI 345/EAST 345: *Theorizing the Female Body in East Asian Art*
  - EAST 380: *Asian Women and Feminism*
  - GOVT 215: *Democracy in Comparative Perspective*
  - GOVT 245: *Comparative Politics of Less-Developed Countries*
  - GOVT 340: *International Politics*
  - GOVT 480: *International Organizations*
  - HIST 105/EAST 105: *Cross-Cultural Interactions Along the Silk Road, 200 BCE - 1400 CE*
  - HIST 206: *Perchance to Dream: A Comparative History of Dreams from Antiquity to Present*
  - HIST 295: *Nationalism in the Modern World*

(Note: EAST courses listed above may satisfy either this requirement or the elective requirement, but not both.) Courses in other disciplines than those listed can also fulfill this requirement. Students should consult with the East Asian studies program director to select a course appropriate to their interests. See the East Asian studies Advising page for additional course suggestions.

6. EAST 699: *Independent Study in East Asian Studies* (6 units) or other 600-level course with approval of the East Asian studies program director, resulting in the completion of a substantial research paper or project. Students should consult with their East Asian studies faculty advisor in spring term of their junior year to develop a plan for their senior experience.
7. At least nine 6-unit courses should be taken at the Appleton campus.

In addition to the requirements listed above, majors are strongly advised to have a disciplinary focus to frame their *Senior Experience*. EAST coursework in a discipline of interest such as anthropology, art history, history, religious studies, government, linguistics, economics, or literature, as well as additional coursework in methods and theory in that same discipline, should be completed *prior* to the *Senior Experience* course.

Majors are also encouraged to further strengthen their Chinese or Japanese language skills by studying in China or Japan (see [Off-Campus Programs](#)) and/or in one of several intensive summer language programs offered in the U.S.

## Senior Experience in East Asian studies

EAST 699: *Independent Study in East Asian Studies* (6 units): Individualized senior-level advanced research under the guidance of an East Asian studies faculty advisor, culminating in the completion of a substantial paper or project derived from previous coursework in the discipline or related fields or field experience.

Students with sufficiently advanced Chinese or Japanese language skills are encouraged to use some target language sources in carrying out their research. Students are encouraged to share the results of their work in a public forum prior to graduation.

## Required for the minor in East Asian studies

1. Six courses, as follows:
  - a. EAST 140: *Traditional East Asian Civilization*
  - b. EAST 150: *Modern East Asian Civilization*
  - c. Four 6-unit elective courses in EAST
2. One additional advanced course (400-level or higher) on East Asia or a 6-unit independent study (EAST 399 or 599) in an area of interest

## Courses - East Asian Studies

### **EAST 105: *CROSS-CULTURAL INTERACTIONS ALONG THE SILK ROAD, 200 BCE - 1400 CE***

The so-called "Silk Road" was the world's first superhighway, linking East Asia to the Mediterranean. The peoples along the way not only traded luxury goods, but also ideas, technology, and more. This course offers a thematic examination of the dynamic, cross-cultural interactions along the ancient and medieval Silk Road. (G & C) *Units: 6.*

*Also listed as History 105, Global Studies 105*

### **EAST 140: *EAST ASIA IN THE PREMODERN WORLD***

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 Global Studies 160, History 160, Ethnic Studies 121*

### **EAST 150: *EAST ASIA IN THE MODERN WORLD***

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, Global Studies 165*

### **EAST 175: *THE ARTS OF EAST ASIA***

An introduction to artistic traditions in China, Japan, and Korea, from prehistory to the 21st century, including tomb and temple sites, gardens, calligraphy, ink painting, woodblock prints, tea ceremony vessels, and contemporary art. Through a balance of broader art historical readings, primary texts, scholarly essays, and close-looking at objects, students will explore how an object's visual and material properties contribute to its function. *Units: 6.*

*Also listed as Art History 175*

### **EAST 191: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **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 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. PREREQUISITES: Sophomore standing; CHJA 112 recommended *Units: 6.*

*Also listed as Chinese and Japanese 265, Linguistics 265*

*Prerequisite: Sophomore standing; CHJA 112 recommended*

### **EAST 283: CHINESE PHILOSOPHY**

A survey of topics in Chinese Philosophy, which may include Classical Chinese philosophy, Buddhism and religion and comparative philosophy. We will discuss how the quickly changing historical and political climates affect the major schools of thought and influence pertinent philosophical questions for the region or topic. Assignments include papers and in-class assignments/presentations. PREREQUISITES: Sophomore standing or consent of instructor *Units: 6.*

*Also listed as Philosophy 283*

*Prerequisite: Sophomore standing or consent of instructor*

### **EAST 284: THE SPECTACLE OF EDO JAPAN**

This course will focus on the diverse artistic production and consumption practices within Edo-period Japan (1603-1868). Topics include the revival of classical Heian narratives like The Tale of Genji, the rise of an urban bourgeois culture, the prints and paintings depicting kabuki actors, courtesans, and ghosts, the reification of the tea ceremony and encounters with the West through trade. PREREQUISITES: ARHI 101 or 175 or sophomore standing *Units: 6.*

*Also listed as Art History 284, Global Studies 284*

*Prerequisite: ARHI 101 or 175 or sophomore standing*

**EAST 285: THE TRANSFORMATION OF THE MODERN CITY: TOKYO, SEOUL AND SHANGHAI (1860-1945)**

This course explores the transformation of the cityscape in Tokyo, Seoul, and Shanghai. Topics include the emergence of the modern artist, the search for an “avant-garde” of the East, the modernization of public and private spaces, the introduction of film and photography and the rise of the “modern girl.” PREREQUISITES: ARHI 101 or 175 or sophomore standing *Units: 6.*

*Also listed as Art History 285, Global Studies 285*

*Prerequisite: ARHI 101 or 175 or sophomore standing*

**EAST 286: THE POLITICS AND POWER IN MODERN AND CONTEMPORARY CHINESE ART**

Over the past century, China has witnessed the arrival of Western Imperialism, mass rebellion, revolution, and radical reconstruction under the Communist regime. This class will trace how artists attempted to intervene in social life to change its course of development and how art continues to affect radical social change. PREREQUISITES: ARHI 101 or 175 or sophomore standing *Units: 6.*

*Also listed as Art History 286, Global Studies 286*

*Prerequisite: ARHI 101 or 175 or sophomore standing*

**EAST 308: HALF THE SKY: CHINESE WOMEN'S HISTORY**

This course examines important questions about the lives of women in the last thousand years of Chinese history. Through an exploration of primary sources in translation, classic works of fiction, film, memoirs, and oral histories, we will address theoretical questions fundamental to both women's studies and Chinese history. (G & C) PREREQUISITES: Sophomore standing or consent of instructor *Units: 6.*

*Also listed as Global Studies 308, History 308*

*Prerequisite: Sophomore standing or consent of instructor*

**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. PREREQUISITES: LING 150 and sophomore standing *Units: 6.*

*Also listed as Linguistics 310, Chinese and Japanese 310*

*Prerequisite: LING 150 and sophomore standing*

**EAST 331: TOPICS IN EAST ASIAN ART**

An examination of a particular topic in East Asian art history. Students are expected to carry out independent research through a series of guided assignments. The topic will change periodically. Course may be repeated when the topic is different. Not open to students who have previously received or need to receive credit for ARHI 430. *Units: 6.*

*Also listed as Art History 331*

*Prerequisite: One 200-level course in art history or consent of instructor*

**EAST 332: SURVEY OF MODERN JAPANESE LITERATURE AND FILM (IN ENGLISH)**

This course introduces students to seminal works of Japanese literature and film from 1868 to the present, as a way to think about the transformation of Japan from a traditional society to a modern nation state. *Units: 6.*

*Also listed as Chinese and Japanese 332*

### **EAST 345: THEORIZING THE FEMALE BODY IN EAST ASIAN ART**

This course explores how the female body and the gendering of space has been addressed in murals, paintings, performance, film, and popular culture during the course of East Asian art history. We will discuss how social and political issues were defined through images of bodies in Japan, Korea, and China in the context of national identity formation, historical reconstruction, subjectivity, and sexuality. Students will also work to develop and refine the quality of their communication skills by presenting and debating their ideas throughout the course. PREREQUISITES: Sophomore standing *Units: 6.*

*Also listed as Gender Studies 345, Art History 345*

*Prerequisite: 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. PREREQUISITES: Sophomore standing; EAST 150 recommended *Units: 6.*

*Also listed as Chinese and Japanese 350, Film Studies 350*

*Prerequisite: Sophomore standing; EAST 150 recommended*

### **EAST 355: HISTORY OF THE CHINESE LANGUAGE (IN ENGLISH)**

This course covers the history of the Chinese language, including the structural characteristics of the language, invention and evolution of the writing system, general survey of the major dialects, diachronic changes, spread and influence of the Chinese lexicon in East Asia, birth of the common language putonghua, evaluation of traditional versus simplified characters, and challenges of the language in the modern era. PREREQUISITES: Sophomore standing; one year of Chinese recommended *Units: 6.*

*Also listed as Chinese and Japanese 355*

*Prerequisite: Sophomore standing; one year of Chinese recommended*

### **EAST 360: CHINESE CONTEMPORARY FILM IN ENGLISH**

Using feature films and documentaries from the so-called Fifth [1982-] and Sixth Generations [beginning in the 1990s] of film directors in China, this course provides a visual record of the immense political, economic, and social changes in China since the Reform and Opening up period at the end of the Cultural Revolution. Taught in English. PREREQUISITES: Sophomore standing; EAST 150 or EAST 420 recommended *Units: 6.*

*Also listed as Film Studies 360, Chinese and Japanese 360*

*Prerequisite: Sophomore standing; EAST 150 or EAST 420 recommended*

### **EAST 361: WESTERN ENCOUNTERS WITH CHINA: PERCEPTIONS AND MISPERCEPTIONS**

This course examines Western encounters with China since the thirteenth century, from Marco Polo to

contemporary journalists, such as Peter Hessler. Students will analyze and assess Western perceptions and misperceptions of China through a variety of primary sources in translation and relevant secondary studies. (G & C or E) PREREQUISITES: Sophomore standing *Units: 6.*

*Also listed as Global Studies 361, History 361*

*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. Focusing on China, we address new areas of research in East Asian anthropology such as demographic change, modernization, urbanization and stratification, gender and the body politic, sexuality, pop culture, consumption, ethnic minorities and national cultural identities. PREREQUISITES: ANTH 110 or sophomore standing *Units: 6.*

*Also listed as Anthropology 364*

*Prerequisite: ANTH 110 or sophomore standing*

### **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. PREREQUISITES: ANTH 110 or sophomore standing *Units: 6.*

*Also listed as Anthropology 366*

*Prerequisite: ANTH 110 or sophomore standing*

### **EAST 370: CHINESE TRADITIONAL LITERATURE AND THOUGHT (IN ENGLISH)**

An introduction to the texts and schools comprising traditional Chinese literature and thought. Reading across time and genre, from ancient classics such as *Shijing* to Tang poetry, to later Ming novels *Water Margin* and *Romance of the Three Kingdoms*, students will explore the breadth of the Chinese literary tradition while engaging with primary texts from the Confucian, Buddhist and Daoist traditions that shaped it. Lecture, discussion and exams. *Units: 6.*

*Also listed as Chinese and Japanese 370*

### **EAST 371: TRADITIONAL JAPANESE LITERATURE AND THOUGHT**

With lectures and discussion, the course introduces students to the canon of texts comprising classical Japanese literature and thought. Reading across time and genre, we look at myth-histories, poetry compilations, Chinese-inspired literature, the birth of fiction and women's literature. Monks and warriors expand our scope into the areas of religion, philosophy, and military theory and we culminate with an introduction to the dramatic arts of the Muromachi. *Units: 6.*

*Also listed as Chinese and Japanese 371*

### **EAST 377: HISTORY OF THE JAPANESE LANGUAGE (IN ENGLISH)**

This course explores the history of the Japanese language, including theories of its origin, the importation of the Chinese characters, Kanji, the invention of the Japanese syllabaries, Kana, the development of the writing system, lexical influence of loan words, and the evolution of both written and spoken forms in modern Japanese. The course also investigates two other languages in Japan, the Ainu and the Ryukyu languages.

PREREQUISITES: Sophomore standing; one year of Japanese recommended *Units: 6.*

*Also listed as Linguistics 365, Chinese and Japanese 365*

*Prerequisite: Sophomore standing; one year of Japanese recommended*

### **EAST 378: EAST ASIAN ENVIRONMENTAL HISTORY**

This course will explore traditional East Asian ideas about the relationship between humans and their natural environments, as well the premodern and modern history of that interaction. We will also consider the relationship between these philosophies and practice, both for the societies we study and for our own.

PREREQUISITES: Some background in East Asian Studies or Environmental Studies is recommended. *Units: 6.*

*Also listed as Environmental Studies 378*

*Prerequisite: Some background in East Asian Studies or Environmental Studies is recommended.*

### **EAST 380: ASIAN WOMEN AND FEMINISM**

This course will focus on the history of women and feminism in Asia, with an emphasis on Indian and East Asian women's histories. Past and present religious, political, economic, and artistic thought and practices of women will be examined to analyse how they have responded to and resisted patriarchal cultures. This course can be counted as the equivalent of GEST 280. PREREQUISITES: GEST 100 or consent of instructor *Units: 6.*

*Prerequisite: GEST 100 or consent of instructor*

### **EAST 388: EARLY MODERN JAPAN**

This discussion course offers an overview of the early modern history of Japan. Through an analysis of literature, woodblock prints, documents, and secondary historical studies we will explore selected issues in the social and cultural history of the Tokugawa. (G & C) PREREQUISITES: Sophomore standing or consent of instructor *Units: 6.*

*Also listed as History 388*

*Prerequisite: Sophomore standing or consent of instructor*

### **EAST 390: TUTORIAL STUDIES IN EAST ASIAN STUDIES**

Individualized advanced study under regular staff direction on topics not covered in lower-level courses.

PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **EAST 391: 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. PREREQUISITES: Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

### **EAST 399: INDEPENDENT STUDY IN EAST ASIAN STUDIES**

Individualized advanced research under staff guidance to prepare a substantial paper. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **EAST 418: KOREAN MODERN HISTORY THROUGH LITERATURE AND FILM**

Using fiction, feature films, and historical texts, this course provides an in-depth introduction to modern Korean history, from the end of the Chōsun dynasty in 1910 to contemporary North and South Korea. Students will gain an understanding of Korea's colonial experience, civil war, dictatorships, development, democratization, and gender politics. PREREQUISITES: EAST 150 or consent of instructor *Units: 6.*

*Also listed as Film Studies 419, History 498*

*Prerequisite: EAST 150 or consent of instructor*

### **EAST 430: TOPICS IN ASIAN ART**

An examination of a particular topic in East Asian art history. Students are expected to carry out independent research through a series of guided assignments. The topic will change periodically. Course may be repeated when the topic is different. Not open to students who have previously received or need to receive credit for ARHI 331. *Units: 6.*

*Also listed as Art History 430*

*Prerequisite: One 200-level course in art history or consent of instructor*

### **EAST 492: THE ART OF HEALING: A HISTORY OF CHINESE MEDICINE**

This course offers an interdisciplinary exploration of the history of Chinese medicine. Students will study the canonical literature of the discipline, and analyze the ways in which those texts and ideas have been reshaped in modern and contemporary practice. Topics include: forensic medicine, gender, religion, and public health. PREREQUISITES: Junior standing *Units: 6.*

*Also listed as History 492*

*Prerequisite: Junior standing*

### **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. PREREQUISITES: RLST 220 or RLST 216 *Units: 6.*

*Also listed as Religious Studies 510*

*Prerequisite: RLST 220 or RLST 216*

### **EAST 590: TUTORIAL STUDIES IN EAST ASIAN STUDIES**

Individualized advanced study under regular staff direction on topics not covered in lower-level courses. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **EAST 591: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

**EAST 599: INDEPENDENT STUDY IN EAST ASIAN STUDIES**

Individualized advanced research under staff guidance to prepare a substantial paper. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

**EAST 690: TUTORIAL STUDIES IN EAST ASIAN STUDIES**

Individualized advanced study under regular staff direction on topics not covered in lower-level courses. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

**EAST 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

**EAST 699: INDEPENDENT STUDY IN EAST ASIAN STUDIES**

Individualized senior-level advanced research under staff guidance to prepare a substantial paper for the senior experience, or for submission for honors. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

# ECONOMICS

<b>Associate professors:</b>	D. Fitz ( <i>chair</i> ), A. Galambos ( <i>Dwight and Marjorie Peterson Professor of Innovation</i> ), D. Gerard ( <i>The John R. Kimberly Distinguished Professor of the American Economic System</i> ) ( <i>on leave term(s) I</i> ), J. Lhost
<b>Assistant professors:</b>	H. Caruthers, V. Nguyen
<b>Lecturer:</b>	I. Strohbeen ( <i>I &amp; E Community Coach</i> )

The Lawrence economics department emphasizes abstract modeling and quantitative reasoning skills. Students acquire a basic knowledge of economic theories, principles, and techniques of analysis. They then apply these concepts and tools to issues such as poverty and discrimination, environmental degradation, and antitrust policy.

Students learn early on that modern economics is an application of mathematical modeling to the study of human behavior. The interdisciplinary mathematics-economics major provides a strong foundation for graduate work in economics, where mathematical aptitude is at a premium. This route also provides outstanding preparation for technical business careers, such as investment banking, management consulting, and finance.

## Required for the major in economics

Students who major in economics will learn to comprehend an economic journal article, including the interpretation of quantitative evidence and regression analysis results, and to prepare an economic analysis (either micro or macro) and communicate effectively the results of that analysis orally and in writing. Students will learn to construct tables and graphs from available public sources that identify relevant trends for public or private policy decision-making, and they will use the methods of economics to analyze a broad spectrum of problems in social science.

The major in economics requires the following:

1. ECON 100: *Introductory Economics*
2. The following mathematics courses:
  - a. MATH 140: *Calculus I*
  - b. STAT 255: *Statistics for Data Science* (or equivalent)
3. Intermediate theory (majors must take all three courses prior to completion of the junior year):
  - a. ECON 300: *Microeconomic Theory*
  - b. ECON 320: *Macroeconomic Theory*
  - c. ECON 380: *Econometrics*
4. Twelve additional units in courses numbered 200 or higher (up to six units of student-initiated courses may count toward these) and eighteen additional units in courses numbered 400 or higher (no student-initiated courses may be used to count toward these). The *Senior Experience* requirement does not count toward these thirty units of electives.
5. Complete the *Senior Experience* in economics by taking ECON 601: *Senior Experience: Reading Option* or ECON 602: *Senior Experience: Research Paper Option* as described below.

The Economics Department must approve any exception to the above requirements.

## Required for the interdisciplinary major in mathematics-economics

Students who complete the major in mathematics-economics will pursue the outcomes described for the economics and mathematics majors with an explicit focus on economics in constructing and critiquing mathematical arguments. Students pursuing the major must have an advisor in each department.

The major in mathematics-economics requires the following:

1. MATH 140: *Calculus*, MATH 155: *Multivariable Calculus*.
2. MATH 200: *Complex Sequences & Series*, MATH 230: *Discrete Mathematics*, Math 250: *Linear Algebra*.
3. STAT 255: *Statistics for Data Science*, MATH 340: *Probability*.
4. One of the following courses: STAT 445: *Mathematical Statistics*, STAT 450: *Bayesian Statistics*, MATH 510: *Real Analysis*.
5. ECON 100: *Introductory Economics*.
6. ECON 300: *Microeconomics*, ECON 320: *Macroeconomics*, ECON 380: *Econometrics*.
7. One 6-unit ECON course numbered between 400 and 580.
8. Senior Experience: a 6-unit independent study project that has been approved by both departments.

## Senior Experience in economics

The economics curriculum culminates with a one-term three-unit *Senior Experience* course required for all majors. Each year, two sections of the course will be offered. In one section (ECON 601), students read a monograph by a formidable economist or a piece of central interest to economists and engage in active discussion; each student produces a term paper in reaction to the reading. In the paper, students must relate the reading to theories and applications they studied in economics courses. The monograph will be selected by the faculty member teaching the course. This *Senior Experience* option is designed to mirror the *Freshman Studies* experience at the end of the student's career at Lawrence.

In the other section (ECON 602), each student is expected to produce a research paper that stands up to the standards of the profession. To register for this section, students must already have a research idea, generally developed in a 400-level course, and discuss a research proposal with the 602 instructor. Students must explain how the previous paper will be improved, refined and polished in content and in form so that it stands up to the standards of the profession. Instructor approval of this proposal is a prerequisite for registration.

Interdisciplinary mathematics-economics majors will need to complete a 6-unit independent study project in which they 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.

## Required for the minor in economics

1. ECON 100: *Introductory Economics* or ECON 300: *Microeconomic Theory*
2. Six additional six-unit courses, at least five of which must be economics courses numbered 200 or above and one that could be a mathematics or statistics course. Only six units of tutorial or independent study may count as one of these six courses.

## Teacher certification in economics or broad-field social studies

Economics majors can seek certification to teach economics or broad-field social studies at the secondary level. For certification in broad-field social studies, students must complete the economics major and a minimum of two courses each in two other social studies (anthropology/sociology, government/political science, history, or psychology) and at least one course in each of the remaining social studies. Students are strongly encouraged to take a course in U.S. history and a course in global history. A course in environmental studies is also required. Students who plan to seek teacher certification should review the requirements in the Education section of the catalog and meet with the director of teacher education, preferably before the end of the sophomore year.

## Course structure and numbering

ECON 100 is a survey course and is an excellent introduction to the discipline, even for those with high school courses in economics.

The 200-level courses apply basic theory to particular fields of inquiry and should be accessible to students with a sound introductory course.

The 300-level courses are intermediate theory courses that are foundational for the economics discipline. A sequence of 300-level courses is required of all majors.

The 400-level courses are advanced applications courses.

The 500-level courses are graduate-school preparatory courses.

The *Senior Experience* courses are at the 600-level.

## Recommendations

ECON 100 and ECON 225 are excellent either as stand-alone courses or as gateways into the discipline. We recommend that all majors and minors take these courses.

For the economics or mathematics-economics major:

- Speak to a professor in the department about mapping curricular choices.
- Take MATH 140 as soon as possible.
- Students preparing for graduate work in economics should seriously consider the mathematics-economics major or majoring in both economics and in mathematics.
- Students interested in careers in public policy, business, statistics, or in an M.B.A. in a quantitative field should seriously consider the Statistics and Data Science minor.

## Courses - Economics

### **ECON 100: *INTRODUCTORY ECONOMICS***

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. *Units: 6.*

### **ECON 151: *INTRODUCTION TO ENVIRONMENTAL POLICY***

This course applies principles of economics and political science to environmental issues, including pollution, resource limitation, and environmental degradation. It is designed to foster an understanding of the environmental policy-making and regulatory process in the United States and globally. *Units: 6.*

*Also listed as Environmental Studies 151, Government 151*

### **ECON 191: *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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **ECON 195: *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. PREREQUISITES: ECON 300, 320, or 380; Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: ECON 300, 320, or 380; Counter Registration Required*

### **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. PREREQUISITES: ECON 100 *Units: 6.*

*Also listed as Government 276*

*Prerequisite: ECON 100*

### **ECON 202: GLOBAL ECONOMIC RELATIONS**

This course covers the major concepts utilized in the field of international political economy. Major issues covered include debates about globalization, trade policy and free-trade agreements, monetary policy and currency regulation, aid and development, immigration policy and labor migration, global corporations, and international institutions such as the World Bank, IMF, and WTO. PREREQUISITES: Sophomore standing and ECON 100. GOVT 140 or GOVT 340 recommended. *Units: 6.*

*Also listed as Government 275*

*Prerequisite: Sophomore standing and ECON 100. GOVT 140 or GOVT 340 recommended.*

### **ECON 203: LATIN AMERICAN ECONOMIC DEVELOPMENT**

This course combines economic theory, policy and historical accounts to understand the forces shaping Latin American economic development. Students will gain an understanding of major theories and trends in Latin American development while analyzing specific development issues, including equitable growth, agriculture, migration, gender equity, education, and health. Students will complete thoughtful critiques of readings, problem sets analyzing real data, and in-depth evaluations of specific issues. PREREQUISITES: ECON 100 *Units: 6.*

*Also listed as Government 203*

*Prerequisite: ECON 100*

### **ECON 204: EFFECTIVE ALTRUISM**

Effective altruism acknowledges that individuals want to help others while examining the most effective ways to do so. Taking a global approach that draws on development, health and experimental economics, this course compares differences in relative welfare and opportunity and evaluates the effectiveness of causes like health interventions, cash transfers, and gender equity. Emphasis placed on close reading problem sets, quizzes, research papers and discussions. PREREQUISITES: ECON 100 *Units: 6.*

*Prerequisite: ECON 100*

### **ECON 205: INTRODUCTION TO INTERNATIONAL ECONOMICS**

This course aims to develop an understanding of international economic issues and policies in open economies. The course will provide a general body of knowledge on topics such as gains from trade; patterns of trade; effect of trade on welfare; exchange rate policy regimes; international organizations; financial crises; and the effect of government policies on trade and the exchange rate. You will get exposed to economic modeling and learn analytical tools that can be applied to understand the changing world economy and analyze problems in international economic policy. You are encouraged to explore the potential and limitations of international economics in dealing with real-world problems. This course will assist you in improving your economic writing skills as well as your ability to read critically and understand discussions on international economic issues in the press. PREREQUISITES: ECON 100 *Units: 6.*

*Also listed as Global Studies 207*

*Prerequisite: ECON 100*

## **ECON 206: *FIELD EXPERIENCE IN DEVELOPMENT***

Students engaged in this course will have the opportunity to do field research in a developing country. Each student will develop and implement a project that concerns a political, economic, social, or environmental issues that is important in the country visited. Past Field Experiences have taken place in Sierra Leone, Ghana, Jamaica, and Morocco. Students will also have the opportunity to learn from both national and local leaders in the country of research, and to participate in community engaged learning through volunteer activities. Class members will actually travel during either winter or spring break. Students should register for ECON 206 in the term prior to the planned travel. They should also register in the subsequent term, when they will present their research to the wider Lawrence community.

*Location for 2021-22: Students will travel to a to be determined location during spring break (March 2022)..*  
Admission is by application to Prof. Skran. Students should register for both winter and spring terms 2022.

Planned Location for 2022-23 To be determined PREREQUISITES: ENST 300, GOVT 248, GOVT 500 and RLST 240 *Units: 3.*

*Also listed as Environmental Studies 311, Global Studies 401*

*Prerequisite: ENST 300, GOVT 248, GOVT 500 and RLST 240*

## **ECON 214: *MARKETS OF LONDON***

A "market" is often a supply-demand graph in economics. Outside economics classes, markets are vibrant, bustling centers of community life, meeting places, crossroads, and, of course, places of exchange. And London, with its many markets of all kinds, is the perfect place to put real markets into "market economics." This course serves as an introduction to market economics through the lens of actual, real-world markets. *Units: 6.*

## **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. PREREQUISITES: ECON 100 *Units: 6.*

*Prerequisite: ECON 100*

## **ECON 216: *SOCIALISM AND CAPITALISM IN BRITAIN, PAST AND PRESENT***

Britain is the birthplace of industrial capitalism and of modern economics. But the roots of socialism also lead us to Britain. The Poor Laws are precursors of the welfare system. A number of important socialist authors were British or wrote in and about Britain, and the British labor movement has a rich history. In this course, we will explore the development of capitalism, the evolution of the welfare system, the labor movement, and socialist proposals in Britain. *Units: 6.*

## **ECON 221: *MONEY AND BANKING***

This course introduces students to money, banking, and financial markets. We will discuss topics including the functions of money, the monetary system, bank management, the behavior of financial markets, the term structure of interest rates, and the role of United States financial institutions. Students will read carefully, take regular quizzes and exams, and have the option to do a group or individual project for extra credit. *Units: 6.*

*Prerequisite: ECON 100*

### **ECON 223: QUANTITATIVE DECISION-MAKING**

The students will learn how to develop formal, quantitative approaches to structuring difficult problems, particularly those problems involving probabilistic factors. We will develop and practice the steps of defining a problem, gathering data, formulating a model, performing numerical calculations, evaluating numerical information, refining the model, analyzing the model's alternatives, and communicating the results. *Units: 6.*

*Also listed as Mathematics 223*

*Prerequisite: Sophomore standing*

### **ECON 225: DECISION THEORY**

This course will present a thorough introduction to decision theory, the study of how people should or do make decisions. Building on that foundation, game theory, the science of strategy, will be introduced, with economic applications. *Units: 6.*

### **ECON 245: 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. PREREQUISITES: ECON 100 or consent of instructor *Units: 6.*

*Prerequisite: ECON 100 or consent of instructor*

### **ECON 252: SUSTAINABLE CITIES**

How can cities be sustainable? The increasing urbanization of the world's population, shift to service-driven economies, and growing diversity of cities make this question pressing and complicated. This course introduces economic, environmental, and social dimensions of the urban sustainability problem and explores responses to it through a two-week December study trip to London and Amsterdam and winter term studies and poster presentations. Program fee is required. Students pay their own airfare. PREREQUISITES: An introductory course in GOVT, ECON, ENST or GLST, or consent of instructor *Units: 3.*

*Also listed as Environmental Studies 252, Government 252*

*Prerequisite: An introductory course in GOVT, ECON, ENST or GLST, or consent of instructor*

### **ECON 255: START-UP THEATRE**

Open to students from theatre, economics, and other students interested in entrepreneurship in the performing arts. Topics change each year. May be repeated when topic is different up to 6 total units. PREREQUISITES: Sophomore standing *Units: 1 TO 3.*

*Also listed as Innovation & Entrepreneurship 255, Theatre Arts 255*

*Prerequisite: Sophomore standing*

### **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.

PREREQUISITES: ECON 100 *Units: 6.*

*Also listed as Government 274*

*Prerequisite: ECON 100*

### **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.

PREREQUISITES: ECON 100 or ENST 151 *Units: 6.*

*Also listed as Environmental Studies 280*

*Prerequisite: ECON 100 or ENST 151*

### **ECON 295: TOPICS IN ECONOMICS**

Each offering will build on modeling and reasoning techniques developed in the introductory-level courses (ECON 100 or 120). Topics depend on the instructor and will vary year-to-year. Topics include, but are not limited to, economics of the arts, financial economics, economics of sports, and economic history. May be repeated for credit if the topic is different. *Topic for Spring 2020: Topics in the Economics of Pandemics*

The course explores the use of economic analysis and quantitative policy tools to address the public policy challenges of preparing for and responding to the outbreak and spread of infectious diseases (including, of course, the coronavirus SARS-CoV-2 current wreaking havoc across the globe). Topics include the development of basic literacy, vocabulary, and concepts related to infectious disease outbreaks, the public policy architecture for preparing and responding to these outbreaks, and the macroeconomic effects of disease pandemics. *Units: 6.*

*Prerequisite: ECON 100 or permission of instructor*

### **ECON 300: MICROECONOMIC THEORY**

A study of the microeconomic foundations of economics. The course focuses on equilibrium models for consumers and firms in competitive markets, as well as deviations from perfect competition. PREREQUISITES: Sophomore standing and ECON 100 and MATH 140 or MATH 130 *Units: 6.*

*Prerequisite: Sophomore standing and ECON 100 and MATH 140 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. PREREQUISITES: MATH 130 or MATH 140, ECON 300 *Units: 6.*

*Prerequisite: MATH 130 or MATH 140, ECON 300*

### **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. PREREQUISITES: Sophomore standing, STAT 255; previous course in economics recommended *Units: 6.*

*Prerequisite: Sophomore standing, STAT 255; previous course in economics recommended*

### **ECON 390: TUTORIAL STUDIES IN ECONOMICS**

Intermediate readings, discussions, and essays in economic problems of special interest to the student.

PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **ECON 391: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **ECON 395: 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. PREREQUISITES: ECON 300, 320, or 380; Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: ECON 300, 320, or 380; Counter Registration Required*

### **ECON 399: INDEPENDENT STUDY IN ECONOMICS**

Intermediate research on a topic of the student's choice, organized in consultation with an instructor.

PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **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. PREREQUISITES: ECON 300, ECON 380 recommended *Units: 6.*

*Prerequisite: ECON 300, ECON 380 recommended*

### **ECON 405: THE ECONOMICS OF INNOVATION & ENTREPRENEURSHIP**

This course examines economic theories of innovation and entrepreneurship (I&E), the role of I&E in the economy, and policy questions related to I&E. Theories are discussed in the context of the history and current prevalence of innovation and entrepreneurship in modern economies. PREREQUISITES: ECON 300 *Units: 6.*

*Prerequisite: ECON 300*

### **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. Sufficient mathematical maturity required. PREREQUISITES: MATH 130 or MATH 140; MATH 300 recommended *Units: 6.*

*Prerequisite: MATH 130 or MATH 140; MATH 300 recommended*

### **ECON 415: INDIVIDUALITY & COMMUNITY**

This course studies how political theorists responded to the emergence of open societies in the West. It focuses on the scope of personal autonomy, the consequences of commerce and luxury, the best political and

economic arrangements, and other topics explored by writers from the Renaissance to the Twentieth Century. PREREQUISITES: Junior standing or consent of instructor *Units: 6.*

*Also listed as Government 405*

*Prerequisite: Junior standing or consent of instructor*

### **ECON 430: ECONOMIC GROWTH AND POVERTY TRAPS**

This course provides advanced coverage of economic growth and poverty traps. We first explore canonical economic growth models, focusing on capital accumulation, productivity, population growth, and the growth of ideas. We next explore the determinants of growth, the role of policy, and factors that limit development. Class will combine lecture and active group work, with students completing reading, problem sets, and projects outside of class. PREREQUISITES: ECON 300, 320, and 380 *Units: 6.*

*Prerequisite: ECON 300, 320, and 380*

### **ECON 444: 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. PREREQUISITES: ECON 300 and ECON 380 recommended *Units: 6.*

*Also listed as Government 444*

*Prerequisite: ECON 300 and ECON 380 recommended*

### **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 there 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.

PREREQUISITES: ECON 300 or GOVT 271 *Units: 6.*

*Prerequisite: ECON 300 or GOVT 271*

### **ECON 460: INTERNATIONAL TRADE**

An inquiry into the historical and theoretical foundations of international trade, leading to a critical analysis of contemporary problems and policies. PREREQUISITES: ECON 300 *Units: 6.*

*Prerequisite: ECON 300*

### **ECON 466: GLOBALIZATION, POVERTY, AND DEVELOPMENT**

This course is an exploration of how economic globalization shapes growth, development, and poverty outcomes in non-rich countries. We focus on three vehicles of economic globalization: trade (goods), foreign investment (capital), and migration (people). Our exploration is facilitated by careful reading and discussion of contemporary development research. Students will use real-world data to compare recent trends with theoretical predictions. PREREQUISITES: Econ 300 and Econ 380 *Units: 6.*

*Prerequisite: Econ 300 and Econ 380*

### **ECON 475: *MARKETS AND MARKET DESIGN***

Free markets are central in economics, but markets depend on human-made institutions and are sometimes created and organized by human-made rules. This course examines how human-made marketplaces, exchanges, and matching mechanisms facilitate mutually beneficial transactions, and how the new field of market design can improve outcomes. Applications include some labor markets, auctions, school choice, and college admissions. PREREQUISITES: ECON 300 *Units: 6*.

*Prerequisite: ECON 300*

### **ECON 481: *ADVANCED ECONOMETRICS & MODELING***

The course explores advanced econometric topics in model specification, estimation, and prediction (e.g., two-stage least squares, limited dependent variables and logistic regression, nonparametric regressions, censored regressions, time-series analysis). Techniques are introduced through work related to the instructor's areas of interest and expertise (e.g., labor, development, health, education). PREREQUISITES: ECON 380 *Units: 6*.

*Prerequisite: ECON 380*

### **ECON 495: *ADVANCED TOPICS IN ECONOMICS***

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. May be repeated when the topic is different. *Units: 6*.

*Prerequisite: ECON 300*

### **ECON 500: *ADVANCED MICROECONOMICS***

Advanced topics in microeconomics that prepare students for a first graduate course in microeconomics. PREREQUISITES: ECON 300; MATH 300 or 310 recommended *Units: 6*.

*Prerequisite: ECON 300; MATH 300 or 310 recommended*

### **ECON 590: *TUTORIAL STUDIES IN ECONOMICS***

Advanced readings, discussions, and essays in economic problems of special interest to the student. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98*.

*Prerequisite: Counter Registration Required.*

### **ECON 591: *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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98*.

*Prerequisite: Counter Registration Required.*

### **ECON 595: *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. PREREQUISITES: ECON 300, 320, or 380; Counter Registration Required *Units: 1 TO 98*.

*Prerequisite: ECON 300, 320, or 380; Counter Registration Required*

### **ECON 599: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **ECON 601: SENIOR EXPERIENCE: READING OPTION**

Students focus on a monograph &/or readings appropriate for advanced undergraduates, engage in active discussion, and produce a paper that expands upon or responds to the readings. Successful completion satisfies the department's Senior Experience requirement. PREREQUISITES: Senior standing; at least two advanced economics courses (400- or 500-level) *Units: 3.*

*Prerequisite: Senior standing; at least two advanced economics courses (400- or 500-level)*

### **ECON 602: SENIOR EXPERIENCE: RESEARCH**

Students will produce a well-researched paper that meets standards of profession. To register, students must submit to instructor a paper prepared in a 400-level economics course with a one-page proposal on how it will be extended, refined and polished in content and form. Instructor's approval of this proposal is prerequisite for registration. PREREQUISITES: Senior standing; at least two advanced economics courses (400- 500-level) *Units: 3.*

*Prerequisite: Senior standing; at least two advanced economics courses (400- 500-level)*

### **ECON 690: TUTORIAL STUDIES IN ECONOMICS**

Advanced readings, discussions, and essays in economic problems of special interest to the student. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **ECON 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **ECON 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. PREREQUISITES: ECON 300, 320, or 380; Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: ECON 300, 320, or 380; Counter Registration Required*

### **ECON 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*



# EDUCATION

<b>Professor:</b>	B. Williams ( <i>chair</i> )
<b>Associate professors:</b>	S. Burdick-Shepherd ( <i>on leave term(s) III</i> ), S. Purkey ( <i>Bee Connell Mielke Professor of Education</i> )
<b>Instructor:</b>	C. Despres-Berry ( <i>Center for Academic Success</i> )
<b>Lecturers:</b>	M. Engman, M. Johnson ( <i>Lecturer of Educaiton</i> )

There is no better preparation for a career as an educator than a liberal arts degree that combines a major in your subject area for in-depth knowledge with education courses that provide professional knowledge and skills. To that end, the Mielke Family Department of Education at Lawrence offers certification for licensure to teach at the elementary and secondary levels. The department also offers a minor in education studies for the bachelor of arts or bachelor of music degree. Lawrence's liberal arts approach prepares students to be effective and reflective K-12 classroom teachers or to pursue graduate study or work in education-related fields.

## Teacher certification

*Students interested in teacher certification can pick up an application and Teacher Certification Handbook from the education department's administrative assistant in Briggs Hall 117 or from the music education administrative assistant in the conservatory.*

Teacher certification is available to Lawrence students, alumni, and graduates from other colleges and universities. Upon completion of the program, students are eligible to be certified for licensure in all fifty states, and our alumni are employed as elementary and secondary school teachers in public and private schools around the world.

Lawrence offers certification in elementary/middle school (grades K-9); secondary English language arts, social studies, science, mathematics, and computer science (grades 4-12); and all-levels art, music, theater, English as a second language, and world languages (Chinese, French, German, Japanese, Russian, or Spanish) (grades PK-12). Music certification is offered through the conservatory only.

Students pursuing teacher certification complete the Lawrence major in their primary academic area along with teacher education courses and practicums that satisfy requirements for licensure. A second certification area may be added through completion of a minor or second major (see the director of teacher education for details).

## Post-graduate teacher certification

Students who have graduated from Lawrence or another college or university may be certified for licensure through Lawrence's teacher education program. Elementary/middle school certification (K-9) typically takes two years, while secondary (4-12) or all-levels (PK-12) certification in specific subject areas typically takes one-and-

a-half years, including student teaching. Program length may vary depending on undergraduate major and coursework.

To be admitted, graduates must demonstrate a 3.000 major GPA in their subject area or attain a qualifying score on the relevant subject area test (Praxis II or ACTFL). A minimum of ten courses in the major subject or seven courses in the minor may be accepted in lieu of the official Lawrence major or minor. Graduates must also have completed (or complete) the equivalent of Lawrence's general education requirements.

Interested graduates should consult the director of teacher education for requirements and tuition, which is lower than the undergraduate tuition rate.

## Program standards

As they complete certification requirements, candidates demonstrate proficiency in the following Lawrence University teacher education program standards, which are based on the Wisconsin state standards for licensure.

### *CONTENT KNOWLEDGE*

1. Understands the central concepts, tools of inquiry, and structure(s) of the discipline and its connections with the various liberal arts and sciences.

### *PEDAGOGICAL PRACTICE*

2. Plans, organizes, and presents systematic instruction that makes the above aspects of the subject meaningful for students.

3. Uses a variety of instructional strategies, including instructional media and technology, to promote understanding.

4. Uses a variety of formal and informal assessment techniques to evaluate learning and adapt instruction.

### *STUDENT ENGAGEMENT*

5. Uses effective verbal and nonverbal communication to foster active inquiry and engagement in learning.

6. Creates a supportive, productive learning environment that encourages positive social interaction, collaboration, and self-motivation.

### *ADAPTIVE EXPERTISE*

7. Understands how children and adolescents learn and are motivated, individually and in groups, and teaches

accordingly.

8. Matches instruction to differences in prior learning, ability, and exceptionality.

9. Demonstrates awareness of differences that arise from cultural background, gender, socio-economic status, or community context, and adapts instruction accordingly.

### *PROFESSIONAL CONDUCT*

10. Acts in an ethical, professional manner and exhibits fairness, respect, and care in dealing with students.

11. Establishes positive relationships with school colleagues, parents, and agencies in the larger community.

12. Demonstrates the ability to be self-critical and to use feedback to improve teaching practice.

### *EDUCATIONAL MISSION*

13. Understands the role of education in a democracy and the relationship between school and society.

Progress toward the standards is assessed in the pre-student teaching portfolio, and proficiency is confirmed in the final teaching portfolio submitted at the completion of student teaching.

## **Required for teacher certification**

*Certification requirements are subject to change by the Wisconsin legislature and the Wisconsin Department of Public Instruction as well as by Lawrence's teacher education program. Students must satisfy the requirements in force at the time of program completion in order to be certified for licensure. It is the student's responsibility to confirm requirements with the education department or with music education in the conservatory.*

To be certified for licensure, students must be admitted to the teacher education program; complete teacher education courses and practicums, any required tests, and student teaching; and meet GPA and other standards for licensure. The following steps are required:

1. *Be admitted to the teacher education program.* A student may apply for admission after completing one teacher education course with a practicum. To be admitted, a student must have a cumulative GPA of 2.750 or higher. The application for admission is available from the education department or music education office.
2. *Complete course requirements:*
  - a. *A major in the certification area.* For elementary/middle school, students may complete any major in the college or conservatory. For other areas, students complete a major (or the teaching ESL minor) in the subject they will teach. Some areas have additional course requirements as described below.
  - b. *Teacher education courses with practicums.* Students must pass the required education studies and teaching methods courses, each of which has a practicum in a school classroom.

- c. *General education requirements.* Students must complete Lawrence's general education requirements. Graduates of other colleges must complete (or have completed) the equivalent.
3. *Qualify for student teaching.* To qualify for student teaching, a student must:
- demonstrate *content knowledge* by achieving the required major GPA or a qualifying score on the standardized test for that certification area;
  - demonstrate *practical preparation* by completing at least 100 school practicum hours with positive evaluations and by receiving satisfactory grades in teaching methods courses; and
  - submit a pre-student teaching portfolio documenting progress toward the teacher education program standards.
4. *Student teach for a full elementary or secondary school semester.*
- For elementary/middle school certification:* complete a fall-semester teaching apprenticeship in an Appleton Area School District school with additional methods instruction provided by Appleton master teachers.
  - For secondary and all-levels certification:* complete a fall or spring semester of student teaching in the vicinity of Lawrence, in Chicago (through our affiliation with the Chicago Center), or internationally (with nine weeks near Lawrence and nine weeks abroad).
5. *Submit a final teaching portfolio and have it approved.* The final portfolio includes a performance assessment completed during student teaching (edTPA), student teaching evaluations from the cooperating teacher and university supervisor, and a reflective essay.
6. *Complete any other requirements as specified for the certification area.*

To be certified for licensure, candidates must complete all requirements, have a final cumulative GPA of 2.750 or higher, receive satisfactory evaluations during student teaching, and achieve a passing score on the edTPA.

At every stage of teacher education and certification, candidates must demonstrate that they are mentally and physically able to carry out the duties and responsibilities of a classroom teacher. This includes:

- consistent attendance and satisfactory performance in university courses and education practicums;
- ability to establish positive working relationships with peers, mentors, supervisors, and K-12 students;
- sensitivity and responsiveness to the needs of diverse students, including students with disabilities; and
- appropriate conduct and professionalism.

A candidate who does not meet these expectations may be removed from the program or denied certification for licensure.

## Elementary/Middle School (K-9)

Students can complete any major in the college or conservatory. Elementary/middle school certification also requires one course in environmental studies; ENST 150 is recommended and satisfies the B.A. general education requirement for a laboratory course in the natural sciences.

Students must achieve a qualifying score on the Praxis II Middle School: Content Knowledge (5146) test to begin student teaching. Candidates must also pass the Wisconsin Foundations of Reading Test (FoRT) to be certified for licensure.

The following teacher education courses are required:

<b>Courses</b>	<b>Lawrence course credit, in units</b>	<b>Certification semester hours</b>
EDST 180: <i>Psychology of Learning</i>	6	4
EDST 350: <i>Ethnicity, Cultural Diversity, and Education</i>	6	4
EDST 412: <i>Foundations of Literacy in a Diverse Society</i>	6	4
EDST 440: <i>Sociology of Education</i>	6	4
EDUC 430: <i>Educating All Learners</i>	6	4
EDUC 555: <i>Methods in Elementary Teaching*</i>	6	4
EDUC 575: <i>Elementary Content Area Methods**</i>	3	3
EDUC 665: <i>Advanced Methods in Teaching-Elementary**</i>	3	3
EDUC 675: <i>Student Teaching Apprenticeship-Elementary**</i>	18	12

\*EDUC 555 is taken in the year prior to student teaching; it's normally offered in the spring term.

\*\*EDUC 575, 665, and 675 are taken concurrently during the fall semester of student teaching.

## English Language Arts (4-12)

Students complete the English major and must demonstrate familiarity with contemporary literature of world scope and coursework in composition, linguistics or history of the English language, literature of ethnic/racial minority groups in America, and theatre arts. A course in literature for adolescents is recommended. Experience in journalism (such as writing for *The Lawrentian*) is also recommended.

If their major GPA is less than 3.000, students must achieve a qualifying score on the Praxis II English Language Arts: Content Knowledge (5038) test to begin student teaching.

The following teacher education courses are required:

Courses	Lawrence course credit, in units	Certification semester hours
EDST 180: <i>Psychology of Learning</i>	6	4
EDST 350: <i>Ethnicity, Cultural Diversity, and Education</i>	6	4
EDST 412: <i>Foundations of Literacy in a Diverse Society</i>	6	4
EDST 440: <i>Sociology of Education</i>	6	4
EDUC 430: <i>Educating All Learners</i>	6	4
EDUC 560: <i>Methods in Middle and Secondary Teaching*</i>	6	4
EDUC 650 (or 655): <i>Student Teaching**</i>	18	12
EDUC 660: <i>Advanced Methods in Teaching**</i>	3	3

\*EDUC 560 is taken in spring term of the year prior to student teaching.  
\*\*EDUC 650 (or 655) and 660 are taken concurrently during the student teaching semester (fall or spring).

Social Studies (4-12)

Students complete a major in history, government/political science, economics, or psychology. Students must also complete at least one course in each of history, government/political science, economics, psychology, and anthropology/sociology/ethnic studies, and a second course in two of these fields (outside the major). Non-history majors are strongly urged to take a minimum of two history courses, one in U.S. history and one in global history. A course in environmental studies is required. Instruction in consumer cooperatives and conservation is incorporated into the methods course (EDUC 560).

If their major GPA is less than 3.000, students must achieve a qualifying score on the Praxis II Social Studies: Content Knowledge (5081) test to begin student teaching.

The following teacher education courses are required:

Courses	Lawrence course credit, in units	Certification semester hours
EDST 180: <i>Psychology of Learning</i>	6	4
EDST 350: <i>Ethnicity, Cultural Diversity, and Education</i>	6	4
EDST 440: <i>Sociology of Education</i>	6	4
EDUC 430: <i>Educating All Learners</i>	6	4
EDUC 560: <i>Methods in Middle and Secondary Teaching</i> *	6	4
EDUC 650 (or 655): <i>Student Teaching</i> **	18	12

EDUC 660: <i>Advanced Methods in Teaching</i> **	3	3
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\*EDUC 560 is taken in spring term of the year prior to student teaching.  
 \*\*EDUC 650 (or 655) and 660 are taken concurrently during the student teaching semester (fall or spring).

## Science (4-12)

Students complete a major in one of the sciences (biology, chemistry, environmental science, geosciences, or physics) and at least one course in each of the remaining sciences.

If their major GPA is less than 3.000, students must achieve a qualifying score on the Praxis II General Science: Content Knowledge (5435) test to begin student teaching.

The following teacher education courses are required:

Courses	Lawrence course credit, in units	Certification semester hours
EDST 180: <i>Psychology of Learning</i>	6	4
EDST 350: <i>Ethnicity, Cultural Diversity, and Education</i>	6	4
EDST 440: <i>Sociology of Education</i>	6	4
EDUC 430: <i>Educating All Learners</i>	6	4
EDUC 560: <i>Methods in Middle and Secondary Teaching</i> *	6	4
EDUC 650 (or 655): <i>Student Teaching</i> **	18	12
EDUC 660: <i>Advanced Methods in Teaching</i> **	3	3

\*EDUC 560 is taken in spring term of the year prior to student teaching.

\*\*EDUC 650 (or 655) and 660 are taken concurrently during the student teaching semester (fall or spring).

## Mathematics (4-12)

Students complete the major in mathematics.

If their major GPA is less than 3.000, students must achieve a qualifying score on the Praxis II Mathematics: Content Knowledge (5161) test to begin student teaching.

The following teacher education courses are required:

Courses	Lawrence course credit, in units	Certification semester hours
EDST 180: <i>Psychology of Learning</i>	6	4
EDST 350: <i>Ethnicity, Cultural Diversity, and Education</i>	6	4
EDST 440: <i>Sociology of Education</i>	6	4
EDUC 430: <i>Educating All Learners</i>	6	4
EDUC 560: <i>Methods in Middle and Secondary Teaching</i> *	6	4
EDUC 650 (or 655): <i>Student Teaching</i> **	18	12
EDUC 660: <i>Advanced Methods in Teaching</i> **	3	3

\*EDUC 560 is taken in spring term of the year prior to student teaching.

\*\*EDUC 650 (or 655) and 660 are taken concurrently during the student teaching semester (fall or spring).

## Computer Science (4-12)

Students complete the major in computer science.

If their major GPA is less than 3.000, students must achieve a qualifying score on the Praxis II Computer Science (5652) test to begin student teaching.

The following teacher education courses are required:

Courses	Lawrence course credit, in units	Certification semester hours
EDST 180: <i>Psychology of Learning</i>	6	4
EDST 350: <i>Ethnicity, Cultural Diversity, and Education</i>	6	4
EDST 440: <i>Sociology of Education</i>	6	4
EDUC 430: <i>Educating All Learners</i>	6	4
EDUC 560: <i>Methods in Middle and Secondary Teaching*</i>	6	4
EDUC 650 (or 655): <i>Student Teaching**</i>	18	12
EDUC 660: <i>Advanced Methods in Teaching**</i>	3	3

\*EDUC 560 is taken in spring term of the year prior to student teaching.

\*\*EDUC 650 (or 655) and 660 are taken concurrently during the student teaching semester (fall or spring).

## Art (PK-12)

Students complete the major in studio art.

If their major GPA is less than 3.000, students must achieve a qualifying score on the Praxis II Art: Content Knowledge (5134) test to begin student teaching.

The following teacher education courses are required:

Courses	Lawrence course credit, in units	Certification semester hours
EDST 180: <i>Psychology of Learning</i>	6	4
EDST 350: <i>Ethnicity, Cultural Diversity, and Education</i>	6	4
EDST 440: <i>Sociology of Education</i>	6	4
EDUC 430: <i>Educating All Learners</i>	6	4
EDUC 560: <i>Methods in Middle and Secondary Teaching</i> *	6	4
EDUC 585: <i>Art in the Elementary and Secondary Schools</i> *	2	2
EDUC 650 (or 655): <i>Student Teaching</i> **	18	12
EDUC 660: <i>Advanced Methods in Teaching</i> **	3	3

\*EDUC 560 and 585 are taken concurrently in spring term of the year prior to student teaching.

\*\*EDUC 650 (or 655) and 660 are taken concurrently during the student teaching semester (fall or spring).

Music (PK-12)

Certification is available only through the conservatory of music. Students complete the [major in music education](#), which includes teacher education courses and student teaching.

If their major GPA is less than 3.000, students must achieve a qualifying score on the Praxis II Music: Content Knowledge (5113) test to begin student teaching.

Theatre (PK-12)

Students complete the major in theatre arts. A course in theatre techniques for educators (EDUC/THAR 253) is recommended.

If their major GPA is less than 3.000, students must achieve a qualifying score on the Praxis II Theatre (5641) test to begin student teaching.

The following teacher education courses are required:

Courses	Lawrence course credit, in units	Certification semester hours
EDST 180: <i>Psychology of Learning</i>	6	4
EDST 350: <i>Ethnicity, Cultural Diversity, and Education</i>	6	4
EDST 440: <i>Sociology of Education</i>	6	4
EDUC 430: <i>Educating All Learners</i>	6	4
EDUC 560: <i>Methods in Middle and Secondary Teaching*</i>	6	4

EDUC 650 (or 655): <i>Student Teaching</i> **	18	12
EDUC 660: <i>Advanced Methods in Teaching</i> **	3	3

\*EDUC 560 is taken in spring term of the year prior to student teaching.  
 \*\*EDUC 650 (or 655) and 660 are taken concurrently during the student teaching semester (fall or spring).

## World Languages (PK-12)

Certification is available to teach Chinese, French, German, Japanese, Russian, or Spanish. Students complete the major in the language and must spend a term studying the language in a country where it is natively spoken.

If their major GPA is less than 3.000, students must pass the ACTFL oral and writing proficiency tests to begin student teaching.

The following teacher education courses are required:

Courses	Lawrence course credit, in units	Certification semester hours
EDST 180: <i>Psychology of Learning</i>	6	4
EDST 350: <i>Ethnicity, Cultural Diversity, and Education</i>	6	4
EDST 440: <i>Sociology of Education</i>	6	4
EDUC 430: <i>Educating All Learners</i>	6	4
EDUC 560: <i>Methods in Middle and Secondary Teaching</i> *	6	4
EDUC 563: <i>Elementary and Secondary World</i>	2	2

## Language Methods\*

EDUC 650 (or 655): <i>Student Teaching</i> **	18	12
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EDUC 660: <i>Advanced Methods in Teaching</i> **	3	3
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\*EDUC 560 and 563 are taken concurrently in spring term of the year prior to student teaching.

\*\*EDUC 650 (or 655) and 660 are taken concurrently during the student teaching semester (fall or spring).

## English as a Second Language (PK-12)

Students complete the teaching ESL minor in linguistics.

If their major GPA is less than 3.000, students must achieve a qualifying score on the Praxis II English to Speakers of Other Languages (5362) test to begin student teaching.

The following teacher education courses are required:

Courses	Lawrence course credit, in units	Certification semester hours
EDST 180: <i>Psychology of Learning</i>	6	4
EDST 350: <i>Ethnicity, Cultural Diversity, and Education</i>	6	4
EDST 440: <i>Sociology of Education</i>	6	4
EDUC 430: <i>Educating All Learners</i>	6	4
EDUC 560: <i>Methods in Middle and Secondary Teaching</i> *	6	4

EDUC 565: <i>Methods in Teaching English Learners*</i>	6	4
EDUC 650 (or 655): <i>Student Teaching**</i>	18	12
EDUC 660: <i>Advanced Methods in Teaching**</i>	3	3

\*EDUC 560 and 565 are taken concurrently in spring term of the year prior to student teaching.  
 \*\*EDUC 650 (or 655) and 660 are taken concurrently during the student teaching semester (fall or spring).

## Courses - Education Studies

### EDST 180: *PSYCHOLOGY OF LEARNING*

An introduction to brain structure and development in childhood and adolescence, memory systems and types of learning, and approaches to building knowledge, improving skills, and deepening understanding. Culminating topics include motivation, the nature and development of expertise, and instructional design. *Units: 6.*  
*Also listed as Psychology 180*

### EDST 191: *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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*  
*Prerequisite: Counter Registration Required.*

### EDUC 191: *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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*  
*Prerequisite: Counter Registration Required.*

### EDST 195: *INTERNSHIP IN EDUCATION STUDIES*

Internship in a school or district office, museum or arts organization, other non-profit or community organization, social services agency, governmental body, policy or advocacy group, or other education-related setting with prior approval. (Does not count toward teacher certification.) 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. PREREQUISITES: Counter registration required. *Units: 1 TO 98.*  
*Prerequisite: Counter registration required.*

### EDST 200: *TO BE OF USE: EXPLORING THE CALL TO TEACH*

There is a strong human desire to make a meaningful difference in our communities and the larger world. For many that means hearing the call to teach, whether in a school or collegiate classroom or helping profession. In this seminar we explore the call to teach, to make a difference through educational praxis, to be of use, using literature, art, music, and dialogue. Student work includes in-class presentations and projects. *Units: 3.*

### **EDST 210: TOPICS IN EDUCATION AND COMMUNITY ENGAGEMENT**

In this topics course, students combine practice in the community with academic coursework to examine a contemporary issue in education and society. typically, one-third of the course takes place in community settings. May be repeated when topics are different.

*Topic*

PREREQUISITES: Sophomore Standing *Units: 1 TO 6.*

*Prerequisite: Sophomore Standing*

### **EDUC 253: THEATRE TECHNIQUES FOR EDUCATORS**

Whether preparing to work as a classroom teacher or in an arts organization, students will explore the power of theatre as a means to teach core content. Taught largely through the guided execution of theatre activities, students will participate in and create interactive curriculum. We will explore how theatre engages a variety of learners and research its history of efficacy with English Learners, underserved communities and students with special needs. *Units: 6.*

*Also listed as Theatre Arts 253*

### **EDST 270: WHY READ CHILDREN'S BOOKS?**

This seminar explores the complex ways children's literature affect readers of all ages. We will immerse ourselves in reading works from *Where the Wild Things Are* to *Charlotte's Web* as we examine what it means to be a reader of children's literature by looking at our own and children's responses to the experience and joy of reading. Discussion, reflective writing and collaborative community projects. *Units: 6.*

### **EDST 300: COMPARATIVE AND INTERNATIONAL EDUCATION**

A general survey and overview of global educational systems. Comparative and international education (CIE) is the academic study of educational issues and themes across a range of cultures, countries, and regions. By comparing educational systems in various countries, the course unpacks the nature of international education, traces its historical roots, identifies the challenges and benefits of its study, and develops implications for the formulation and implementation of policies in education and social, national, and international development.

PREREQUISITES: Sophomore standing *Units: 6.*

*Prerequisite: Sophomore standing*

### **EDST 309: HOLLYWOOD GOES TO HIGH SCHOOL**

Year after year, Hollywood turns out movies that are set in schools and present images of teachers and teens. Many of these films address typical coming-of-age issues, societal fear of teen crime and delinquency and, of course, the search for romance. A subset of these films provide powerful and culturally enduring images of teachers and teaching. High school movies also provide insight into the fantasies, anxieties, dreams, and assumptions prevalent in American culture. This course will examine the world and worldview found in Hollywood high school movies and the extent to which the stories they tell make us who we are.

PREREQUISITES: Sophomore standing *Units: 6.*

*Also listed as Film Studies 309*

*Prerequisite: Sophomore standing*

### **EDST 315: PHILOSOPHY OF CHILDREN**

Students will consider childhood and children through a philosophical lens. The first half of the course will focus on the philosophy of childhood; the second half will focus on how children philosophize the world, children's rights, and adult responsibilities. Readings will derive from philosophical texts, fiction and children's literature, and social media. Students may elect to also enroll in EDST 316 for a field experience practicum in elementary classrooms. PREREQUISITES: Sophomore standing *Units: 6.*

*Prerequisite: Sophomore standing*

### **EDST 316: PHILOSOPHY OF CHILDREN PRACTICUM**

Field experiences in elementary classrooms encouraging children's wonder through philosophical discussion. This is an optional practicum for the course EDST 315 Philosophy of Children. Students will design philosophy lessons for young children and will conduct these lessons in small cooperative groups. PREREQUISITES: EDST 315 (taken in the past or concurrently). *Units: 2.*

*Prerequisite: EDST 315 (taken in the past or concurrently).*

### **EDST 345: DISTRIBUTED COGNITION AND THE EXTENDED MIND**

The new science of the mind treats cognition as a distributed process involving the brain, body, and world. This seminar explores the role of material settings and tools, bodily engagement, social interaction, and cultural processes in human reasoning, problem solving, and learning. Students will write short papers examining aspects of cognitive activity in real-world settings. PREREQUISITES: PHIL 105 recommended *Units: 6.*

*Also listed as Cognitive Science 345, Anthropology 345, Psychology 345*

*Prerequisite: PHIL 105 recommended*

### **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. PREREQUISITES: Sophomore standing *Units: 6.*

*Also listed as Ethnic Studies 352*

*Prerequisite: Sophomore standing*

### **EDST 380: ENGAGING IN ACTION RESEARCH**

This course engages students in social science research to collect and use data to solve real problems. Students interested in careers that emphasize working with others (teaching, counseling, nursing, social work) will find this course particularly relevant. Content will explore methods of examining instructional effectiveness. Lab will consist of classroom-based research experiences, data analysis, and collaborative inquiry. PREREQUISITES: EDST 180 and Sophomore standing *Units: 6.*

*Prerequisite: EDST 180 and Sophomore standing*

### **EDST 387: PICTURE BOOKS AND GRAPHIC NOVELS FOR CHILDREN AND YOUNG ADULTS**

This seminar examines narratives for young people that combine text and image. It introduces concepts from literary, aesthetic, design, and cultural criticism to examine how audiences interpret these works, focusing attention on questions of representation and subjectivity. Selected works encompass fiction and non-fiction and may include picture books, graphic novels/comics, hybrid books, and digital/hyperlinked narratives. Discussion, short papers and visual projects, and collaborative final project. PREREQUISITES: Sophomore Standing.

*Units: 6.*

*Prerequisite: Sophomore Standing.*

### **EDST 390: 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. PREREQUISITES: Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

### **EDUC 390: 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. PREREQUISITES: Counter Registration Required.

*Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **EDST 391: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **EDUC 391: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **EDST 395: INTERNSHIP IN EDUCATION STUDIES**

Internship in a school or district office, museum or arts organization, other non-profit or community organization, social services agency, governmental body, policy or advocacy group, or other education-related setting with prior approval. (Does not count toward teacher certification.) 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. PREREQUISITES: Counter registration required. *Units: 1 TO 98.*

*Prerequisite: Counter registration required.*

### **EDST 399: INDEPENDENT STUDY IN EDUCATION STUDIES**

*Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

### **EDUC 399: *INDEPENDENT STUDY IN EDUCATION***

Advanced study arranged in consultation with the department. Students considering a senior honors project should register for this course. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **EDST 400: *THE ENVIRONMENT, COMMUNITY, AND EDUCATION***

The course will examine the relationship between community-mindedness and the development of ecological literacy. Cultural assumptions about the natural world and our place in it that are implicit within the K-12 and college curriculum, and the manner in which modern forms of education shape our understanding of what it means to “live well in a place we know well” will be explored. Examples of how schools can contribute to environmental and social sustainability (and justice) via community- and place-based education will be presented. PREREQUISITES: Sophomore standing or consent of instructor *Units: 6.*

*Also listed as Environmental Studies 460*

*Prerequisite: Sophomore standing or consent of instructor*

### **EDST 410: *IMPOSSIBLE CHOICES? ETHICAL DILEMMAS IN EDUCATION***

In this course we question conventional understandings of what the good is, what it should be, and what it can be in educational contexts. We discuss common ethical dilemmas central to schooling, including how these intersect with issues of race, class, and gender, and we consider challenges to traditional schooling structures. Papers include case studies and reflections. PREREQUISITES: sophomore standing *Units: 6.*

*Prerequisite: sophomore standing*

### **EDST 412: *FOUNDATIONS OF LITERACY IN A DIVERSE SOCIETY***

Through community experience and lab work the student will examine reading instructional practices and the contemporary issues teachers of language and reading face in a diverse society, and will consider the purposes of learning to read and becoming literate in the world. Students will gain understanding of literacy theories and explore reading development and the acquisition of reading competency. PREREQUISITES: Sophomore standing *Units: 6.*

*Prerequisite: Sophomore standing*

### **EDUC 430: *EDUCATING ALL LEARNERS***

This course for students in the Teacher Education Program focuses on two important aspects of K-12 teaching: (1) helping learners develop academic and disciplinary literacy; and (2) tailoring instruction to specific learning needs (for students with disabilities, English language learners, struggling readers, students with gaps in academic knowledge, gifted students, etc.). Practicum of 20 hours required in a subject area class that includes learners with special needs. PREREQUISITES: EDST 180 and junior standing *Units: 6.*

*Prerequisite: EDST 180 and junior standing*

### **EDUC 431: *EDUCATING ALL LEARNERS - MUSIC***

This course for students seeking certification to teach music (choral, general, and/or instrumental) focuses on adapting music instruction to learners with disabilities. Practicum of 10 hours required in a music class that includes learners with special needs. PREREQUISITES: EDST 180, junior standing, and declared major in

music education *Units: 3.*

*Also listed as Music Education and Pedagogy 431*

*Prerequisite: EDST 180, junior standing, and declared major in music education*

### **EDST 440: 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 equity and excellence in education. Practicum of 20 hours required. PREREQUISITES: Sophomore standing *Units: 6.*

*Also listed as Ethnic Studies 340*

*Prerequisite: Sophomore standing*

### **EDST 450: TOPICS IN EDUCATION STUDIES**

This seminar explores issues in contemporary education. Topics vary by term and focus on controversies or innovations in educational systems, practices, and policy or in the relations between school and society. May be repeated when topic is different.

*Topic for Spring 2021: The Philosophy of the Play*

Maria Montessori wrote that “the work of the child is play.” But is play also the work of all humans, child or adult? In this seminar students will examine the concept of play by reading philosophers on play, observing children and adults at play, and considering the role of play in human flourishing. Students will engage in discussion, reflective writing, and collaborative projects. *Units: 6.*

*Prerequisite: Sophomore standing and one course in education studies or instructor approval*

### **EDUC 555: METHODS IN ELEMENTARY TEACHING**

For students preparing to teach in the elementary classroom. Students will practice and observe methodologies in instructional strategies, assessment, and organization of the elementary environment. Students will analyze how learner, subject, and environment influence pedagogical choice with emphasis on collaborative learning, differentiated instruction, and developmentally appropriate practice. *Units: 6.*

*Prerequisite: Junior standing and admission to the teacher certification program*

### **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. PREREQUISITES: Junior standing and admission to certification program *Units: 6.*

*Prerequisite: Junior standing and admission to certification program*

### **EDUC 563: ELEMENTARY AND SECONDARY WORLD LANGUAGE METHODS**

A seminar on teaching world languages in the elementary, middle, and high school. Emphasis on curriculum planning, methods of instruction, and assessment of learning. PREREQUISITES: Taken concurrently with EDUC 560 *Units: 2.*

*Prerequisite: Taken concurrently with EDUC 560*

### **EDUC 565: METHODS IN TEACHING ENGLISH LEARNERS**

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 learners in diverse learning environments. Practicum of 20 hours required. PREREQUISITES: Junior standing and consent of instructor *Units: 6.*

*Prerequisite: Junior standing and consent of instructor*

### **EDUC 575: ELEMENTARY CONTENT AREA METHODS**

This course is for students concurrently enrolled in the elementary student teaching apprenticeship. The apprenticeship will design and teach lessons engaging elementary students and young children in the fundamental content, concepts, and inquiry tools of mathematics, English language arts, social studies, science, fine arts, physical education and health. PREREQUISITES: Baccalaureate degree, admission to elementary teacher certification, and concurrent enrollment in EDUC 665 and EDUC 675 *Units: 3.*

*Prerequisite: Baccalaureate degree, admission to elementary teacher certification, and concurrent enrollment in EDUC 665 and EDUC 675*

### **EDUC 585: ART IN THE ELEMENTARY AND SECONDARY SCHOOLS**

A seminar on teaching art in the elementary, middle, and high school. Emphasis on curriculum planning, methods of instruction, and assessment of learning. PREREQUISITES: Taken concurrently with EDUC 560 history courses. *Units: 2.*

*Also listed as Studio Art 585*

*Prerequisite: Taken concurrently with EDUC 560 history courses.*

### **EDST 590: 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. PREREQUISITES: Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

### **EDUC 590: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **EDST 591: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **EDUC 591: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **EDST 595: INTERNSHIP IN EDUCATION STUDIES**

Internship in a school or district office, museum or arts organization, other non-profit or community organization, social services agency, governmental body, policy or advocacy group, or other education-related setting with prior approval. (Does not count toward teacher certification.) 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. PREREQUISITES: Counter registration required. *Units: 1 TO 98.*

*Prerequisite: Counter registration required.*

### **EDST 599: INDEPENDENT STUDY IN EDUCATION STUDIES**

*Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

### **EDUC 599: INDEPENDENT STUDY IN EDUCATION**

Advanced study arranged in consultation with the department. Students considering a senior honors project should register for this course. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **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. PREREQUISITES: Senior standing and admission to certification program; contact department chair about prerequisites and corequisites *Units: 18.*

*Prerequisite: Senior standing and admission to certification program; contact department chair about prerequisites and corequisites*

### **EDUC 655: INTERNATIONAL STUDENT TEACHING**

This is an overseas student teaching option. After nine weeks of student teaching in the Fox Valley, students will be placed in one of 16 countries to complete the student teaching practicum. International student teaching is available during 13th Term only. Students must have been admitted to the student teaching program (college or conservatory) and have met all requirements for domestic student teaching. Students should contact the department chair for additional admission and fee requirements. PREREQUISITES: Senior or graduate status, admission to the student teaching program and to the international student teaching program, passing score on Praxis II or ACTFL, proficiency tests and, beginning in 2015, a passing score on the TPA during the first 9 weeks of domestic student teaching. *Units: 18.*

*Prerequisite: Senior or graduate status, admission to the student teaching program and to the international student teaching program, passing score on Praxis II or ACTFL, proficiency tests and, beginning in 2015, a passing score on the TPA during the first 9 weeks of domestic student teaching.*

### **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. PREREQUISITES: Concurrent enrollment in EDUC 650 or consent of instructor *Units: 3.*

*Prerequisite: Concurrent enrollment in EDUC 650 or consent of instructor*

### **EDUC 665: ADVANCED METHODS IN TEACHING-ELEMENTARY**

The seminar will engage students in critical reflection upon their elementary student teaching experience. Concrete and theoretical problems of teaching and learning will be explored (e.g., classroom management, assessment, curriculum design), as will issues regarding educational policy and school organization. Taken in conjunction with student teaching in elementary. PREREQUISITES: Baccalaureate degree, admission to elementary teacher certification and concurrent enrollment in EDUC 575 and 675 *Units: 3.*

*Prerequisite: Baccalaureate degree, admission to elementary teacher certification and concurrent enrollment in EDUC 575 and 675*

### **EDUC 675: STUDENT TEACHING ELEMENTARY**

Student teaching for elementary licensure (EC-MC) is a full-time, fall-semester apprenticeship in a K-6 grade classroom setting. This apprenticeship is an embedded clinical experience whereby the student teacher will learn the craft and art of teaching under the guidance of a master teacher from the Appleton Area School District. PREREQUISITES: Baccalaureate degree, admission to elementary teacher certification, and concurrent enrollment in EDUC 575 and EDUC 665 *Units: 18.*

*Prerequisite: Baccalaureate degree, admission to elementary teacher certification, and concurrent enrollment in EDUC 575 and EDUC 665*

### **EDST 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. PREREQUISITES: Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

### **EDUC 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **EDST 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **EDUC 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. PREREQUISITES: Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

### **EDST 695: *INTERNSHIP IN EDUCATION STUDIES***

Internship in a school or district office, museum or arts organization, other non-profit or community organization, social services agency, governmental body, policy or advocacy group, or other education-related setting with prior approval. (Does not count toward teacher certification.) 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. PREREQUISITES: Counter registration required. *Units: 1 TO 98.*

*Prerequisite: Counter registration required.*

### **EDUC 695: *INTERNSHIP IN EDUCATION***

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. *Units: 1 TO 98.*

### **EDST 699: *INDEPENDENT STUDY IN EDUCATION STUDIES***

*Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

### **EDUC 699: *INDEPENDENT STUDY IN EDUCATION***

Advanced study arranged in consultation with the department. Students considering a senior honors project should register for this course. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

# EDUCATION STUDIES

The minor in education studies introduces students to the study of education as an academic discipline within the liberal arts. As an alternative to teacher certification (or a bridge to post-graduate certification), the minor supports academic and career interests in literacy; special education or school psychology; education policy; educational anthropology, sociology or psychology; philosophy of education; and practical applications in a variety of settings, including arts organizations, museums, and other cultural institutions.

Students pursuing the minor engage in focused inquiry into the philosophical, cultural, and social foundations of education; the historical and present-day relationship between school and society; the part formal education plays in human development; and/or contemporary issues of education policy and practice.

## Required for the minor in education studies

1. Three foundational courses:
  - a. EDST 180: *Psychology of Learning*
  - b. EDST 315: *Philosophy of Children*
  - c. EDST 350: *Ethnicity, Cultural Diversity, and Education*
2. Three elective courses in education studies (EDST), child development (PSYC 260/265), and/or adolescent development (PSYC 460), with at least one at the 400 level or above.

A course from a department other than education or psychology that deals with the study of education, children, or adolescents may count as one of the electives with prior approval from the education department chair.

## Courses - Education Studies

### EDST 180: *PSYCHOLOGY OF LEARNING*

An introduction to brain structure and development in childhood and adolescence, memory systems and types of learning, and approaches to building knowledge, improving skills, and deepening understanding. Culminating topics include motivation, the nature and development of expertise, and instructional design. *Units: 6.*

*Also listed as Psychology 180*

### EDST 191: *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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### EDST 195: *INTERNSHIP IN EDUCATION STUDIES*

Internship in a school or district office, museum or arts organization, other non-profit or community organization, social services agency, governmental body, policy or advocacy group, or other education-related setting with prior approval. (Does not count toward teacher certification.) 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. **PREREQUISITES:** Counter registration required. *Units: 1 TO 98.*

*Prerequisite: Counter registration required.*

### **EDST 200: *To Be of Use: Exploring the Call to Teach***

There is a strong human desire to make a meaningful difference in our communities and the larger world. For many that means hearing the call to teach, whether in a school or collegiate classroom or helping profession. In this seminar we explore the call to teach, to make a difference through educational praxis, to be of use, using literature, art, music, and dialogue. Student work includes in-class presentations and projects. *Units: 3.*

### **EDST 210: *Topics in Education and Community Engagement***

In this topics course, students combine practice in the community with academic coursework to examine a contemporary issue in education and society. typically, one-third of the course takes place in community settings. May be repeated when topics are different.

*Topic*

**PREREQUISITES:** Sophomore Standing *Units: 1 TO 6.*

*Prerequisite: Sophomore Standing*

### **EDST 270: *Why Read Children's Books?***

This seminar explores the complex ways children's literature affect readers of all ages. We will immerse ourselves in reading works from *Where the Wild Things Are* to *Charlotte's Web* as we examine what it means to be a reader of children's literature by looking at our own and children's responses to the experience and joy of reading. Discussion, reflective writing and collaborative community projects. *Units: 6.*

### **EDST 300: *Comparative and International Education***

A general survey and overview of global educational systems. Comparative and international education (CIE) is the academic study of educational issues and themes across a range of cultures, countries, and regions. By comparing educational systems in various countries, the course unpacks the nature of international education, traces its historical roots, identifies the challenges and benefits of its study, and develops implications for the formulation and implementation of policies in education and social, national, and international development. **PREREQUISITES:** Sophomore standing *Units: 6.*

*Prerequisite: Sophomore standing*

### **EDST 309: *Hollywood Goes to High School***

Year after year, Hollywood turns out movies that are set in schools and present images of teachers and teens. Many of these films address typical coming-of-age issues, societal fear of teen crime and delinquency and, of course, the search for romance. A subset of these films provide powerful and culturally enduring images of teachers and teaching. High school movies also provide insight into the fantasies, anxieties, dreams, and assumptions prevalent in American culture. This course will examine the world and worldview found in Hollywood high school movies and the extent to which the stories they tell make us who we are. **PREREQUISITES:** Sophomore standing *Units: 6.*

*Also listed as Film Studies 309*

*Prerequisite: Sophomore standing*

### **EDST 315: PHILOSOPHY OF CHILDREN**

Students will consider childhood and children through a philosophical lens. The first half of the course will focus on the philosophy of childhood; the second half will focus on how children philosophize the world, children's rights, and adult responsibilities. Readings will derive from philosophical texts, fiction and children's literature, and social media. Students may elect to also enroll in EDST 316 for a field experience practicum in elementary classrooms. PREREQUISITES: Sophomore standing *Units: 6.*

*Prerequisite: Sophomore standing*

### **EDST 316: PHILOSOPHY OF CHILDREN PRACTICUM**

Field experiences in elementary classrooms encouraging children's wonder through philosophical discussion. This is an optional practicum for the course EDST 315 Philosophy of Children. Students will design philosophy lessons for young children and will conduct these lessons in small cooperative groups. PREREQUISITES: EDST 315 (taken in the past or concurrently). *Units: 2.*

*Prerequisite: EDST 315 (taken in the past or concurrently).*

### **EDST 345: DISTRIBUTED COGNITION AND THE EXTENDED MIND**

The new science of the mind treats cognition as a distributed process involving the brain, body, and world. This seminar explores the role of material settings and tools, bodily engagement, social interaction, and cultural processes in human reasoning, problem solving, and learning. Students will write short papers examining aspects of cognitive activity in real-world settings. PREREQUISITES: PHIL 105 recommended *Units: 6.*

*Also listed as Cognitive Science 345, Anthropology 345, Psychology 345*

*Prerequisite: PHIL 105 recommended*

### **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. PREREQUISITES: Sophomore standing *Units: 6.*

*Also listed as Ethnic Studies 352*

*Prerequisite: Sophomore standing*

### **EDST 380: ENGAGING IN ACTION RESEARCH**

This course engages students in social science research to collect and use data to solve real problems. Students interested in careers that emphasize working with others (teaching, counseling, nursing, social work) will find this course particularly relevant. Content will explore methods of examining instructional effectiveness. Lab will consist of classroom-based research experiences, data analysis, and collaborative inquiry. PREREQUISITES: EDST 180 and Sophomore standing *Units: 6.*

*Prerequisite: EDST 180 and Sophomore standing*

### **EDST 387: PICTURE BOOKS AND GRAPHIC NOVELS FOR CHILDREN AND YOUNG ADULTS**

This seminar examines narratives for young people that combine text and image. It introduces concepts from

literary, aesthetic, design, and cultural criticism to examine how audiences interpret these works, focusing attention on questions of representation and subjectivity. Selected works encompass fiction and non-fiction and may include picture books, graphic novels/comics, hybrid books, and digital/hyperlinked narratives. Discussion, short papers and visual projects, and collaborative final project. PREREQUISITES: Sophomore Standing. *Units: 6.*

*Prerequisite: Sophomore Standing.*

### **EDST 390: 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. PREREQUISITES: Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

### **EDST 391: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **EDST 395: INTERNSHIP IN EDUCATION STUDIES**

Internship in a school or district office, museum or arts organization, other non-profit or community organization, social services agency, governmental body, policy or advocacy group, or other education-related setting with prior approval. (Does not count toward teacher certification.) 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. PREREQUISITES: Counter registration required. *Units: 1 TO 98.*

*Prerequisite: Counter registration required.*

### **EDST 399: INDEPENDENT STUDY IN EDUCATION STUDIES**

*Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

### **EDST 400: THE ENVIRONMENT, COMMUNITY, AND EDUCATION**

The course will examine the relationship between community-mindedness and the development of ecological literacy. Cultural assumptions about the natural world and our place in it that are implicit within the K-12 and college curriculum, and the manner in which modern forms of education shape our understanding of what it means to “live well in a place we know well” will be explored. Examples of how schools can contribute to environmental and social sustainability (and justice) via community- and place-based education will be presented. PREREQUISITES: Sophomore standing or consent of instructor *Units: 6.*

*Also listed as Environmental Studies 460*

*Prerequisite: Sophomore standing or consent of instructor*

### **EDST 410: IMPOSSIBLE CHOICES? ETHICAL DILEMMAS IN EDUCATION**

In this course we question conventional understandings of what the good is, what it should be, and what it can

be in educational contexts. We discuss common ethical dilemmas central to schooling, including how these intersect with issues of race, class, and gender, and we consider challenges to traditional schooling structures. Papers include case studies and reflections. PREREQUISITES: sophomore standing *Units: 6.*

*Prerequisite: sophomore standing*

### **EDST 412: FOUNDATIONS OF LITERACY IN A DIVERSE SOCIETY**

Through community experience and lab work the student will examine reading instructional practices and the contemporary issues teachers of language and reading face in a diverse society, and will consider the purposes of learning to read and becoming literate in the world. Students will gain understanding of literacy theories and explore reading development and the acquisition of reading competency. PREREQUISITES: Sophomore standing *Units: 6.*

*Prerequisite: Sophomore standing*

### **EDST 440: 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 equity and excellence in education. Practicum of 20 hours required. PREREQUISITES: Sophomore standing *Units: 6.*

*Also listed as Ethnic Studies 340*

*Prerequisite: Sophomore standing*

### **EDST 450: TOPICS IN EDUCATION STUDIES**

This seminar explores issues in contemporary education. Topics vary by term and focus on controversies or innovations in educational systems, practices, and policy or in the relations between school and society. May be repeated when topic is different.

*Topic for Spring 2021: The Philosophy of the Play*

Maria Montessori wrote that “the work of the child is play.” But is play also the work of all humans, child or adult? In this seminar students will examine the concept of play by reading philosophers on play, observing children and adults at play, and considering the role of play in human flourishing. Students will engage in discussion, reflective writing, and collaborative projects. *Units: 6.*

*Prerequisite: Sophomore standing and one course in education studies or instructor approval*

### **EDST 590: 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. PREREQUISITES: Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

### **EDST 591: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

**EDST 595: INTERNSHIP IN EDUCATION STUDIES**

Internship in a school or district office, museum or arts organization, other non-profit or community organization, social services agency, governmental body, policy or advocacy group, or other education-related setting with prior approval. (Does not count toward teacher certification.) 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. PREREQUISITES: Counter registration required. *Units: 1 TO 98.*

*Prerequisite: Counter registration required.*

**EDST 599: INDEPENDENT STUDY IN EDUCATION STUDIES**

*Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

**EDST 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. PREREQUISITES: Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

**EDST 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

**EDST 695: INTERNSHIP IN EDUCATION STUDIES**

Internship in a school or district office, museum or arts organization, other non-profit or community organization, social services agency, governmental body, policy or advocacy group, or other education-related setting with prior approval. (Does not count toward teacher certification.) 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. PREREQUISITES: Counter registration required. *Units: 1 TO 98.*

*Prerequisite: Counter registration required.*

**EDST 699: INDEPENDENT STUDY IN EDUCATION STUDIES**

*Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

# ENGLISH

<b>Professor:</b>	D. McGlynn
<b>Associate professors:</b>	C. Barnes, G. Bond ( <i>chair</i> ), K. Hoffmann, L. Khor ( <i>on leave term(s) III</i> ), M. Range, T. Spurgin ( <i>Bonnie Glidden Buchanan Professor of English Literature</i> )
<b>Assistant professors:</b>	C. Kervin, C. Segrest ( <i>on leave term(s) II</i> )

The English Department at Lawrence offers two majors, English: Creative Writing and English: Literature.

*English: Creative Writing* fosters opportunities for students to simultaneously study literature and participate in its artistic production. Students in the major learn, in both creative writing and literature courses, to interrogate the complexities of language, culture, aesthetics, identities, communities, and themselves. Students take creative writing classes in fiction, nonfiction, and poetry (with options to also work in scriptwriting and playwrighting) at every level of the major, have numerous opportunities to interact with nationally and internationally renowned writers, and to interact closely with their peers and professors. The major is capped off by an intimate Senior Experience seminar, in which they produce a lengthy work of poetry or creative prose and present it during a public reading.

*English: Literature* provides students opportunities to develop their skill at critical reading, writing, and analysis—skills that can be applied not only to "literary" texts but also to the texts and images produced by the cultures that surround us. Literature courses include analysis of British, American, African American, multi-ethnic, and postcolonial cultures.

## Required for the major in English

The Lawrence University English department offers two majors, English: Creative Writing and English: Literature.

Students in English: Creative Writing learn to interrogate through literary study, and reflect through literary production, the complexities of language, culture, aesthetics, identities, communities, and themselves. Students will be required to do substantial work in both poetry and prose (with options to also work in scriptwriting and playwrighting) while also studying literature through numerous critical and historical lenses. At the conclusion of the English major, students on the Creative Writing Track will complete the Senior Experience by producing a lengthy work of poetry or creative prose accompanied by a critical introduction and a public presentation of their work.

Students English: Literature develop skills of critical reading, writing, and analysis—skills that can be applied not only to "literary" texts but also to the texts and images produced by the cultures that surround us. Our mission is to impart the passion and skills necessary for our students to become effective communicators across a diverse and multicultural world. We engage our students in deep explorations of texts, ideas, writers, cultures, histories, and audiences and provide extensive opportunities for writing, interpreting, and creating. Literature courses include analysis of British, American, African-American, multiethnic, and postcolonial cultures, which students are encouraged to examine in interdisciplinary contexts in pursuit of a broad-based

liberal-arts education.

**The English: Creative Writing major requires the following:**

1. Two introductory courses at the 100 or 200-level:
  - a. ENG 110: *Literature and War*
  - b. ENG 111: *Literature and Music*
  - c. ENG 112: *Literature and Truth*
  - d. ENG 114: *Literature, Psychology, and Memory*
  - e. ENG 115: *Literature and Adolescence*
  - f. ENG 150: *Reading Literature*
  - g. ENG 151: *Reading Fiction*
  - h. ENG 152: *Reading Poetry*
  - i. ENG 230: *British Writers*
  - j. ENG 240: *British Writers II*
  - k. ENG 250: *American Writers*
  - l. ENG 260: *African American Writers*
  - m. ENG 280: *Postcolonial Writers*
  - n. ENG 281: *History of the Book in London*
2. ENG 180: *Introduction to Creative Writing*
3. Two 300-level creative writing courses, one in prose (fiction or nonfiction) and one in poetry:
  - a. ENG 350: *Creative Writing: Nonfiction*
  - b. ENG 360: *Creative Writing: Fiction*
  - c. ENG 370: *Creative Writing: Poetry*
4. Two 500-level creative writing courses in any genre. (Students may also petition for THAR 427: *Playwrighting* to count in place of one of these courses.):
  - a. ENG 550: *Advanced Creative Writing: Nonfiction*
  - b. ENG 560: *Advanced Creative Writing: Fiction*
  - c. ENG 562: *Novel Writing*
  - d. ENG 565: *Advanced Creative Writing: Poetry*
  - e. ENG 568: *Poetry as Practice*
5. Two advanced literature courses focusing on periods before 1800:
  - a. ENG 401: *Topics in Literary Criticism*
  - b. ENG 410: *Newtonian Lit: Chronicles of a Clockwork Universe*
  - c. ENG 420: *Studies in Medieval Literature*
  - d. ENG 425: *Shakespeare* (or ENG 170: *Shakespeare in London*, but not both)
  - e. ENG 430: *Renaissance Literature*
  - f. ENG 435: *Renaissance Drama*
  - g. ENG 440: *Milton and the 17th Century*
  - h. ENG 441: *John Donne and the Metaphysical Poets*
  - i. ENG 443: *New England Puritan Poetry*
  - j. ENG 445: *Restoration and 18th-Century Comedy*

- k. ENG 446: *Gender and Enlightenment*
  - l. ENG 447: *Eighteenth-Century Terrors*
  - m. ENG 448: *Enlightenment Selves*
  - n. ENG 450: *Eighteenth-Century Literature* - no longer offered
  - o. ENG 451: *The Revolutionary Eighteenth Century*
  - p. ENG 452: *Samuel Richardson's Clarissa*
  - q. ENG 470: *Early American Writing* - no longer offered
  - r. ENG 527: *History of the Book*
6. One advanced literature course focusing on the nineteenth century:
- a. ENG 402: *Topics in Literary Criticism*
  - b. ENG 455: *Romanticism*
  - c. ENG 460: *The Victorian Age*
  - d. ENG 465: *The English Novel*
  - e. ENG 474: *American Poets of the Nineteenth Century*
  - f. ENG 476: *Nineteenth-Century American Women Writers*
  - g. ENG 477: *Dickinson*
  - h. ENG 478: *Nineteenth-Century African-American Writers*
7. One advanced literature course focusing on the twentieth or twenty-first centuries:
- a. ENG 403: *Topics in Literary Criticism*
  - b. ENG 480: *Modernist British Fiction*
  - c. ENG 481: *Joyce's Ulysses*
  - d. ENG 483: *American Autobiography*
  - e. ENG 485: *Modernist Poetry* - no longer offered
  - f. ENG 490: *Modern Drama*
  - g. ENG 495: *Modernist American Fiction* - no longer offered
  - h. ENG 498: *Representing War in American Writing* - no longer offered
  - i. ENG 500: *Contemporary American Fiction*
  - j. ENG 501: *The Graphic Novel*
  - k. ENG 502: *Contemporary Jewish-American Literature*
  - l. ENG 503: *Contemporary American Poetry*
  - m. ENG 504: *Multiethnic American Literature*
  - n. ENG 506: *Contemporary African-American Women Poets*
  - o. ENG 510: *Literature of the Harlem Renaissance*
  - p. ENG 515: *Gender and Modernist British/American Literature*
  - q. ENG 516: *Literature and Human Rights*
  - r. ENG 517: *Topics in Human Rights*
  - s. ENG 518: *Narratives of Inequality*
  - t. ENG 521: *Narratives of International News*
  - u. ENG 522: *Literature and the Environment*
8. In completing the above requirements, students must take at least one course from each of the following literary and cultural traditions:
- a. British: ENG 170 (London Centre), 230, 240, 281, 410, 420, 425, 430, 435, 440, 441, 445, 446, 447, 448, 450, 451, 452, 455, 460, 465, 480, 481, 515, 527

- b. American: ENG 250, 260, 443, 470, 474, 476, 477, 478, 483, 485, 495, 498, 500, 501, 502, 503, 504, 506, 510, 522
- c. African American: ENG 260, 478, 504, 506, 510; OR postcolonial: ENG 280, 517, 518, 521. A course in African-American literature may satisfy either category b or c but not both.

9. ENG 601: *Senior Seminar in Creative Writing*

**The English: Literature major requires the following:**

1. Three Introductory courses at the 100 or 200-level:
  - a. ENG 110: *Literature and War*
  - b. ENG 111: *Literature and Music*
  - c. ENG 112: *Literature and Truth*
  - d. ENG 114: *Literature, Psychology, and Memory*
  - e. ENG 115: *Literature and Adolescence*
  - f. ENG 150: *Reading Literature*
  - g. ENG 151: *Reading Fiction*
  - h. ENG 152: *Reading Poetry*
  - i. ENG 180: *Introduction to Creative Writing*
  - j. ENG 230: *British Writers*
  - k. ENG 240: *British Writers II*
  - l. ENG 250: *American Writers*
  - m. ENG 260: *African American Writers*
  - n. ENG 280: *Postcolonial Writers*
  - o. ENG 281: *History of the Book in London*
2. Two advanced courses focusing on periods before 1800:
  - a. ENG 401: *Topics in Literary Criticism*
  - b. ENG 410: *Newtonian Lit: Chronicles of a Clockwork Universe*
  - c. ENG 420: *Studies in Medieval Literature*
  - d. ENG 425: *Shakespeare* (or ENG 170: *Shakespeare in London*, but not both)
  - e. ENG 430: *Renaissance Literature*
  - f. ENG 435: *Renaissance Drama*
  - g. ENG 440: *Milton and the 17th Century*
  - h. ENG 441: *John Donne and the Metaphysical Poets*
  - i. ENG 443: *New England Puritan Poetry*
  - j. ENG 445: *Restoration and 18th-Century Comedy*
  - k. ENG 446: *Gender and Enlightenment*
  - l. ENG 447: *Eighteenth-Century Terrors*
  - m. ENG 448: *Enlightenment Selves*
  - n. ENG 450: *Eighteenth-Century Literature*
  - o. ENG 451: *The Revolutionary Eighteenth Century*
  - p. ENG 452: *Samuel Richardson's Clarissa*
  - q. ENG 470: *Early American Writing*
  - r. ENG 527: *History of the Book*

3. One advanced course focusing on the nineteenth century:
  - a. ENG 402: *Topics in Literary Criticism*
  - b. ENG 455: *Romanticism*
  - c. ENG 460: *The Victorian Age*
  - d. ENG 465: *The English Novel*
  - e. ENG 474: *American Poets of the Nineteenth Century*
  - f. ENG 476: *Nineteenth-Century American Women Writers*
  - g. ENG 477: *Dickinson*
  - h. ENG 478: *Nineteenth-Century African-American Writers*
4. One advanced course focusing on the twentieth or twentieth-first centuries:
  - a. ENG 403: *Topics in Literary Criticism*
  - b. ENG 480: *Modernist British Fiction*
  - c. ENG 481: *Joyce's Ulysses*
  - d. ENG 483: *American Autobiography*
  - e. ENG 485: *Modernist Poetry* - no longer offered
  - f. ENG 490: *Modern Drama*
  - g. ENG 495: *Modernist American Fiction* - no longer offered
  - h. ENG 498: *Representing War in American Writing* - no longer offered
  - i. ENG 500: *Contemporary American Fiction*
  - j. ENG 501: *The Graphic Novel*
  - k. ENG 502: *Contemporary Jewish-American Literature*
  - l. ENG 503: *Contemporary American Poetry*
  - m. ENG 504: *Multiethnic American Literature*
  - n. ENG 506: *Contemporary African-American Women Poets*
  - o. ENG 510: *Literature of the Harlem Renaissance*
  - p. ENG 515: *Gender and Modernist British/American Literature*
  - q. ENG 516: *Literature and Human Rights*
  - r. ENG 517: *Topics in Human Rights*
  - s. ENG 518: *Narratives of Inequality*
  - t. ENG 521: *Narratives of International News*
  - u. ENG 522: *Literature and the Environment*
5. In completing requirements 2, 3 & 4, one class must be English 401, 402, or 403: *Topics in Literary Criticism*
6. Two additional courses in English
7. One course, separate from requirements 1-6, focusing on writers of color (ENG 260, 280, 478, 504, 506, 510, 517, 518, 521).
8. At least one of the courses in 6-7 must be an advanced course (400 or 500-level)
9. Senior Experience (ENG 600, honors project in English, or student teaching in English)

## Senior Experience in English

Students in the English: Creative Writing major must take:

ENG 601: Senior Seminar in Creative Writing: A seminar involving analysis of theoretical, critical, literary, and practical (i.e., craft-related) readings at an advanced level in conjunction with students' writing of an original, substantial creative work, in either poetry or prose. Students working in different genres will have the opportunity to read one another's work and discuss, as a group, both the challenges and possibilities associated with composing lengthy creative projects. Each section of the seminar will focus on a theme that can accommodate variety in students' individual research projects

Students in the English: Literature major may fulfill *Senior Experience* through one of several options:

1. 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);
2. An advanced course in creative writing with additional work determined by the instructor (taken during the junior or senior year); students should plan ahead so that they complete the necessary prerequisite for the advanced course in creative writing;
3. 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; or
4. An honors project in English (or adequate progress toward completing an honors project as approved by departmental petition); 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 ENG 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.

## Required for the minor in English

1. Two courses from the introductory and intermediate group:
  - a. ENG 110: *Literature and War*

- b. ENG 111: *Literature and Music*
  - c. ENG 112: *Literature and Truth*
  - d. ENG 114: *Literature, Psychology, and Memory*
  - e. ENG 115: *Literature and Adolescence*
  - f. ENG 150: *Reading Literature*
  - g. ENG 151: *Reading Fiction*
  - h. ENG 152: *Reading Poetry*
  - i. ENG 230: *British Writers I*
  - j. ENG 240: *British Writers II*
  - k. ENG 250: *American Writers*
  - l. ENG 260: *African American Writers*
  - m. ENG 280: *Postcolonial Writers*
  - n. ENG 281: *History of the Book in London*
2. One course focusing on periods before 1800:
- a. ENG 401: *Topics in Literary Criticism*
  - b. ENG 410: *Newtonian Lit: Chronicles of a Clockwork Universe*
  - c. ENG 420: *Studies in Medieval Literature*
  - d. ENG 425: *Shakespeare* (or ENG 170: *Shakespeare in London*, but not both)
  - e. ENG 430: *Renaissance Literature*
  - f. ENG 435: *Renaissance Drama* - no longer offered
  - g. ENG 440: *Milton and the 17th Century*
  - h. ENG 441: *John Donne and the Metaphysical Poets*
  - i. ENG 443: *New England Puritan Poetry*
  - j. ENG 445: *Restoration and 18th-Century Comedy*
  - k. ENG 446: *Gender and Enlightenment*
  - l. ENG 447: *Eighteenth-Century Terrors*
  - m. ENG 448: *Enlightenment Selves*
  - n. ENG 450: *Eighteenth-Century Literature* - no longer offered
  - o. ENG 451: *The Revolutionary Eighteenth Century*
  - p. ENG 452: *Samuel Richardson's Clarissa*
  - q. ENG 470: *Early American Writing* - no longer offered
  - r. ENG 527: *History of the Book*
3. One course focusing on the nineteenth century:
- a. ENG 402: *Topics in Literary Criticism*
  - b. ENG 455: *Romanticism*
  - c. ENG 460: *The Victorian Age*
  - d. ENG 465: *The English Novel*
  - e. ENG 474: *American Poets of the Nineteenth Century*
  - f. ENG 476: *Nineteenth-Century American Women Writers*
  - g. ENG 477: *Dickinson*
  - h. ENG 478: *Nineteenth-Century African-American Writers*
4. One course focusing on the twentieth or twenty-first centuries:
- a. ENG 403: *Topics in Literary Criticism*
  - b. ENG 480: *Modernist British Fiction*
  - c. ENG 481: *Joyce's Ulysses*
  - d. ENG 483: *American Autobiography*

- e. ENG 485: *Modernist Poetry* - no longer offered
  - f. ENG 490: *Modern Drama*
  - g. ENG 495: *Modernist American Fiction* - no longer offered
  - h. ENG 498: *Representing War in American Writing* - no longer offered
  - i. ENG 500: *Contemporary American Fiction*
  - j. ENG 501: *The Graphic Novel*
  - k. ENG 502: *Contemporary Jewish-American Literature*
  - l. ENG 503: *Contemporary American Poetry*
  - m. ENG 504: *Multiethnic American Literature*
  - n. ENG 506: *Contemporary African-American Women Poets*
  - o. ENG 510: *Literature of the Harlem Renaissance*
  - p. ENG 515: *Gender and Modernist British/American Literature*
  - q. ENG 516: *Literature and Human Rights*
  - r. ENG 517: *Topics in Human Rights*
  - s. ENG 518: *Narratives of Inequality*
  - t. ENG 521: *Narratives of International News*
  - u. ENG 522: *Literature and the Environment*
5. One additional course in English

## Required for the minor in creative writing

1. Three courses in literary studies at any level in the English department (for English majors completing the creative writing minor, these can be courses from the major).
2. Three courses in creative writing at any level, including work in at least two different literary genres. Courses in creative writing include:
  - a. ENG 350: *Creative Writing: Non-Fiction*
  - b. ENG 360: *Creative Writing: Fiction*
  - c. ENG 370: *Creative Writing: Poetry*
  - d. ENG 550: *Advanced Creative Writing: Nonfiction*
  - e. ENG 560: *Advanced Creative Writing: Fiction*
  - f. ENG 562: *Advanced Creative Writing: Novel Writing*
  - g. ENG 565: *Advanced Creative Writing: Poetry*
  - h. ENG 568: *Poetry as Practice*
  - i. THAR 427: *Playwriting*
  - j. ENG 601: *Senior Seminar in Creative Writing*

## Teacher certification in English language arts

Students who major in English: Literature can seek certification to teach English language arts at the secondary level. Students seeking certification must satisfactorily complete at least one course in writing (e.g., 150, 401 / 402 / 403, or a creative writing course), at least one course in linguistics (LING 150) or the English language, a course in literature for adolescents (like ENG 115), and a course in literature by writers of color in America

(e.g., ENG 260, 478, 504, 506, 510). Students can add an endorsement for a second area (such as English as a second language) by completing the appropriate minor. Students who plan to seek teacher certification should review the requirements in the Education section of the catalog and meet with the director of teacher education, preferably before the end of the sophomore year.

## **Teacher certification in English as a second language (K-12)**

Students can seek certification to teach English as a second language at the elementary and secondary levels by completing the Teaching ESL minor in linguistics and other certification requirements. Interested students should review the requirements in the Education section of the catalog and meet with the director of teacher education, preferably before the end of the sophomore year.

## **Advanced placement**

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.

Students who earn a 4 or better in the Advanced Placement English Language and Composition Exam will be given credit for one course at Lawrence, which will count toward graduation, but not toward the completion of the major.

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 see the following link for more information about university credit for AP Examinations. [AP Examination Information \(PDF\)](#)

## **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.

## **Graduate school**

Students considering graduate work in English are advised to take classes with at least two different members of the department. They will likely want to do more English coursework than the minimum required for the major. Creative Writing students should take as many courses as possible in both creative writing and

literature.

For Literature students considering pursuing the master's degree, be advised that most graduate schools require demonstrated proficiency in at least one modern language in addition to English. For the doctorate, the usual requirement is demonstrated proficiency in two modern languages. ENG 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.

## Courses - English

### ENG 110: *LITERATURE AND WAR*

In this discussion-based course, we will grapple with language stretched to its absolute limit as we move through several centuries of writers attempting to describe war's indescribable violences, from the U.S. Civil War to the wars in Iraq and Afghanistan. Assignments will include discussion leading, journal-keeping. 2-3 short papers, and a final exam. *Units: 6.*

### ENG 111: *LITERATURE AND MUSIC*

A discussion course focused on literary works about music and musicians. Readings will include stories and novels, memoirs, plays, and poetry. As they read and discuss these works, students will be encouraged to reflect on the place of music in their own lives. Assignments will include brief oral presentations, daily learning journals, and a few short papers. *Units: 6.*

### ENG 112: *LITERATURE AND THE TRUTH: UNRELIABLE NARRATORS*

All first-person narrators are unreliable; everyone's story is biased, incomplete, flawed by memory. Yet certain narrators are particularly suspicious, and this class explores stories told by manipulative, self-deceitful, and unstable voices. Working across multiple genres - including novels, short stories, and visual media - we will investigate what these works ask of readers and how they comment on truth-telling and reality. Assessments: class discussion, reader's journal, essay. *Units: 6.*

### ENG 114: *LITERATURE, PSYCHOLOGY AND MEMORY*

A discussion course focused on literary works that explore characters' and speakers' psychological complexities, especially in terms of memory. We will analyze texts from multiple genres, such as short stories, novels, poetry, and memoirs. Assessments: class discussion, reader's journal, and a few short papers. *Units: 6.*

### ENG 115: *LITERATURE AND ADOLESCENCE*

A discussion course focused on literary works about adolescence. Readings will include literary novels, youngadult novels, graphic novels / memoirs, and a film. As they read and discuss these works, students will be encouraged to reflect on their own experiences as teens / adolescents. Assignments will include short papers, a group presentation, and learning journals. *Units: 6.*

### ENG 150: *READING LITERATURE*

An introduction to the techniques of literary analysis through the detailed study of individual texts. *Units: 6.*

### ENG 151: *READING FICTION*

An introduction to the pleasures and possibilities of fiction as a literary form. Through the close study of texts across a variety of narrative styles, this seminar will consider how novels, novellas, and short stories convey

meaning and draw readers into imaginative worlds. Students will learn how to analyze fiction critically and creatively and write about it thoughtfully. *Units: 6.*

### **ENG 152: READING POETRY**

An introduction to the techniques of poetic analysis through the detailed study of individual poems and poetic forms. In this course, we will consider how poems work, how to read them closely, and how to write about them thoughtfully *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.* PREREQUISITES: Must be attending Lawrence London Centre *Units: 6.*

*Also listed as Theatre Arts 170*

*Prerequisite: Must be attending Lawrence London Centre*

### **ENG 171: LITERATURE OF THE IRISH TROUBLES**

The class includes poetry, short stories, novels, plays and film scripts which document the cultural and political conflict in Northern Ireland ("The Troubles"). Analysing literature from both sides of the conflict and from the Republic and Ulster, will allow for an in-depth understanding of the socio-historical context influencing these works, and the importance of literature as a personal and political voice. PREREQUISITES: Must be attending the Lawrence London Centre. *Units: 6.*

*Also listed as Theatre Arts 174*

*Prerequisite: Must be attending the Lawrence London Centre.*

### **ENG 172: MODERN IRISH DRAMA**

The class will read and discuss plays by contemporary Irish playwrights from Brendan Behan to Martin McDonagh. It will analyse personal and the political issues in modern day Ireland, the question of Irish identities and the gradual social changes since the beginning of the Troubles. Particular emphasis will be on the performance history of the plays, both in Ireland and abroad. PREREQUISITES: Must be attending the Lawrence London Centre. *Units: 6.*

*Also listed as Theatre Arts 172*

*Prerequisite: Must be attending the Lawrence London Centre.*

### **ENG 180: INTRODUCTION TO CREATIVE WRITING**

A survey of prominent literary works through the lens of creative writing. Students will analyze works of fiction, nonfiction, and poetry and will have the opportunity to respond creatively to the assigned readings-- i.e., by composing original stories, creative essays, and poems. Assigned texts will seek to expose students to various writing styles, and provide examples of the successes and strategies of other writers. In addition to learning various aspects of reading and discussing texts as writers, students will learn how to respond to writing in different genres. *Units: 6.*

### **ENG 189: BRITISH AND INTERNATIONAL SOCCER CULTURE**

A study of the myths, narratives, and cultural implications of the British and international football (soccer) industry, from its Victorian roots to its global present. Offered at the London Centre. PREREQUISITES: Must be attending the Lawrence London Centre. *Units: 6.*

*Prerequisite: Must be attending the Lawrence London Centre.*

### **ENG 191: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **ENG 203: LITERARY LONDON**

This course studies literature created in and about London, from Medieval poetry, short stories, journals to newspaper sequels and contemporary novels. We will walk in the footsteps of London-born writers and those who made London their home to find out how their writings have capture social, political, and cultural changes. A variety of assignments will allow students to engage individually with London. *Offered at the London Centre.* PREREQUISITES: Must be attending Lawrence London Centre *Units: 6.*

*Prerequisite: Must be attending Lawrence London Centre*

### **ENG 230: 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.*

### **ENG 240: 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.*

### **ENG 245: THE LONG NOVEL**

A comparative study of nineteenth century European realism, with readings taken from a variety of national traditions. Authors studied may include Dickens, Flaubert, and Dostoevsky. Collaborative teaching of each text will expose participants to a wide range of critical and pedagogical methods. With instructor approval students may also register for an additional tutorial (3 units) in which we will read and discuss important theoretical works on the history of the novel form. PREREQUISITES: Sophomore standing *Units: 6.*

*Also listed as Russian 260*

*Prerequisite: Sophomore standing*

### **ENG 250: AMERICAN WRITERS**

Intensive study of major American authors from Emerson to Hughes. Emphasis on close reading and critical writing. *Units: 6.*

### **ENG 260: AFRICAN AMERICAN WRITERS**

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*

### **ENG 263: GREEK AND ROMAN DRAMA IN TRANSLATION**

In this course we analyze ancient plays both as great works of literature and as artifacts of a particular artistic, cultural, and political context. Students will read excerpts and complete plays in English from a variety of ancient authors, including (from Classical Athens) Aeschylus, Sophocles, Euripides, Aristophanes, and Menander, and (from late Republican and early Imperial Rome) Plautus, Terence, and Seneca.

PREREQUISITES: Sophomore standing or consent of instructor *Units: 6.*

*Also listed as Theatre Arts 363, Classics 363*

*Prerequisite: Sophomore standing or consent of instructor*

### **ENG 265: GREEK AND ROMAN EPIC IN TRANSLATION**

An examination of ancient epic literature through the study of Homer's *Iliad* and *Odyssey* and Virgil's *Aeneid*, all read in English translation. Emphasis on the important features and themes of the epic genre, ancient conceptions of the hero, and the literary, cultural, and political resonance of these texts in classical antiquity.

PREREQUISITES: Sophomore standing or consent of instructor *Units: 6.*

*Also listed as Classics 370*

*Prerequisite: Sophomore standing or consent of instructor*

### **ENG 280: POSTCOLONIAL WRITERS**

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, Global Studies 280*

### **ENG 281: HISTORY OF THE BOOK IN LONDON**

An introduction to the interdisciplinary field of the history of the book, focusing especially on London's role as a site of book production, distribution and consumption. We will work directly with manuscripts and rare books, studying the material history of books and writing techniques from early manuscripts to iPads. Offered at the London Centre. PREREQUISITES: Must be attending the Lawrence London Centre. *Units: 6.*

*Also listed as History 384*

*Prerequisite: Must be attending the Lawrence London Centre.*

### **ENG 285: BIBLICAL NARRATIVES IN LITERATURE**

An interdisciplinary exploration of the retelling of biblical narratives in modern literature. We will examine novels and poems that revisit biblical scenes, from the binding of Isaac to the crucifixion of Jesus, as independent literary works and in comparison to the biblical text and its retellings in early exegesis. *Units: 6.*

### **ENG 350: CREATIVE WRITING: NON-FICTION**

Practice in the writing of non-fictional prose. PREREQUISITES: ENG 180. Sophomore standing or consent of instructor *Units: 6.*

*Prerequisite: ENG 180. Sophomore standing or consent of instructor*

### **ENG 360: CREATIVE WRITING: FICTION**

Practice in the writing of short fiction. PREREQUISITES: ENG 180. Sophomore standing or consent of instructor *Units: 6.*

*Prerequisite: ENG 180. Sophomore standing or consent of instructor*

### **ENG 370: CREATIVE WRITING: POETRY**

Practice in the writing of poetry. PREREQUISITES: ENG 180. *Units: 6.*

*Prerequisite: ENG 180.*

### **ENG 390: 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.

PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **ENG 391: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **ENG 399: INDEPENDENT STUDY IN ENGLISH**

Advanced study, arranged in consultation with the department chair. Students considering an honors project should register for this course. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **ENG 401: TOPICS IN LITERARY CRITICISM**

In this discussion-driven class, we will focus on a single early modern author or literary text in order to master the art of sophisticated literary criticism: crafting and organizing complex arguments, conducting scholarly research, and employing both primary and secondary sources effectively in literary analysis. May be repeated when topic is different. *Units: 6.*

*Prerequisite: Two 100- or 200- level courses in ENG or sophomore standing*

### **ENG 402: TOPICS IN LITERARY CRITICISM**

In this discussion-driven class, we will focus on a single nineteenth-century author or literary text in order to master the art of sophisticated literary criticism: crafting and organizing complex arguments, conducting scholarly research, and employing both primary and secondary sources effectively in literary analysis. May be repeated when topic is different. *Units: 6.*

*Prerequisite: Two 100- or 200- level courses in ENG or sophomore standing*

### **ENG 403: TOPICS IN LITERARY CRITICISM**

*Topic for Fall 2022: Jamaica Kincaid*

Prerequisites: Two 100- or 200- level courses in ENG or sophomore standing

This discussion-driven class will focus on the writings of Jamaica Kincaid while helping students to master the art of sophisticated literary criticism: crafting and organizing complex arguments, conducting scholarly research, and employing both primary and secondary sources effectively in literary analysis. (This course is open to students who have already taken ENG 403 with a focus on a different author or work). *Units: 6.*

*Prerequisite: Two 100- or 200- level courses in ENG or sophomore standing*

### **ENG 410: NEWTONIAN LIT: CHRONICLES OF A CLOCKWORK UNIVERSE**

Newtonian Lit is a course that investigates the connections between the literature and science of the Enlightenment, particularly with respect to contemporary notions of space and time. Students will analyze important texts from the fields of English and Physics, notably Laurence Sterne's *The Life and Opinions of Tristram Shandy, Gentleman* and Isaac Newton's *Principia*. PREREQUISITES: ENG 150 or its equivalent, plus any introductory course in the natural sciences (e.g., PHYS 141), plus sophomore standing or consent of instructor *Units: 6.*

*Also listed as Physics 215*

*Prerequisite: ENG 150 or its equivalent, plus any introductory course in the natural sciences (e.g., PHYS 141), plus sophomore standing or consent of instructor*

### **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. PREREQUISITES: Junior standing, ENG 230, or consent of instructor *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. PREREQUISITES: Junior standing, ENG 230, or consent of instructor *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. PREREQUISITES: Junior standing, ENG 230, or consent of instructor *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. PREREQUISITES: Junior standing, ENG 230, or consent of instructor *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. PREREQUISITES: Junior standing, ENG 230, or consent of instructor *Units: 6.*

*Prerequisite: Junior standing, ENG 230, or consent of instructor*

#### **ENG 441: JOHN DONNE AND THE METAPHYSICAL POETS**

This lecture/discussion class will explore the rich historical, sexual, and religious tensions of 17th century British poet, courtier, and Anglican priest, John Donne. We will also explore the same tensions, manifested very differently, in the poetry of Donne's contemporary poet-priest, George Herbert. Students will write short weekly papers and a substantial final paper. In addition to Donne and Herbert, we will also read works by Sir Thomas Wyatt, Andrew Marvell, and others. PREREQUISITES: ENG 250 or ENG 260, junior standing, or consent of instructor *Units: 6.*

*Prerequisite: ENG 250 or ENG 260, junior standing, or consent of instructor*

#### **ENG 443: NEW ENGLAND PURITAN POETRY**

A study of New England Puritan poetry in the context of new world spiritual aspirations and anxieties. Readings will include sections of Martin Luther's writings and Perry Miller's and others' criticism, as well as the poems of Anne Bradstreet, Edward Taylor, Michael Wiggelsworth, and other minor and post-Puritan poets. PREREQUISITES: Sophomore standing *Units: 6.*

*Also listed as Religious Studies 343*

*Prerequisite: Sophomore standing*

#### **ENG 445: RESTORATION AND 18TH-CENTURY COMEDY**

In this discussion-driven course, we will consider issues of gender, sexuality, class, and performance in English comedies from 1660-1800. Students will complete regular informal writings, a group research project, a proposal, and a researched term paper. PREREQUISITES: Junior standing, ENG 230, or consent of instructor *Units: 6.*

*Also listed as Theatre Arts 434*

*Prerequisite: Junior standing, ENG 230, or consent of instructor*

#### **ENG 446: GENDER AND THE ENLIGHTENMENT**

This course will examine writings by both men and women that reflect on the changing social roles for women in eighteenth-century Britain. Focusing on women's labor, reproduction, reading, and writing, the course will consider to what extent women could participate in the project of the Enlightenment. PREREQUISITES: Junior standing, ENG 230, or consent of instructor *Units: 6.*

*Also listed as Gender Studies 446*

*Prerequisite: Junior standing, ENG 230, or consent of instructor*

#### **ENG 447: EIGHTEENTH-CENTURY TERRORS**

In this discussion course, we'll consider British poetry and prose of the eighteenth century specifically designed to frighten readers in order to uncover just what anxieties—cultural, racial, political—these texts are meant to awaken. Students will complete numerous short assignments, a group research project, and a researched term

paper. Authors might include: Defoe, Walpole, Gray, Radcliffe, Austen. PREREQUISITES: Junior standing, ENG 230, or consent of instructor *Units: 6.*

*Prerequisite: Junior standing, ENG 230, or consent of instructor*

### **ENG 448: ENLIGHTENMENT SELVES**

An interdisciplinary investigation of key concepts of identity and the emotions as understood during the Enlightenment. Students examine philosophical and literary texts to uncover how seventeenth and eighteenth century people conceived of their mental and emotional existence, and how these historical conceptions still influence contemporary theories of mind and self. PREREQUISITES: One course in either English or philosophy, or junior standing, or consent of instructor *Units: 6.*

*Also listed as Philosophy 448*

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

### **ENG 451: THE REVOLUTIONARY EIGHTEENTH CENTURY**

Eighteenth-century Britain was bookended by revolutions of the political sort—the Glorious Revolution (1688) and the French Revolution (1789)—yet also rife with revolutions of the social sort: abolition, women's rights, libertinism, etc. We'll consider prose, poetry, and fiction from the period, paying particular attention to how they're imagining social and other forms of change. Regular short assignments, group research project, and researched term paper. May not be taken by students who have already earned credit for ENG 450. PREREQUISITES: Junior standing, ENG 230, or consent of instructor *Units: 6.*

*Prerequisite: Junior standing, ENG 230, or consent of instructor*

### **ENG 452: SAMUEL RICHARDSON'S CLARISSA AND THE #METOO EIGHTEENTH CENTURY**

Clarissa (1748) is one of the longest novels in English, and we're going to read every single beautiful word of it. Its sheer density and complexity mean that, as author Amy Gentry puts it, Richardson's messy #metoo tale "breaks and renews itself over thousands of pages." Required: short writings, short research presentation, critical synthesis. PREREQUISITES: Junior standing or ENG 230, or consent of the instructor. *Units: 6.*

*Prerequisite: Junior standing or ENG 230, or consent of the 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. PREREQUISITES: Junior standing, ENG 240, or consent of instructor *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. PREREQUISITES: Junior standing, ENG 240, or consent of instructor *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. PREREQUISITES: Junior standing, ENG 240, or consent of instructor *Units: 6.*

*Prerequisite: Junior standing, ENG 240, or consent of instructor*

### **ENG 467: JANE AUSTEN AND THE HISTORY OF THE NOVEL**

Intensive study of Austen's achievement and legacy. In addition to her six novels, readings will include books by earlier and later writers. These readings will help us to trace Austen's development as a writer and to consider her crucial place in literary history. Regular short assignments, brief oral reports, and a final examination.

PREREQUISITES: Junior standing, ENG 240, or consent of instructor *Units: 6.*

*Prerequisite: Junior standing, ENG 240, or consent of 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. PREREQUISITES: Junior standing, an intermediate course in English, or consent of the instructor. *Units: 6.*

*Prerequisite: Junior standing, an intermediate course in English, or consent of the instructor.*

### **ENG 476: NINETEENTH-CENTURY AMERICAN WOMEN WRITERS**

An exploration of 19th century women writers, including Sigourney, Harper, Stowe, Jacobs, Dickinson, Harding Davis, Chopin, Lazarus, Johnson, Zitkala-sa and/or others. PREREQUISITES: Junior standing, an intermediate course in English, or consent of instructor. *Units: 6.*

*Also listed as Gender Studies 476*

*Prerequisite: Junior standing, an intermediate course in English, or consent of instructor.*

### **ENG 477: DICKINSON**

In this lecture/discussion course, we will grapple with the difficult poetry of Emily Dickinson, one of the greatest, and most mythologized, of American poets. Cutting through the myths of Dickinson, we will attempt to get to the truth of Dickinson by careful readings of her poetry and archival investigations of its historical and material contexts. Assignments will include short weekly papers, presentations, and a substantial final research project.

PREREQUISITES: Junior standing or one course in English at the 200-level or above, or consent of instructor.

*Units: 6.*

*Also listed as Gender Studies 477*

*Prerequisite: Junior standing or one course in English at the 200-level or above, or consent of instructor.*

### **ENG 478: 19TH C AFRICAN-AMER WRITERS**

This lecture/discussion class will explore the rich literature African-American authors created, against great adversity, in nineteenth-century America. We will read works by Frederick Douglass, Frances Ellen Watkins Harper, Charlotte Forten Grimke, Paul Laurence Dunbar and others. Students will write short weekly papers and a substantial final research paper. PREREQUISITES: ENG 250, ENG 260, or junior standing; or consent of instructor *Units: 6.*

*Also listed as Ethnic Studies 478*

*Prerequisite: ENG 250, ENG 260, or junior standing; 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. PREREQUISITES: Junior standing, ENG 240, or consent of instructor *Units: 6.*

*Prerequisite: Junior standing, ENG 240, or consent of instructor*

### **ENG 481: JOYCE'S ULYSSES**

An intensive study of *Ulysses*, covering the entire novel. Discussions will focus on Joyce's experiments with language and narration, his exploration of human psychology and sexuality, and (time permitting) his unique sense of humor. Seminar with short papers. PREREQUISITES: Junior standing or consent of instructor *Units: 6.*

*Prerequisite: Junior standing or consent of instructor*

### **ENG 483: AMERICAN MEMOIR**

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. PREREQUISITES: Junior standing, ENG 250, or consent of instructor *Units: 6.*

*Prerequisite: Junior standing, ENG 250, 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. PREREQUISITES: Junior standing, an intermediate course in English, or consent of instructor *Units: 6.*

*Also listed as Theatre Arts 440*

*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. PREREQUISITES: Junior standing, ENG 250, or consent of instructor *Units: 6.*

*Prerequisite: Junior standing, ENG 250, or consent of instructor*

### **ENG 501: THE GRAPHIC NOVEL**

In recent years, graphic novels have taken a decidedly autobiographical turn as an increasing number of artists explore their own personal histories through a genre typically reserved for the fantastic and imagined. This course will examine a diverse array of contemporary graphic novels, ranging from popular comics to autobiography to experimental forms. Though the course will concentrate primarily on American graphic novels, it will include works produced by writer-artists in Asia, Western Europe, and elsewhere. PREREQUISITES: ENG 250, junior standing, or consent of instructor *Units: 6.*

*Prerequisite: ENG 250, junior standing, or consent of instructor*

### **ENG 502: CONTEMPORARY JEWISH-AMERICAN LITERATURE**

A survey of contemporary American-Jewish authors, as Phillip Roth, Cynthia Ozick, Paul Auster, Art

Spiegelman, Jonathan Safran-Foer, and others, exploring the question of identity, gender, minor-literature, religion, immigration, and heritage. The course will also examine the two key components of these works -- Jewish and American -- and inquire into their validity. *Units: 6.*

### **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. PREREQUISITES: Junior standing, ENG 250, or consent of instructor *Units: 6.*

*Prerequisite: Junior standing, ENG 250, or consent of instructor*

### **ENG 504: MULTIETHNIC AMERICAN LITERATURE**

A study of selected works reflecting the ethnic and cultural diversity of American literature, with primary attention to minority voices and experiences. Selected texts will center on a specific theme such as hybridity, migration, or belonging. Works are taught in their literary, historical, and cultural context, critical readings will also be incorporated. Students will complete several short writing assignments and a researched term paper. PREREQUISITES: ENG 150 or the equivalent *Units: 6.*

*Also listed as Ethnic Studies 504*

*Prerequisite: ENG 150 or the equivalent*

### **ENG 506: CONTEMPORARY AFRICAN-AMERICAN WOMEN POETS**

In this lecture/discussion course, we'll look at the great stylistic variety of poetry that Black women have been writing during the past twenty years. Students will consider poetry through the lenses of critical race and gender criticism and will write weekly short papers and a substantial research paper. Poets may include Marilyn Nelson, Natasha Trethewey, Claudia Rankine, Tracy K. Smith, Nikky Finney and others. PREREQUISITES: ENG 250, ENG 260, or junior standing; or consent of instructor *Units: 6.*

*Also listed as Ethnic Studies 506, Gender Studies 506*

*Prerequisite: ENG 250, ENG 260, or junior standing; or consent of instructor*

### **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. PREREQUISITES: Junior standing, ENG 250 or 260, or consent of instructor *Units: 6.*

*Also listed as Ethnic Studies 561*

*Prerequisite: Junior standing, ENG 250 or 260, or consent of instructor*

### **ENG 511: TONI MORRISON**

In this discussion course, we will engage with literary criticism and analyze various novels and works of non-fiction by Toni Morrison, who was described in late 20th Century U.S. as "the closest thing the country has to a national writer." Discussions will include analysis of Morrison's depictions of Black Americans' experiences and the traumas of racism. Requires a researched term paper and exams. PREREQUISITES: Junior standing, 200-level (or higher) course in ENG or ETST or consent of instructor. *Units: 6.*

*Also listed as Ethnic Studies 511*

*Prerequisite: Junior standing, 200-level (or higher) course in ENG or ETST 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. PREREQUISITES: Junior standing, an intermediate course in English or gender studies, or consent of instructor *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. PREREQUISITES: Junior standing, ENG 280, or consent of instructor *Units: 6.*

*Also listed as Ethnic Studies 516, Global Studies 516*

*Prerequisite: Junior standing, ENG 280, or consent of instructor*

### **ENG 517: TOPICS IN HUMAN RIGHTS**

This course will address an advanced topic in the study of human rights such as human rights and narrative forms, ethical witnessing, or humanitarianism. *Units: 6.*

*Prerequisite: Junior standing or consent of instructor*

### **ENG 518: NARRATIVES OF INEQUALITY**

Why is there so much inequality in the world? We will explore several answers to this question, focusing on economic inequality specifically. We will analyze novels and films about economic inequality and efforts to right them at home and abroad. PREREQUISITES: ENG 280, junior standing, or consent of instructor *Units: 6.*

*Also listed as Ethnic Studies 518, Global 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. PREREQUISITES: ENG 280, junior standing, or consent of instructor *Units: 6.*

*Also listed as Ethnic Studies 521*

*Prerequisite: ENG 280, junior standing, or consent of instructor*

### **ENG 522: LITERATURE AND THE ENVIRONMENT**

An interdisciplinary investigation of the ways that literature shapes environmental values and practices as well as responds to environmental concerns. We will study novels, films, and essays on topics such as organic food and farming, air and water pollution, and environmental justice movements. PREREQUISITES: Junior standing *Units: 6.*

*Also listed as Environmental Studies 522*

*Prerequisite: Junior standing*

### **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. PREREQUISITES: Junior standing or consent of instructor *Units: 6.*

*Prerequisite: Junior standing 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. PREREQUISITES: Junior standing or consent of the instructor. *Units: 6.*

*Also listed as History 385*

*Prerequisite: Junior standing or consent of the instructor.*

### **ENG 550: ADVANCED CREATIVE WRITING: NONFICTION**

A writing workshop for students with previous creative writing experience. PREREQUISITES: ENG 350 or ENG 360 *Units: 6.*

*Prerequisite: ENG 350 or ENG 360*

### **ENG 560: ADVANCED CREATIVE WRITING: FICTION**

A workshop for students with previous fiction writing experience. PREREQUISITES: ENG 360 or consent of instructor *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. PREREQUISITES: ENG 350 or ENG 360, and ENG 550 or ENG 560 *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. PREREQUISITES: ENG 370 or consent of instructor *Units: 6.*

*Prerequisite: ENG 370 or consent of instructor*

### **ENG 568: POETRY AS PRACTICE**

This workshop-based course is for advanced poetry students who would like to delve more deeply into the craft of poetry. The course will include intensive readings in contemporary poetry and poetics, frequent poetry workshops, and a practical introduction to the world of publishing. Students will produce a substantial poetry portfolio and will write several short papers and craft professional documents related to poetry publication. Recommended for students interested in applying to graduate programs in poetry. PREREQUISITES: ENG 370 and ENG 565 *Units: 6.*

*Prerequisite: ENG 370 and ENG 565*

### **ENG 590: 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.

PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **ENG 591: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **ENG 599: INDEPENDENT STUDY IN ENGLISH**

Advanced study, arranged in consultation with the department chair. Students considering an honors project should register for this course. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **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.

PREREQUISITES: Majors only; junior standing for spring term, otherwise, senior standing; at least two English courses numbered 400 or above *Units: 6.*

*Prerequisite: Majors only; junior standing for spring term, otherwise, senior standing; at least two English courses numbered 400 or above*

### **ENG 601: SENIOR SEMINAR IN CREATIVE WRITING**

A seminar involving analysis of theoretical, critical, literary, and practical (i.e., craft-related) readings at an advanced level in conjunction with students' writing of an original, substantial creative work, in either poetry or prose. Students working in different genres will have the opportunity to read one another's work and discuss, as a group, both the challenges and possibilities associated with composing lengthy creative projects. Each section of the seminar will focus on a theme that can accommodate variety in students' individual research projects. PREREQUISITES: Majors only; junior standing for spring term, otherwise, senior standing; at least two English courses numbered 400 or above, and two workshops numbered 500 or above. *Units: 6.*

*Prerequisite: Majors only; junior standing for spring term, otherwise, senior standing; at least two English courses numbered 400 or above, and two workshops numbered 500 or above.*

### **ENG 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.

PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **ENG 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

**ENG 699: INDEPENDENT STUDY IN ENGLISH**

Advanced study, arranged in consultation with the department chair. Students considering an honors project should register for this course. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

# ENVIRONMENTAL SCIENCE

<b>Professors:</b>	M. Bjornerud ( <i>Geosciences, Walter Schober Professor of Environmental Studies</i> ), J. Clark ( <i>Geosciences</i> ), B. De Stasio ( <i>Biology, Dennis and Charlot Nelson Singleton Professor of Biological Sciences</i> ) ( <i>on leave term(s) I</i> ), A. Knudsen ( <i>Geosciences</i> ) ( <i>on leave term(s) III</i> ), J. Sedlock ( <i>Biology</i> )
<b>Associate professors:</b>	J. Brozek ( <i>Government, Stephen Edward Scarff Professor of International Affairs</i> ), A. Hakes ( <i>Biology</i> )
<b>Assistant professors:</b>	I. Del Toro ( <i>Biology</i> ), R. Ribbons ( <i>Geosciences</i> ) ( <i>on leave term(s) I</i> )

The Environmental Science major draws from the curricula of multiple departments to equip students with the tools to investigate complexly interconnected Earth systems. ENSC majors develop a sense for the intrinsic time scales of environmental processes, for the evolution of environmental systems in the past, and for how these systems are likely to change in the future, especially as a result of human activities. ENSC students also learn to communicate technical concepts effectively both to other scientists and to public audiences. The major includes a rigorous core of required courses but also leaves significant latitude for each student to shape an individualized academic plan. ENSC majors will be well prepared for graduate study or work in the corporate, government, or non-profit sectors.

## Required for the major in environmental science

1. Foundational Concepts and Quantitative Tools (30 units)
  - a. ENST 150: *Introduction to Environmental Science*
  - b. ENST 151: *Introduction to Environmental Policy*
  - c. CHEM 116: *Principles of Chemistry*
  - d. GEOS 220: *Remote Sensing and GIS* or BIOL 420: *Geography of Life*
  - e. One of the following statistics courses: STAT 107 or 217, BIOL 170, ANTH 207, CHEM 211
2. Social and Cultural Perspectives on the Environment (6 units)
  - a. Any ENST Cross-listed course in the arts, humanities, or social sciences
3. Scientific Perspectives on the Nature of Nature (18 units)
  - a. One course in each of the following categories:
    - i. Ecology: BIOL 190, 230, 330, 335, or 345
    - ii. Environ Chemistry: CHEM 210, CHEM 212, GEOS 213, GEOS 240, or GEOS 265
    - iii. Natural Systems in Time: GEOS 210 or 214; BIOL 235
4. Science Focus (24 units)

24 units in the natural sciences from the following list, including two courses that are lab-based and three courses at the 200 level or above. Ideally, students will select courses that represent a coherent conceptual theme (see suggested themes below). Students may petition for approval of science courses not on the list. Prerequisites must be observed.

- Biology: BIOL 130, 150, 200, 211, 221, 225, 226, 230, 235, 245, 265, 330, 335, 345, 360, 375, 380, 420, 434, 505
- Geoscience: GEOS 125, 210, 213, 214, 220, 240, 265, 314, 340, 360, 430, 550
- Chemistry: CHEM 210, 212, 225, 250, 320, 410, 420
- Physics: PHYS 112, 141, 151, 220, 225, 230, 320

5. Synthesis: Seminars and Research Experience (12 units)\*
  - a. ENST 300: *Symposium on Environmental Topics* (6 units)
  - b. ENSC 580\*\*: *Junior Seminar* (3 units)
  - c. ENSC 620\*\*: *Senior Capstone* (3 units)

\*\*Students double majoring in a natural science may petition the ENST program to fulfill the capstone in the other natural science major provided the topic has an environmental focus.

## Restrictions

- Courses can be counted for only one category.
- No more than 4 courses may count towards the ENSC major and an additional major.
- ENSC majors cannot double major with ENST or declare an ENST minor.

## Suggested Thematic Groupings of Courses

Below we describe groupings of courses organized around particular themes. These themes are common areas of student interest and common subfields within the environmental sciences. These are not prescriptive, rather they are intended to give students and advisors a list of courses taught at Lawrence that could be used to create a coherent course of study around a particular area of interest. Some of these courses fall outside the natural sciences and may or may not count towards the major. For example, the Sustainable Agriculture cluster includes courses in anthropology and philosophy. One of these could count towards the major under category II, but the other would not count. We list these to give a broad picture of course at Lawrence that may be thematically linked.

### TERRESTRIAL AND AQUATIC ECOSYSTEMS

Courses in this cluster are appropriate for students interested in the biotic/abiotic interactions in terrestrial and aquatic ecosystems. Foci include animal and plant interactions with each other and their corresponding environments.

- BIOL 200: *Animal Behavior*
- BIOL 211: *Botany*
- BIOL 221: *Entomology*
- BIOL 230: *General Ecology*
- BIOL 245: *Conservation Biology*
- BIOL 330: *Aquatic Ecology*
- BIOL 335: *Plant Ecology*
- BIOL 345: *Terrestrial Field Ecology*
- BIOL 420: *The Geography of Life: Biodiversity in a Changing Planet*
- BIOL 434: *Ecological Energetics*
- BIOL 505: *Coral Reef Environments*

### GEOCHEMISTRY

Courses in this cluster include:

- GEOS 213: *Geology and Health*
- GEOS 214: *Climate and Climate Change*
- GEOS 240: *The Material World: Geochemistry of Minerals, Rocks and Waters*
- GEOS 250: *Hot Rocks*
- GEOS 265: *Biogeochemistry*
- GEOS 314: *Soil Science*
- GEOS 340: *Advanced Geochemistry*
- CHEM 210: *Analytical Chemistry*
- CHEM 211: *Statistical Methods in Analytical Chemistry*
- CHEM 212: *Atmospheric & Environmental Chemistry*
- CHEM 370: *Physical Chemistry: Thermodynamics and Kinetics*
- CHEM 410: *Instrumental Analysis*

## WATER RESOURCES

Courses in this cluster explore the physical and chemical properties of water as they pertain to surface and groundwater systems and the anthropogenic effects on these systems. This cluster is appropriate for students interested in water quality/ contamination/pollution, flooding, and water scarcity

- BIOL 330: *Aquatic Ecology*
- GEOL 213: *Geology and Health*
- GEOS 214: *Climate and Climate Change*
- GEOS 240: *The Material World: Geochemistry of Minerals, Rocks and Waters*
- GEOS 360: *Earth Surface Processes*
- GEOS 430: *Watershed Hydrology*
- CHEM 210: *Analytical Chemistry*
- CHEM 410: *Instrumental Analysis*

## SUSTAINABLE AGRICULTURE

Courses in this cluster expose students to the fundamental underpinnings the physical and chemical conditions necessary for robust plant growth and reproduction. In addition, supplemental courses that directly link agriculture to society through ideas around food and culture provide a well-rounded perspective.

- BIOL 103: *Biotechnology and Society*
- BIOL 211: *Botany*
- BIOL 221: *Entomology*
- BIOL 225/226: *Microbiology*
- BIOL 335: *Plant Ecology*
- GEOS 265: *Biogeochemistry*
- GEOS 314: *Soil Science*
- GEOS 360: *Earth Surface Processes*
- GEOS 430: *Watershed Hydrology*

ANTH 344: *Nutritional Anthropology*

- ANTH 378: *Anthropology of Food*
- PHIL 115: *Food Ethics*

## CLIMATE

Courses in this cluster will provide a broad background on the fundamentals of climate science, and specific in-depth knowledge on applications of climate science to understanding climate change and environmental feedback loops. This cluster will serve students who have an interest in understanding the science behind climate change, and global-scale environmental processes.

- GEOS 210/ENST 230: *History of the Earth and Life*
- GEOS 214/ENST 235: *Climate and Climate Change*
- CHEM 116: *Principles of Chemistry: Energetics and Dynamics*,
- CHEM 210/ENST 250: *Analytical Chemistry*
- CHEM 212/ENST 222: *Atmospheric & Environmental Chemistry*
- BIOL 420/ENST 420: *The Geography of Life: Biodiversity on a Changing Planet*

## ENVIRONMENTAL DATA ANALYSIS

Courses in this cluster will provide students with exposure and familiarity to a series of tools and approaches used to analyze environmental data. Students with an interest in advancing their analytical skillsets, and applied research in environmental science would benefit from these courses.

- BIOL 170: *Integrative Biology: Experimental Design and Statistics*
- GEOL 220: *Environmental Remote Sensing and GIS Applications*
- CMSC/STAT 205: *Data-Scientific Programming*
- STAT 255: *Statistics for Data Science*
- ENST 237: *Environmental Remote Sensing And GIS Applications*
- CHEM 210/ENST 250: *Analytical Chemistry*
- CHEM 212/ENST 222: *Atmospheric & Environmental Chemistry*
- BIOL 375: *Biostatistics*

## Senior Experience in environmental science

The Environmental Science capstone experience is a sequence of two 3-unit courses that are taken in a student's junior and senior years. In ENSC 580: *Junior Seminar*, students reflect on their trajectory through the major and plot a course forward for their capstone project. The Junior seminar culminates in a literature review and research proposal. This is followed by ENSC 620 in a student's senior year, in which they complete the proposed research project.

## Courses - Environmental Science

### **ENSC 135: ECOLOGY, EVOLUTION, AND SOCIETY**

This course introduces the mechanisms of biological evolution that have resulted in earth's rich diversity of life. We will explore the ways in which populations change, species interact, communities are structured and ecosystems function through an evolutionary lens. Connections to global crises related to human-driven processes, such as climate change, land use change, and disease spread will make these basic concepts germane to our lives, and underscore the interdependence of human and environmental health. A weekly laboratory will provide opportunities to practice field ecology research and run evolutionary lab experiments. *Units: 6.*

*Also listed as Biology 135*

### **ENSC 191: DIRECTED STUDY IN ENVIRONMENTAL 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: 1 TO 98.*

### **ENSC 580: ENVIRONMENTAL SCIENCE JUNIOR SEMINAR**

Students will build upon their understanding of the field of environmental science. A majority of the term will be devoted to exploring and discussing the scientific literature base, as students prepare for their senior capstone projects. By the end of the term students will have proposed a research topic, written a research proposal (including a literature review), and selected a research mentor for their senior projects. **PREREQUISITES:** Declared major in Environmental Science and junior standing. *Units: 3.*

*Prerequisite: Declared major in Environmental Science and junior standing.*

### **ENSC 599: INDEPENDENT STUDY IN ENVIRONMENTAL SCIENCE**

*Units: 1.*

### **ENSC 620: ENVIRONMENTAL SCIENCE SENIOR CAPSTONE**

Students will refine their understanding and appreciation for the field of environmental science. A majority of the term will be devoted to discussion of literature relevant to student research interests and supporting students as they build on their junior seminar and subsequent work, ultimately producing a final paper and oral presentation. **PREREQUISITES:** Declared major in Environmental Science and senior standing. *Units: 3.*

*Prerequisite: Declared major in Environmental Science and senior standing.*

# ENVIRONMENTAL STUDIES

<b>Professors:</b>	M. Bjornerud ( <i>Geosciences, Walter Schober Professor of Environmental Studies</i> ), J. Clark ( <i>Geosciences</i> ), B. De Stasio ( <i>Biology, Dennis and Charlot Nelson Singleton Professor of Biological Sciences</i> ) ( <i>on leave term(s) I</i> ), A. Knudsen ( <i>Geosciences</i> ) ( <i>on leave term(s) III</i> ), M. Rico ( <i>History</i> ), J. Sedlock ( <i>Biology</i> ), C. Skran ( <i>Government, Edwin &amp; Ruth West Professorship of Economics and Social Science</i> ) ( <i>on leave term(s) I</i> ), T. Troy ( <i>Theatre Arts, J. Thomas and Julie E. Hurvis Professor of Theatre and Drama</i> ) ( <i>on leave term(s) I, II, III</i> )
<b>Associate professors:</b>	C. Armstrong ( <i>Philosophy</i> ) ( <i>on leave term(s) III</i> ), J. Brozek ( <i>Government, Stephen Edward Scarff Professor of International Affairs, chair</i> ), D. Donohoue ( <i>Chemistry</i> ), D. Gerard ( <i>Economics, The John R. Kimberly Distinguished Professor of the American Economic System</i> ) ( <i>on leave term(s) I</i> ), A. Hakes ( <i>Biology</i> ), W. Hixon ( <i>Government, Gordon R. Clapp Chair of American Studies</i> ), D. Joyner ( <i>Art History</i> ), S. Purkey ( <i>Education, Bee Connell Mielke Professor of Education</i> )
<b>Assistant professors:</b>	S. Colon, I. Del Toro ( <i>Biology</i> ), C. Kervin ( <i>English</i> ), R. Ribbons ( <i>Geosciences</i> ) ( <i>on leave term(s) I</i> )

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 management, and fundamental research. Students in the major share a common sequence of core courses, beginning with introductions to environmental science and policy through an intermediate level practicum and culminating with the senior capstone. Throughout the curriculum, majors are exposed to different perspectives on and tools for understanding the environment including those from the natural sciences, social sciences, and the humanities. In addition, all students are required to take advanced courses in one department to provide disciplinary depth. Students have considerable choice in their courses and work with their advisor to select courses that fit individual interests and career goals. The field experience requirement ensures that students get out of the classroom to put their academic work into practice.

The minor in environmental studies is designed to complement a major in any field.

## Required for the major in environmental studies

Students who major in environmental studies will learn how to understand the multiple ways humans attribute meaning to the environment, apply methods and/or concepts from multiple disciplines to analyze environmental problems, evaluate the quality of data and arguments, and communicate environmental science to a variety of audiences.

The major in environmental studies requires the following:

1. Core courses:
  - a. ENST 150: *Introduction to Environmental Science with Lab*
  - b. ENST 151: *Introduction to Environmental Policy*
  - c. ENST 300: *Symposium on Environmental Topics*
  - d. ENST 650: *Environmental Studies Senior Seminar*
  - e. One of the following:
    - STAT 107: *Principles of Statistics*
    - STAT 255: *Statistics for Data Science*
    - BIOL 170: *Integrative Biology: Experimental Design and Statistics*
    - ANTH 207: *Quantitative Analysis in Anthropology*
    - GOVT 271: *Research Methods in Political Science*
2. Perspectives from science:

Three additional 6-unit natural science courses from at least two different departments, one of which must be lab-based and one of which must be 200 or above.
3. Perspectives from policy:
  - a. ECON 280: *Environmental Economics*
  - b. GOVT 270: *Global Environmental Politics* or GOVT 380: *Introduction to Public Policy*
4. Perspectives from history, society, and culture:

One course selected from the following courses (ENST 200: *Topics in Environmental Studies* may be used to satisfy this requirement with approval of the student's advisor).

  - ENST 127: *Environmental Justice and Citizenship*
  - RLST 205: *Religion and the Biosphere*
  - ANTH 310: *Ecological Anthropology*
  - HIST 355: *History of the American Environment*
  - PHIL 360: *Environmental Ethics*
  - THAR 387: *Let Us Arise: Ireland's Deep Time*
  - EDST 400: *The Environment, Community, and Education*
  - ENGL 522: *Literature and the Environment*
5. Disciplinary focus:

Three additional six-unit courses numbered 200 or above in a single department--government, economics, anthropology, biology, chemistry, geosciences, physics, or philosophy, selected in consultation with the advisor. Units earned in independent study may not be used to satisfy this requirement.
6. 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 approved by the advisor.

## 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, ENST 151, and ENST 300 as prerequisites. Students may elect, with the approval of their ENST advisor, to identify a different project, such as an independent research project, as their *Senior Experience*. Completion of ENST 650, however, is required for all environmental studies majors.

## Required for the minor in environmental studies

1. Required core courses:
  - a. ENST 150: *Introduction to Environmental Science with Lab*
  - b. ENST 151: *Introduction to Environmental Policy*
  - c. ENST 300: *Symposium on Environmental Topics*
2. One 6-unit natural science course cross-listed with ENST and one course each from the following two categories:
  - a. Perspectives from policy: ECON 280, GOVT 270, or GOVT 380
  - b. Perspectives from history, society, and culture: ANTH 310, EDST 400, HIST 355, or PHIL 360Environmental studies courses taken through Lawrence-approved off-campus programs may also fulfill this requirement with approval of the environmental studies program.

No more than one course may be applied simultaneously toward completion of this minor and a student's major.

## Teacher certification in environmental science or broad-field science

Students can seek certification to teach environmental science at the secondary level. Students must take EDST/ENST 400 and should fulfill the science-track requirements of the environmental studies major or, preferably, major in one of the natural sciences and minor in environmental studies. Students also have the option of seeking broad-field science certification by completing the major and a minimum of two courses in each of two other science disciplines and at least one course in each of the remaining sciences. Students who plan to seek teacher certification should review the requirements in the Education section of the catalog and meet with the director of teacher education, preferably before the end of the sophomore year.

## Courses - Environmental Studies

### 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 127: *ENVIRONMENTAL JUSTICE AND CITIZENSHIP*

Environmental degradation impacts some individuals and communities more than others: the poor, people of color, and certain nonhuman species and landscapes bear the brunt of our collective actions. This seminar pairs literary texts (novels, short stories and poems) with nonfiction essays on topics ranging from food production to indigenous rights. We will discuss and write about how these texts impact our understanding of fairness, justice, rights and responsibility. *Units: 6.*

### **ENST 150: ENVIRONMENTAL SCIENCE**

Presents principles of biology, chemistry, geology, and physics 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. This course may not be taken on a Satisfactory/Unsatisfactory basis. PREREQUISITES: Freshman or sophomore standing; consent of instructor required for juniors and seniors *Units: 6.*

*Also listed as Geosciences 150*

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

### **ENST 151: INTRODUCTION TO ENVIRONMENTAL POLICY**

This course applies principles of economics and political science to environmental issues, including pollution, resource limitation, and environmental degradation. It is designed to foster an understanding of the environmental policy-making and regulatory process in the United States and globally. *Units: 6.*

*Also listed as Economics 151, Government 151*

### **ENST 191: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **ENST 195: 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. 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **ENST 200: TOPICS IN ENVIRONMENTAL STUDIES**

Study of a particular topic of current interest in environmental studies. Topics will vary with each offering of the course, and may include field research, community engagement, or other experiential learning opportunities. Course may be repeated when topic is different.

*Topic for Fall 2022: Confronting Eco-Anxiety*

Prerequisites: None

tbd *Units: 1 TO 6.*

### **ENST 202: GEOENVIRONMENTAL HEALTH AND JUSTICE**

A course investigating the links between geology and health, with a particular focus on environmental issues in urban areas and ties to the field of environmental justice. The course considers issues such as human lead exposure from soil and water, and the links between air pollution and asthma. This course includes a lab component in which students will be collecting and analyzing soil, air, and water samples. PREREQUISITES: GEOL 110, ENST 150, or CHEM 116 *Units: 6.*

*Also listed as Geosciences 213*

*Prerequisite: GEOL 110, ENST 150, or CHEM 116*

### **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. PREREQUISITES: BIOL 150 *Units: 6.*

*Also listed as Biology 200*

*Prerequisite: BIOL 150*

### **ENST 213: EVOLUTIONARY BIOLOGY**

A study of biological evolution, including natural selection, adaptation, the evolution of sex, speciation, extinction, and constraints on evolutionary change. Reading primary literature is emphasized. Two lectures and one discussion per week. PREREQUISITES: BIOL 130 or ANTH 140 *Units: 6.*

*Also listed as Biology 235*

*Prerequisite: BIOL 130 or ANTH 140*

### **ENST 220: GENERAL ECOLOGY**

An introduction to the interactions between organisms and the environment. Explores the role of physical, chemical and biotic processes--including human activities--in determining the structure and function of populations, communities, and ecosystems. Topics 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. PREREQUISITES: CHEM 116 *Units: 6.*

*Also listed as Chemistry 212*

*Prerequisite: CHEM 116*

### **ENST 229: GENERAL ECOLOGY (LECTURE ONLY)**

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

*Also listed as Biology 229*

### **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. PREREQUISITES: GEOL 110 *Units: 6.*

*Also listed as Geosciences 210*

*Prerequisite: GEOL 110*

### **ENST 235: CLIMATE AND CLIMATE CHANGE**

In this class we will cover the fundamental scientific knowledge about climate, and the long-term patterns and variation in climates over Earth's history. Students will be able to evaluate and explain major climate drivers in the past, and how past and future human activities are altering climates at both local and global scales. PREREQUISITES: GEOL 110 or GEOS 110 or GEOL 150 or GEOS 150 or CHEM 212 *Units: 6.*

*Also listed as Geosciences 214*

*Prerequisite: GEOL 110 or GEOS 110 or GEOL 150 or GEOS 150 or CHEM 212*

### **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. Lecture and laboratory. PREREQUISITES: GEOL 110; high school physics recommended *Units: 6.*

*Also listed as Geosciences 220*

*Prerequisite: GEOL 110; high school physics recommended*

### **ENST 240: THE MATERIAL WORLD: GEOCHEMISTRY OF MINERALS, ROCKS AND WATERS**

Low-temperature geochemical processes drive the formation, weathering, and alteration of rocks and minerals and govern the composition of waters at the Earth's surface. In studying these principles, we will investigate questions about the Earth's environment from both modern systems and deep geological time. Course includes a three-day field trip to northern Wisconsin in the middle of the term. One lab per week. PREREQUISITES: GEOL 110 or GEOS 110 and CHEM 115; concurrent enrollment in GEOS 245. *Units: 6.*

*Also listed as Geosciences 240*

*Prerequisite: GEOL 110 or GEOS 110 and CHEM 115; concurrent enrollment in GEOS 245.*

### **ENST 241: ECOCINEMA: AESTHETICS AND ENVIRONMENTAL JUSTICE**

This course examines the growing genre of ecocinema through film screenings, literary, political, and theoretical works that delve into the intersections among aesthetics, political accountability, and environmental

issues. We will consider the role of creative work in addressing environmental conditions and connecting struggles for social and environmental justice. Students will learn about video production and will have the opportunity to create their own short films. *Units: 6.*

*Also listed as Film Studies 241*

### **ENST 245: CONSERVATION BIOLOGY**

This course explores scientific concepts related to the conservation and restoration of 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. PREREQUISITES: BIOL 150 and sophomore standing *Units: 6.*

*Also listed as Biology 245*

*Prerequisite: BIOL 150 and sophomore standing*

### **ENST 250: ANALYTICAL CHEMISTRY**

A course in the quantitative description of chemical equilibria in solution (acid-base, complexation, redox, solubility) using classical, separation, electrochemical, and spectrochemical methods of analysis. This course covers methods of quantification, statistics, and data analysis as applied to modern chemistry. Students will have the opportunity to individually design projects. Three lectures and two laboratory periods per week. PREREQUISITES: CHEM 116, placement exam, or consent of instructor *Units: 6.*

*Also listed as Chemistry 210*

*Prerequisite: CHEM 116, placement exam, or consent of instructor*

### **ENST 252: SUSTAINABLE CITIES**

How can cities be sustainable? The increasing urbanization of the world's population, shift to service-driven economies, and growing diversity of cities make this question pressing and complicated. This course introduces economic, environmental, and social dimensions of the urban sustainability problem and explores responses to it through a two-week December study trip to London and Amsterdam and winter term studies and poster presentations. Program fee is required. Students pay their own airfare. PREREQUISITES: An introductory course in GOVT, ECON, ENST or GLST, or consent of instructor *Units: 3.*

*Also listed as Government 252, Economics 252*

*Prerequisite: An introductory course in GOVT, ECON, ENST or GLST, 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 will take part in field research. PREREQUISITES: ANTH 120 *Units: 6.*

*Also listed as Anthropology 220*

*Prerequisite: ANTH 120*

### **ENST 265: BIOGEOCHEMISTRY**

This course explores fundamental cycles between earth's major reservoirs of nutrients such as nitrogen, phosphorus, carbon and water. Through lecture and group presentations, students will gain a solid

understanding of the fundamentals of biogeochemical cycles and the mechanism underlying the biological transformations of those elements. Lecture and laboratory. PREREQUISITES: BIOL 130 or GEOL 110 *Units: 6.*

*Also listed as Geosciences 265, Biology 265*

*Prerequisite: BIOL 130 or GEOL 110*

### **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. PREREQUISITES: Sophomore standing or ENST 150 or GOVT 110 *Units: 6.*

*Also listed as Government 270, Global Studies 271*

*Prerequisite: Sophomore standing or ENST 150 or GOVT 110*

### **ENST 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. PREREQUISITES: ECON 100 or ENST 151 *Units: 6.*

*Also listed as Economics 280*

*Prerequisite: ECON 100 or ENST 151*

### **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 305: MEDIEVAL ECOLOGIES: ART, NATURE, AND THE ENVIRONMENT**

This class investigates intersections among people, arts, and the environment in European regions during the Middle Ages (c. 400-1400). Readings draw broadly from primary sources in translation, ecocritical studies, and environmental histories and dovetail with close examinations of images, objects, monuments, and sites across varied medieval landscapes. We question what constitutes medieval ecologies and consider their profound relevance for today's world. *Units: 6.*

*Also listed as Art History 305*

### **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. PREREQUISITES: BIOL 150 or BIOL 170 (or concurrent enrollment) or BIOL 230 *Units: 6.*

*Also listed as Biology 330*

*Prerequisite: BIOL 150 or BIOL 170 (or concurrent enrollment) or BIOL 230*

### **ENST 311: FIELD EXPERIENCE IN DEVELOPMENT**

Students engaged in this course will have the opportunity to do field research in a developing country. Each student will develop and implement a project that concerns a political, economic, social, or environmental issues that is important in the country visited. Past Field Experiences have taken place in Sierra Leone, Ghana, Jamaica, and Morocco. Students will also have the opportunity to learn from both national and local leaders in the country of research, and to participate in community engaged learning through volunteer activities. Class members will actually travel during either winter or spring break. Students should register for ENST 311 in the term prior to the planned travel. They should also register in the subsequent term, when they will present their research to the wider Lawrence community.

*Planned Location for 2021-22: To be determined* PREREQUISITES: GOVT 248, GOVT 500 or consent of instructor *Units: 3.*

*Also listed as Economics 206, Global Studies 401*

*Prerequisite: GOVT 248, GOVT 500 or consent of instructor*

### **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 activities.

*Topic for Spring 2020: Community Read: Braiding Sweetgrass: Indigenous Wisdom, Scientific Knowledge, and the Teachings of Plants*

Robin Wall Kimmerer is a Plant Ecologist and a member of the Citizen Potawatomi Nation. In this collection of writings about the natural world, she weaves together stories from both Indigenous and scientific teachings to foster a wider ecological consciousness in the reader and challenge us to re-imagine and heal our broken relationship with nature. Join us in small group discussion of the book over the course of the term.

*Units: 1 TO 98.*

### **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. PREREQUISITES: GEOL 240 and CHEM 115, or consent of instructor; CHEM 116 recommended *Units: 6.*

*Also listed as Geology 340, Geosciences 340*

*Prerequisite: GEOL 240 and CHEM 115, or consent of instructor; CHEM 116 recommended*

### **ENST 335: EARTH SURFACE PROCESSES**

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. PREREQUISITES: GEOL/GEOS 110 and 240 or consent of instructor; PHYS 141 or 151 recommended *Units: 6*.

*Also listed as Geosciences 360*

*Prerequisite: GEOL/GEOS 110 and 240 or consent of instructor; PHYS 141 or 151 recommended*

### **ENST 340: PLANT ECOLOGY**

This course emphasizes core concepts in ecology and evolution from the unique perspective of plants. Students will explore the interactions between plants and their environment over a range of scales; from individuals to populations and communities. Lecture and laboratory. PREREQUISITES: BIOL 170 *Units: 6*.

*Also listed as Biology 335*

*Prerequisite: BIOL 170*

### **ENST 345: WILDLIFE 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. PREREQUISITES: BIOL 150 or BIOL 170, and sophomore standing *Units: 6*.

*Also listed as Biology 345*

*Prerequisite: BIOL 150 or BIOL 170, and sophomore standing*

### **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. PREREQUISITES: Sophomore standing *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. PREREQUISITES: One course in economics or environmental studies or government or philosophy; or junior standing *Units: 6*.

*Also listed as Philosophy 360*

*Prerequisite: One course in economics or environmental studies or government or philosophy; or junior standing*

### **ENST 370: RELIGION AND THE BIOSPHERE**

A look at how humans have made sense of existing in the biosphere. We will examine views on the nature of life in religious traditions like ancient Egypt and Jainism as well as early philosophical accounts. The second half will involve a close reading of Charles Darwin and reflection on resources offered by religious traditions to

respond to the "sixth extinction." Lecture/discussion with written assignments and journaling on the coming of spring. PREREQUISITES: Sophomore standing *Units: 6.*

*Also listed as Religious Studies 205*

*Prerequisite: Sophomore standing*

### **ENST 378: EAST ASIAN ENVIRONMENTAL HISTORY**

This course will explore traditional East Asian ideas about the relationship between humans and their natural environments, as well the premodern and modern history of that interaction. We will also consider the relationship between these philosophies and practice, both for the societies we study and for our own.

PREREQUISITES: Some background in East Asian Studies or Environmental Studies is recommended. *Units: 6.*

*Also listed as East Asian Studies 378*

*Prerequisite: Some background in East Asian Studies or Environmental Studies is recommended.*

### **ENST 380: ECOLOGICAL MODELING**

An integrated lecture and computer laboratory 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, biogeochemical cycling, and mass balance in ecosystems. PREREQUISITES: At least one of the following: BIOL 229, BIOL 230, BIOL 245, BIOL 330, BIOL 335 or BIOL 345 *Units: 6.*

*Also listed as Biology 380*

*Prerequisite: At least one of the following: BIOL 229, BIOL 230, BIOL 245, BIOL 330, BIOL 335 or BIOL 345*

### **ENST 387: LET US ARISE: IRELAND'S DEEP TIME**

Taking a dramaturgical and geographical approach to explore a deep sense of place, we will use the lens of culture (drama, poetry, fiction, music, film, history and visual arts) to investigate the variegated quality of Ireland's land and its people. PREREQUISITES: Sophomore standing and ENST 150, ENST 151, or THAR 327 *Units: 6.*

*Also listed as Theatre Arts 387*

*Prerequisite: Sophomore standing and ENST 150, ENST 151, or THAR 327*

### **ENST 390: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **ENST 391: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **ENST 395: 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. 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.

PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **ENST 399: 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.

PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **ENST 404: INDIGENOUS ECOLOGY: ANCESTRAL KNOWLEDGES AND SCIENCE IN ACTION**

This service-learning course involves hands-on research and advocacy with Menominee community members concerning issues of sustainability, environmental justice, and community-based scholarship. You will work in groups on areas of concern to the Menominee community, and will produce knowledge that will assist in their efforts. Through course readings, presentations, field trips, and projects, you will gain a firm grounding in Indigenous knowledgeways, environmental ethics, and methodologies. PREREQUISITES: Sophomore standing *Units: 6.*

*Also listed as Ethnic Studies 505*

*Prerequisite: Sophomore standing*

### **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. PREREQUISITES: BIOL 330, concurrent enrollment in BIOL 505 and 226 and consent of instructor *Units: 6.*

*Also listed as Biology 434*

*Prerequisite: BIOL 330, concurrent enrollment in BIOL 505 and 226 and consent of instructor*

### **ENST 411: ECOLOGICAL ENERGETICS (LECTURE ONLY)**

Study of the transfer and transformation of energy or energy-containing materials between and within organisms and populations. Discussions will cover food web structure and function across marine, freshwater and terrestrial environments. Part of the Marine Biology Term. Lecture only. PREREQUISITES: BIOL 330, concurrent enrollment in BIOL 505 and 226 and consent of instructor *Units: 6.*

*Also listed as Biology 433*

*Prerequisite: BIOL 330, concurrent enrollment in BIOL 505 and 226 and consent of instructor*

### **ENST 420: THE GEOGRAPHY OF LIFE: BIODIVERSITY IN A CHANGING PLANET**

Earth is a dynamic and changing planet, comprised of tightly linked ecosystems and organisms. In this course we explore relationships between the biotic and abiotic drivers that influence the distribution of global diversity. We use large-scale datasets to develop practical skills for monitoring the responses of biodiversity to environmental change. PREREQUISITES: BIOL 150 and BIOL 170; preferred but not required: BIOL 230 and BIOL 235 *Units: 6.*

*Also listed as Biology 420*

*Prerequisite: BIOL 150 and BIOL 170; preferred but not required: BIOL 230 and BIOL 235*

### **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. PREREQUISITES: GEOL 110; PHYS 141 or 151 recommended *Units: 6.*

*Also listed as Geology 430, Geosciences 430*

*Prerequisite: GEOL 110; PHYS 141 or 151 recommended*

### **ENST 460: THE ENVIRONMENT, COMMUNITY, AND EDUCATION**

The course will examine the relationship between community-mindedness and the development of ecological literacy. Cultural assumptions about the natural world and our place in it that are implicit within the K-12 and college curriculum, and the manner in which modern forms of education shape our understanding of what it means to “live well in a place we know well” will be explored. Examples of how schools can contribute to environmental and social sustainability (and justice) via community- and place-based education will be presented. PREREQUISITES: Sophomore standing or consent of instructor *Units: 6.*

*Also listed as Education Studies 400*

*Prerequisite: Sophomore standing or consent of instructor*

### **ENST 470: ENVIRONMENTAL POLITICS**

An examination of selected aspects of environmental policy in the United States. Topics include the historical development of US environmental policy, environmental justice, urban environmental issues, connections between food systems and the environment, and the application of economic reasoning to environmental policy making. PREREQUISITES: ENST 151 and junior standing, or consent of instructor *Units: 6.*

*Also listed as Government 465*

*Prerequisite: ENST 151 and junior standing, or consent of instructor*

### **ENST 478: TOPICS IN ENVIRONMENTAL HISTORY**

An in-depth examination of a particular topic in environmental history, suitable for majors in history and environmental studies. Students from other majors should consult the instructor before registering. May be repeated for credit when topic is different.

*Units: 6.*

*Also listed as History 478*

*Prerequisite: HIST 355*

### **ENST 494: MUSIC AND THE ENVIRONMENT**

In many societies around the world, people use music and specialized listening skills to connect with nature, specific places, and surrounding environments. This course will explore music performance practices that express or enact these connections. Course materials will draw on ethnographic case studies and the growing fields of ecomusicology, acoustic ecology, and zoomusicology. PREREQUISITES: MUCO 212 or MUCO 202 or ENST 127 or consent of instructor *Units: 6.*

*Also listed as Global Studies 494, Musicology 494*

*Prerequisite: MUCO 212 or MUCO 202 or ENST 127 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. PREREQUISITES: BIOL 330 and concurrent enrollment in BIOL 226 and BIOL 434 *Units: 6.*

*Also listed as Biology 505*

*Prerequisite: BIOL 330 and concurrent enrollment in BIOL 226 and BIOL 434*

### **ENST 522: LITERATURE AND THE ENVIRONMENT**

An interdisciplinary investigation of the ways that literature shapes environmental values and practices as well as responds to environmental concerns. We will study novels, films, and essays on topics such as organic food and farming, air and water pollution, and environmental justice movements. PREREQUISITES: Junior standing *Units: 6.*

*Also listed as English 522*

*Prerequisite: Junior standing*

### **ENST 590: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **ENST 591: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **ENST 595: 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. 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. **PREREQUISITES:** Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **ENST 599: 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. **PREREQUISITES:** Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **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. **PREREQUISITES:** ENST 150, ENST 300, and senior standing; or consent of the instructor *Units: 1 TO 98.*

*Prerequisite: ENST 150, ENST 300, and senior standing; or consent of the instructor*

### **ENST 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. **PREREQUISITES:** Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **ENST 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. **PREREQUISITES:** Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **ENST 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. 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. **PREREQUISITES:** Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

**ENST 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.

PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

# ETHNIC STUDIES

<b>Associate professors:</b>	A. Balsekar ( <i>Government, chair</i> ), E. Carlson ( <i>Art History</i> ) ( <i>on leave term(s) III</i> ), C. Daughtry ( <i>Anthropology</i> ), S. Downing ( <i>Conservatory of Music</i> ), J. Encarnacion ( <i>Conservatory of Music</i> ), K. Hoffmann ( <i>English</i> ), L. Khor ( <i>English</i> ) ( <i>on leave term(s) III</i> ), B. Miller ( <i>Conservatory of Music</i> ), S. Purkey ( <i>Education, Bee Connell Mielke Professor of Education</i> ), M. Range ( <i>English</i> )
<b>Assistant professors:</b>	S. Colon ( <i>Environmental Studies</i> ), J. Smith, B. Zinsli ( <i>Art History</i> )
<b>Instructor:</b>	G. Hitch

Ethnic Studies at Lawrence is the critical and interdisciplinary examination of race and ethnicity. Through a focus on the experiences and expressions of people of color in and beyond the U.S., students explore current and historical issues pertaining to race and ethnicity in both domestic and global contexts. Students learn how ethnic groups identify themselves on the basis of national origin, family heritage, shared historical experience, customs and traditions, and/or language. They critically examine how constructions of race and racism are still embedded in institutions and everyday life. Students gain skills enhancing their own ability to negotiate multi-ethnic and interracial relationships and to thrive in diverse communities and workplaces.

The Ethnic Studies major offers foundational courses that introduce students to central concepts and current approaches to Ethnic Studies theory and methods. In consultation with an Ethnic Studies faculty advisor, students will select a set of electives that reflect their individual interest in certain topics or current debates, specific ethno-racial communities, geographic areas, or historical time periods. In a community-based learning experience, students will bridge academic learning and “real-world” practice through service learning, internships, volunteer work, or student-teaching. Finally, for their *Senior Experience*, students may choose from three options designed to bring reflection and focus to their Ethnic Studies experience.

## Required for the major in ethnic studies

Students who major in ethnic studies will learn to critically review debates over definitions of race and ethnicity. They will learn to articulate a variety of disciplinary perspectives and will demonstrate familiarity with a range of theoretical approaches in discussions of race and ethnicity. And they will relate the impact of race and ethnicity on the lives of people in contemporary society.

The major in ethnic studies requires the following:

1. The following introductory courses:
  - a. ETST 110: *Introduction to Ethnic Studies*
  - b. ETST 210: *Expressions of Ethnicity*
2. The following theory and methods courses:
  - a. ETST 302: *Research Methods in Ethnic Studies*
  - b. ETST 402: *Theories of Race and Ethnicity* [NOTE: ETST 301, taken during an academic year before 2022-23, meets this requirement]
3. Five six-unit elective courses, representing coursework from at least two different departments and including at least two upper-division courses numbered in the 400s-500s other than ETST 402.

4. Required social justice or community-based learning experience in an off-campus site (local, domestic, or global) accompanied by a reflection
  - a. A non-credit bearing requirement that students may fulfill through work-study, volunteering, or service-learning in a community or organization. Students may fulfill this requirement for elective credit if completed as part of an internship or community-based learning. The Ethnic Studies Advisory Committee approves social justice or community-based learning proposals and evaluates written reflections upon completion. The deadline for completion is third week of winter term in a student's senior year (though students are encouraged to complete this requirement sooner).

## Senior Experience in ethnic studies

In consultation with an Ethnic Studies faculty advisor, students may choose one of three senior capstone options:

1. ETST 600: *Senior Seminar*
2. Off-campus program experience incorporating a major research project
3. Student teaching practicum teaching English to speakers of other languages OR Teaching in ethnically diverse K-12 classrooms or programs

## Required for the minor in ethnic studies

1. ETST 110: *Introduction to Ethnic Studies*
2. One of the following courses:
  - a. ETST 210: *Expressions of Ethnicity*
  - b. ETST 302: *Research Methods with Communities of Color*
  - c. ETST 402: *Theories of Race and Ethnicity* [NOTE: ETST 301, taken during an academic year before 2022-23, meets this requirement.]
3. Three six-unit electives drawn from at least two departments and reflecting individual interest in certain topics or current debates, specific ethno-racial communities, geographic areas, or historical time periods.
4. One six-unit upper-division seminar (courses numbered in the 400s-500s)

## Courses - Ethnic Studies

### ETST 110: INTRODUCTION TO ETHNIC STUDIES

Introducing interdisciplinary approaches to the study of race and ethnicity in mostly U.S. history and contemporary social issues. Topics including the emergence of ethnic studies as an interdisciplinary field; racial and ethnic formations in relation to colonization, slavery and migration; immigration; and resistance and social movements. Students learn through lecture/discussion with papers, presentations and exams. *Units: 6.*

### 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: EAST ASIA IN THE PREMODERN WORLD**

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 Global Studies 160, History 160, East Asian Studies 140*

### **ETST 145: INTRODUCTION TO DISABILITY STUDIES**

This seminar introduces the interdisciplinary field of Disability Studies, which focuses on the ways medical, legal, and social discourses and practices construct non-normative bodies and minds as disabled. We will explore topics such as power and social control, lived experiences, biomedical approaches to disability, incarceration and decarceration, performance art, and crip solidarity; and engage disability justice movements that address race, class, gender, sexuality, and embodiment. *Units: 6.*

### **ETST 159: WĒSKŌHSAEH: HISTORY OF THE INDIGENOUS NATIONS OF WISCONSIN**

This course traces the history of Wisconsin's Indigenous Nations from before colonization to the present. You will learn in this discussion-based course how Native Americans have shaped their history and Wisconsin history more broadly. Moreover, you will come to understand how settler and Indigenous histories themselves are constructed narratives. You will also gain important skills, including analytical writing, persuasive speaking, and historical research methods. *Units: 6.*

*Also listed as History 211*

### **ETST 160: INTRODUCTION TO ASIAN AMERICAN STUDIES**

This course provides an introduction to the interdisciplinary field of Asian American Studies with particular attention to the experiences and histories that help define what it means to be "Asian American" and to study Asians in the U.S. We will consider who is included in the category "Asian American," who or what determines that identity, and how conceptions of Asian America have changed over time. Drawing on a range of cultural texts, history, policy, race, gender and sexuality studies, we will address topics related to identity formation, community life, migration, immigration, citizenship, labor, empire, globalization, and popular culture. *Units: 6.*

### **ETST 191: 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. **PREREQUISITES:** Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **ETST 195: INTERNSHIP IN ETHNIC STUDIES**

Practical experience working with diverse population, focused on volunteer, policy, or advocacy work. For example, students might volunteer to tutor youth in ethnically diverse educational programs, 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. 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. **PREREQUISITES:** Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

### **ETST 208: AFRICAN AMERICAN HISTORY TO EMANCIPATION**

This course surveys African American History from 1607 to 1865. Students will analyze the African origins of this country, the Middle Passage, the different manifestations of enslavement, and the historical changes that shaped African-American life and culture thereafter—from the Revolution to Civil War. Topics will include the gendered experiences of enslavement; slave resistance; the black abolitionist movement in the United States; Civil War; Reconstruction. **PREREQUISITES:** Sophomore standing. *Units: 6.*

*Also listed as History 208*

*Prerequisite: Sophomore standing.*

### **ETST 209: AFRICAN AMERICAN HISTORY SINCE EMANCIPATION**

This course will explore African American History from 1865 to the present. We will examine the major themes, problems, events, structures, and personalities of African American History, paying particular attention to how African Americans themselves shaped their experiences. We will devote some portion of each week to the close examination of a variety of primary sources, including: autobiographies, fiction, film, speeches, music, and art. **PREREQUISITES:** Sophomore standing *Units: 6.*

*Also listed as History 209*

*Prerequisite: Sophomore standing*

### **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 220: ATLANTIC SLAVE TRADE**

An examination of the Atlantic trade in enslaved Africans from its beginning in the 15th century to its eventual abolition in the 19th century. Topics include ideas of slavery in Europe and Africa; the development of the Atlantic trade; the economic, social, political, and religious effects of the slave trade in Africa and the Americas; the rise of racism; abolition and its aftermath. **PREREQUISITES:** Sophomore standing or consent of instructor *Units: 6.*

*Also listed as History 215*

*Prerequisite: Sophomore standing or consent of instructor*

### **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. **PREREQUISITES:** Sophomore standing or consent of instructor *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. PREREQUISITES: Sophomore standing *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. PREREQUISITES: Sophomore standing or consent of instructor *Units: 6.*

*Also listed as History 295, Global Studies 295*

*Prerequisite: Sophomore standing or consent of instructor*

### **ETST 224: INTRODUCTION TO JUDAISM: CANON, THOUGHT, PRACTICE**

The oldest monotheistic religion, studied through its classic texts (including the Bible, Talmud, Maimonides, the Zohar and much more). Readings of the modern era will highlight the shift from a religion to a national/ethnic identity. In addition, key terms of the Jewish cycle of life will be introduced. *Units: 6.*

*Also listed as Religious Studies 225*

### **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. PREREQUISITES: Sophomore standing or consent of instructor *Units: 6.*

*Also listed as Government 226*

*Prerequisite: Sophomore standing or consent of instructor*

### **ETST 272: SOCIAL PSYCHOLOGY OF PREJUDICE**

This course explores social psychology through the lens of research and theory on prejudice and discrimination. What are prejudice's causes, consequences, and cures? We will examine theories related to personality, emotion, cognition, and perception that help to explain generalized and specific prejudices (e.g., sexism/heterosexism, racism, ethnocentrism, anti-Semitism). Students will be assessed through exams and papers. Intended as an alternative to PSYC 270. PREREQUISITES: PSYC 100 or sophomore standing *Units: 6.*

*Also listed as Psychology 272*

*Prerequisite: PSYC 100 or sophomore standing*

### **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 Global Studies 280, English 280*

### **ETST 281: ECOLOGICAL (DE)COLONIZATION**

This discussion based course investigates how historical and contemporary environmental injustices are entangled with settler colonialism and extractive capitalism. Through papers, discussions, and presentations, you will come to understand how Indigenous sovereignty and decolonization are fundamentally concerned with land, water, and ecosystems. You will receive an introduction to Indigenous environmental justice, develop a theoretical toolkit to approach topics concerning settler colonialism, and explore political and environmental solutions. *Units: 6.*

### **ETST 284: BORDER CROSSINGS IN CHILDREN'S AND YOUNG ADULT LITERATURE**

This seminar uses the concept of crossing borders--im/emigrating, transgressing boundaries, occupying margins--as a focus for critical exploration of children's and young adult literature. What should books for young people be and do? How do these texts participate in systems of power and developing social identities? Critical readings draw on literary, ethnic, gender, and disability studies. Discussion, short papers, and final paper/project. **PREREQUISITES:** Sophomore Standing *Units: 6.*

*Also listed as Education Studies 282*

*Prerequisite: Sophomore Standing*

### **ETST 290: AFRICAN-AMERICAN ART**

Beginning with the late eighteenth century and concluding with art today, this course examines African-American history through visual culture. We will examine how race relations in the United States were and are constructed through an examination of painting, sculpture, public monuments, photography, advertising, and performance. **PREREQUISITES:** Sophomore standing *Units: 6.*

*Also listed as Art History 272*

*Prerequisite: Sophomore standing*

### **ETST 300: STRONG NATIONS: PERSPECTIVES OF CONTEMPORARY NATIVE AMERICAN WOMEN**

An interdisciplinary examination of issues facing Native American women today. This course explores the ways gender, race and ethnicity shape identity as well as narrative constructions of nation in regional contexts. Readings by contemporary indigenous women authors, with field trips to federally recognized tribal lands and discussion with Native American women leaders, activists, scholars, musicians, artists and business leaders from a variety of nations. *Units: 6.*

*Also listed as Gender Studies 320*

### **ETST 301: THEORIES OF RACE AND ETHNICITY**

This seminar examines and critiques prominent theories/theorists of race and ethnicity. We review the origins of

the concept of race and discuss both the biological myth and social reality of race. We survey primordialist, constructivist, assimilationist, and conflict theories of race and ethnicity; structural, intersectional, culturalist and critical approaches; and the re-emergence of biological theories of race in the genomic age. **PREREQUISITES:** Sophomore standing or consent of instructor *Units: 6.*

*Prerequisite: Sophomore standing or consent of instructor*

### **ETST 302: RESEARCH METHODS IN ETHNIC STUDIES**

An introduction to a variety of methodological ways of investigating our social world. We focus on applied (or public) ways of conducting research that explicitly inform social policy, programs, and practice on issues related to race and ethnicity. We work in collaborative research environments, understanding how research can be conducted both for the sake of research and to improve the lives of people. *Units: 6.*

### **ETST 303: RACE, ETHNICITY AND HEALTH**

The aim of this course is to introduce students to important health issues that different racial and ethnic communities face. The course will explore in-depth a range of issues relating to racial and ethnic health disparities and it will analyze these issues via structural, systemic and cultural frameworks. *Units: 6.*

### **ETST 304: RACE, ETHNICITY AND THE CRIMINAL JUSTICE SYSTEM**

This course will explore in-depth racial and ethnic differences in criminal involvement in the US. This will include examining police practices, policies, and laws and their impact on racial inequality in the criminal justice system. In this course we will analyze data, utilize different theoretical approaches to interpreting the data, and discuss current research regarding the ways race and ethnicity are intersected with the criminal justice system. **PREREQUISITES:** Sophomore standing or consent of instructor *Units: 6.*

*Prerequisite: Sophomore standing or consent of instructor*

### **ETST 310: TOPICS IN ETHNIC STUDIES**

An explanation of a particular topic in ethnic studies. Topics may pertain to an issue or debate, a specific ethno-racial community, a geographic area, or a historical time period. The specific topic investigated changes each year or varies by term. May be repeated when topic is different.

*Topic for Fall 2022: Social Justice and Critical Geography*

**Prerequisites:** Sophomore standing

This course examines the spatial dimensions of various systems of social injustice including racism, sexism, and economic inequality. We examine how space (physical, imagined, or otherwise) structures our social world: how markers of race, class, sexuality, gender, and nationality intersect in our bodies, lives, emotions, and physical environment. We situate our analysis in economic processes such as productive and reproductive labor, migration, displacement, and gentrification. *Units: 6.*

*Prerequisite: Sophomore standing*

### **ETST 315: INTRODUCTION TO THE ART MUSEUM: HISTORY, ISSUES, AND PRACTICES**

Introduction to art museums and exhibitions as objects of critical inquiry, and to issues and practices in the art museum field. Topics will include: history and evolution of collecting and display; museum exhibitions and knowledge formation; collection practices and ethics; exhibition theory and design; controversies, institutional critique, and the artist-as-curator. **PREREQUISITES:** Sophomore standing *Units: 6.*

*Also listed as Art History 315*

*Prerequisite: Sophomore standing*

**ETST 318: RACE AND RELIGION**

This course examines how religious cultures and discourses contributed to the emergence of the concept of race, racial classification, and processes of 'racialization'; how biblical interpretation both justified and contested the transatlantic slave trade; and how anti-Black racism relates to anti-Semitism. The course examines the history of doctrines on indigenous peoples, race science, and exploitation, and the dynamics of race and ethnicity in Israel and Palestine. Lecture/discussion with final paper. PREREQUISITES: Sophomore standing  
*Units: 6.*

*Also listed as Religious Studies 381*

*Prerequisite: Sophomore standing*

**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. PREREQUISITES: Sophomore standing or consent of instructor; HIST 320 or 325 recommended *Units: 6.*

*Also listed as Global Studies 315, History 315*

*Prerequisite: Sophomore standing or consent of instructor; HIST 320 or 325 recommended*

**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. PREREQUISITES: Sophomore standing; HIST 178 or HIST 179 recommended *Units: 6.*

*Also listed as History 378*

*Prerequisite: Sophomore standing; HIST 178 or HIST 179 recommended*

**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. PREREQUISITES: ANTH 110 or consent of instructor *Units: 6.*

*Also listed as Anthropology 358*

*Prerequisite: ANTH 110 or consent of instructor*

**ETST 335: 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. PREREQUISITES: ANTH 110 or consent of instructor *Units: 6.*

*Also listed as Anthropology 360*

*Prerequisite: ANTH 110 or consent of instructor*

### **ETST 336: *DECOLONIZATION, ACTIVISM AND HOPE: CHANGING THE WAY WE SEE NATIVE AMERICA***

This course explores the damaging effects of colonization and colonial patterns of representation on Native American people throughout history. It calls on students to produce creative interdisciplinary projects that engage with the community and offer more accurate, better-informed representations of Native American culture in the United States. Seminar/studio with readings by significant Native American authors and field trips to federally recognized tribal lands. PREREQUISITES: Sophomore standing or consent of instructor *Units: 6.*

*Prerequisite: Sophomore standing or consent of instructor*

### **ETST 337: *INDIGENEITY UNLEASHED: PERSPECTIVES OF INSTITUTIONAL DECOLONIZATION TODAY***

This course centers Indigeneity by exploring how we may practice and enact decolonization at institutions through ethnographic analyses and studying talk and symbolic practice. We will equip students with the skills to identify and assess how colonialism currently affects them today in an effort to create innovation around systemic structural change. Using an interdisciplinary lens students will investigate the topic through music, art, literature, and ethnographic research. Field experiences and guest presenters from Indigenous communities will be an important component of this course. PREREQUISITES: Sophomore standing *Units: 6.*

*Also listed as Anthropology 337, Music Education and Pedagogy 337*

*Prerequisite: Sophomore standing*

### **ETST 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. PREREQUISITES: Sophomore standing *Units: 6.*

*Also listed as Education Studies 440*

*Prerequisite: Sophomore standing*

### **ETST 341: *HUMAN VARIATION***

A survey of human biological variation and adaptation. Topics include the geographic distribution of human variation; evolutionary approaches to understanding human diversity; historic and modern concepts of race and ethnicity; human biological adaptations to disease, climate, poverty, and other stressors; and the genetics of simple and complex traits. PREREQUISITES: ANTH 140, BIOL 110, or consent of instructor *Units: 6.*

*Also listed as Anthropology 341*

*Prerequisite: ANTH 140, BIOL 110, or consent of instructor*

### **ETST 346: *INDIGENOUS MUSIC & ART: IDENTITY, LOSS AND HEALING***

An interdisciplinary examination of contemporary music and art from various Indigenous communities of North and South America. This course explores the ways the traditional arts help shape cultural identity and provide an outward expression for loss and healing. All course readings and performances are by contemporary indigenous authors, artists and musicians. Weekly written work, discussion and a multimedia project *Units: 6.*

### **ETST 352: 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. PREREQUISITES: Sophomore standing *Units: 6*.

*Also listed as Education Studies 350*

*Prerequisite: Sophomore standing*

### **ETST 360: AFRICAN AMERICAN WRITERS**

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*

### **ETST 365: BLACK AND LATIN@ SOCIOLOGY**

Through lecture and discussion, this course compares and contrasts the diverse experiences of Blacks and Latin@ in the United States. Some topics include historical background, racial and ethnic formation, systemic racism, discrimination immigration, racial/class/gender and sexuality intersections, language discrimination and group conflict and cooperation. Students will review critically important literature, do weekly assignments and submit a final project. PREREQUISITES: Sophomore standing or consent of instructor *Units: 6*.

*Prerequisite: Sophomore standing or consent of instructor*

### **ETST 370: SOCIOLOGY OF THE U.S./MEXICAN BORDER**

This lecture and discussion course introduces sociological understandings of the U.S./Mexico border. More than a geographical divide, the border has a power and a force that structures and patterns human behavior, identity, and belonging for people who live near it, cross it, locate it in their memory, and see its effects on their family and friends. Students test understandings through presentations, exams and final projects. PREREQUISITES: Sophomore standing or consent of instructor *Units: 6*.

*Prerequisite: Sophomore standing or consent of instructor*

### **ETST 378: BLACK EUROPE: RESISTANCE, PERFORMANCE, & SELF-MAKING (IN ENGLISH)**

This course dispels racial myths of the European continent, introduces the Black Diaspora beyond the African American context, pushes the boundaries of belonging and national identity in Europe, and presents black individuals/collectives as historical agents and transnational actors on and beyond the continent. Course materials may consist of literature, poetry, music videos, film, and art. Assessments include short reflection papers, research papers, and oral presentations. 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 Global Studies 378, German Studies 378*

### **ETST 382: MIGRANTS AND GERMAN CULTURE**

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. PREREQUISITES: GER 312 or consent of the instructor *Units: 6.*

*Also listed as German Studies 447, Film Studies 447*

*Prerequisite: GER 312 or consent of the instructor*

### **ETST 390: TUTORIAL IN ETHNIC STUDIES**

*Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **ETST 391: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **ETST 392: THE AFRICAN AND BLACK AMERICAN EXPERIENCE**

This comparative literature course examines the representations of the African and Black American experience in literature. It explores how their subaltern status on the continent and the US has been instrumental in shaping the spirit of resistance that subtend the works of writers from both literary traditions. We will examine the thematic intersections between these literatures and analyse how writers deal with colonialism, slavery, race, ethnicity, the question of belonging and humanism. This course will only count for French major/minor units with an accompanying 3 unit tutorial in French arranged with instructor. PREREQUISITES: Non for non-majors or minors in French & Francophone Studies For majors or minors in French & Francophone Studies: one 300-level French course or instructor's consent. This course will only count for French major/minor units with an accompanying 3 unit tutorial in French arranged with instructor. *Units: 6.*

*Also listed as Global Studies 392, French 392*

*Prerequisite: Non for non-majors or minors in French & Francophone Studies For majors or minors in French & Francophone Studies: one 300-level French course or instructor's consent. This course will only count for French major/minor units with an accompanying 3 unit tutorial in French arranged with instructor.*

### **ETST 395: INTERNSHIP IN ETHNIC STUDIES**

Practical experience working with diverse population, focused on volunteer, policy, or advocacy work. For example, students might volunteer to tutor youth in ethnically diverse educational programs, 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. 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. PREREQUISITES: Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

### **ETST 399: INDEPENDENT STUDY IN ETHNIC STUDIES**

*Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **ETST 400: SOCIOLOGY OF LATINX AMERICANS**

The course provides students with a broad knowledge about Latina/os frequently omitted from the common curriculum, centered in the experiences of Latina/os. Topics include race/ethnicity, gender, politics, religion, education, labor, immigration, and major historical events like the Chicano and Puerto Rican civil rights movements and the social and demographic characteristics of Latina/os. Reading quizzes, exam, and project.

PREREQUISITES: Sophomore standing *Units: 6.*

*Prerequisite: Sophomore standing*

### **ETST 401: SOCIOLOGY OF BLACK AMERICANS**

This course examines sociological perspectives as they pertain to Black Americans. we will explore the nexus between historical and contemporary situations of African Americans in the United States in an attempt to unearth the various ways in which these strands of thought intersect at both individual and institutional levels. Readings, group projects, final exam and project.

PREREQUISITES: Sophomore standing *Units: 6.*

*Prerequisite: Sophomore standing*

### **ETST 402: THEORIES OF RACE, RACISM, & ETHNICITY**

This writing intensive seminar examines classical statements on race and ethnicity in sociological thought. Then, we survey more recent contributions, looking at primordialist, constructivist and assimilationist theories of ethnicity; and structural, intersectional, and critical approaches to race. Lastly, we review some new directions with critical race theory and settler colonialism. This course engages complex theoretical readings, requires a research paper, includes group discussion, and concludes with a conference where students present their research to the broader public. Students who have taken ETST 301 are not eligible to take ETST 402.

PREREQUISITES: Sophomore standing or permission of instructor. Students are strongly encouraged to have taken an Ethnic Studies course previously. Those who have not done so should speak with the instructor before registering. *Units: 6.*

*Prerequisite: Sophomore standing or permission of instructor. Students are strongly encouraged to have taken an Ethnic Studies course previously. Those who have not done so should speak with the instructor before registering.*

### **ETST 407: SPANISH IN THE U.S.**

A first approach to the study of Spanish in the United States through different lenses, including (but not limited to) the history of Spanish and its speakers in the U.S., a demographic overview of its varieties, sociopolitical factors surrounding its use, linguistic phenomena resulting from contact with English, and educational approaches to learning Spanish as a heritage language. Written assignments and exams. PREREQUISITES: 300-level course in Spanish or consent of instructor *Units: 6.*

*Also listed as Linguistics 407, Spanish 407*

*Prerequisite: 300-level course in Spanish or consent of instructor*

### **ETST 410: ADVANCED TOPICS IN ETHNIC STUDIES**

An in-depth investigation of a particular topic in Ethnic Studies. Topics may pertain to an issue or debate, a specific ethno-racial community, a geographic area, or a historical time period. The specific topic investigated changes each year or varies by term. May be repeated for credit when topic is different. *Units: 6.*

*Prerequisite: ETST 200 or ETST 210, or consent of instructor*

### **ETST 415: AFRICA IN THE EUROPEAN IMAGINATION**

This advanced seminar examines the conceptualization of Africa and Africans in modern European intellectual history. The course details how European thinkers explored issues of race and identity through their figurative and physical engagement with the African continent. Topics include travel narratives, the philosophy of slavery and abolition, and imperialism. *Fulfills Seminar Requirement (G & C)* PREREQUISITES: Sophomore standing  
*Units: 6.*

*Also listed as History 415*

*Prerequisite: Sophomore standing*

### **ETST 420: 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. PREREQUISITES: Junior standing and HIST 131, or consent of instructor  
*Units: 6.*

*Also listed as History 470*

*Prerequisite: Junior standing and HIST 131, or consent of instructor*

### **ETST 425: BLACK, BROWN, AND QUEER ON FILM: RACE, GENDER, AND SEXUALITY ON FILM**

Visual culture has long defined that which is not white, not queer, and not male as deviant from the visual norm. This course will explore the way in which film culture has traditionally positioned people it defines as deviant from the racial, ethnic, gender or sexual norm and the ways in which filmmakers have responded to that positioning. PREREQUISITES: Sophomore standing or consent of instructor  
*Units: 6.*

*Also listed as Film Studies 325, Gender Studies 325*

*Prerequisite: Sophomore standing or consent of instructor*

### **ETST 471: PERFORMING ARTS OF BALI**

This course explores the intersections of Balinese music, dance, drama, and ritual. Discussions will include how globalization, tourism, and economic and religious tensions affect the arts and performer's lives. Students will have hands-on experience learning to play Balinese gamelan instruments. PREREQUISITES: MUCO 212 or MUCO 202 or consent of instructor.  
*Units: 6.*

*Also listed as Global Studies 471, Musicology 471*

*Prerequisite: MUCO 212 or MUCO 202 or consent of instructor.*

### **ETST 478: NINETEENTH-CENTURY AFRICAN-AMERICAN WRITERS**

This lecture/discussion class will explore the rich literature African-American authors created, against great adversity, in nineteenth-century America. We will read works by Frederick Douglass, Frances Ellen Watkins Harper, Charlotte Forten Grimke, Paul Laurence Dunbar and others. Students will write short weekly papers and a substantial final research paper. PREREQUISITES: ENG 250, ENG 260, or junior standing; or consent of instructor  
*Units: 6.*

*Also listed as English 478*

*Prerequisite: ENG 250, ENG 260, or junior standing; or consent of instructor*

### **ETST 485: JOYS AND PAINS OF RACE IN FRANCE**

This seminar examines the history and contemporary life of “race” in France, from 18th-century French essays on the “races” of man, to the removal of the word “race” in 2018 from Article 1 of the French Constitution. Alongside literary/film written and oral analysis, we will deepen our historical and socio-cultural knowledge of French and American concepts, e.g. universalism, laïcité, intersectionality, “color-blindness,” minorités visibles. PREREQUISITES: One 300-level French course or consent of instructor. *Units: 6.*

*Also listed as French 485*

*Prerequisite: One 300-level French course or consent of instructor.*

### **ETST 504: MULTIETHNIC AMERICAN LITERATURE**

A study of selected works reflecting the ethnic and cultural diversity of American literature, with primary attention to minority voices and experiences. Selected texts will center on a specific theme such as hybridity, migration, or belonging. Works are taught in their literary, historical, and cultural context, critical readings will also be incorporated. Students will complete several short writing assignments and a researched term paper. PREREQUISITES: ENG 150 or the equivalent *Units: 6.*

*Also listed as English 504*

*Prerequisite: ENG 150 or the equivalent*

### **ETST 505: INDIGENOUS ECOLOGY: ANCESTRAL KNOWLEDGES AND SCIENCE IN ACTION**

This service-learning course involves hands-on research and advocacy with Menominee community members concerning issues of sustainability, environmental justice, and community-based scholarship. You will work in groups on areas of concern to the Menominee community, and will produce knowledge that will assist in their efforts. Through course readings, presentations, field trips, and projects, you will gain a firm grounding in Indigenous knowledgeways, environmental ethics, and methodologies. PREREQUISITES: Sophomore standing *Units: 6.*

*Also listed as Environmental Studies 404*

*Prerequisite: Sophomore standing*

### **ETST 506: CONTEMPORARY AFRICAN-AMERICAN WOMEN POETS**

In this lecture/discussion course, we'll look at the great stylistic variety of poetry that Black women have been writing during the past twenty years. Students will consider poetry through the lenses of critical race and gender criticism and will write weekly short papers and a substantial research paper. Poets may include Marilyn Nelson, Natasha Trethewey, Claudia Rankine, Tracy K. Smith, Nikky Finney and others. PREREQUISITES: ENG 250, ENG 260, or junior standing; or consent of instructor *Units: 6.*

*Also listed as English 506, Gender Studies 506*

*Prerequisite: ENG 250, ENG 260, or junior standing; or consent of instructor*

### **ETST 511: TONI MORRISON**

In this discussion course, we will engage with literary criticism and analyze various novels and works of non-fiction by Toni Morrison, who was described in late 20th Century U.S. as "the closest thing the country has to a national writer." Discussions will include analysis of Morrison's depictions of Black Americans' experiences and the traumas of racism. Requires a researched term paper and exams. PREREQUISITES: Junior standing, 200-level (or higher) course in ENG or ETST or consent of instructor. *Units: 6.*

*Also listed as English 511*

*Prerequisite: Junior standing, 200-level (or higher) course in ENG or ETST or consent of instructor.*

### **ETST 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. PREREQUISITES: Junior or senior standing and at least two other courses in the social sciences *Units: 6.*

*Also listed as Anthropology 512*

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

### **ETST 514: READING THE BORDER: GENDER, TEXTS AND PERFORMANCE**

This course will focus on textual and cultural (re)presentations—including narratives, performance, film, photography and genre-defying texts—of the Central American-Mexico-U.S. borders, where spaces, race, violence and ethnicity become gendered. The course will cover the mid-1980s until contemporary times, a period tempered by the events of 9/11, as well as more recent political discourses focused on the border. Seminar with papers and a final project. PREREQUISITES: SPAN 300-level course or equivalent official placement *Units: 6.*

*Also listed as Spanish 514*

*Prerequisite: SPAN 300-level course or equivalent official placement*

### **ETST 515: RUINING THE IMAGINARY OF PARADISE: ECO-CRITICISM IN THE SPANISH-SPEAKING CARIBBEAN**

This seminar examines the history and cultural expressions of the Spanish-speaking Caribbean--both the insular and the continental areas--from an eco-critical perspective. Parting from the so-called discovery, conquest and colonization and moving through slavery, independence and postcolonial movements, the course provides an account of the exploitative processes of imperial powers that have imagined the Caribbean as a tropical paradise. Lecture/discussion with papers. PREREQUISITES: 400-level course in Spanish or consent of instructor *Units: 6.*

*Also listed as Spanish 515*

*Prerequisite: 400-level course in Spanish or consent of instructor*

### **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. PREREQUISITES: Junior standing, ENG 280, or consent of instructor *Units: 6.*

*Also listed as Global Studies 516, English 516*

*Prerequisite: Junior standing, ENG 280, or consent of instructor*

### **ETST 518: NARRATIVES OF INEQUALITY**

Why is there so much inequality in the world? We will explore several answers to this question, focusing on economic inequality specifically. We will analyze novels and films about economic inequality and efforts to right them at home and abroad. PREREQUISITES: ENG 280, junior standing, or consent of instructor *Units: 6.*

*Also listed as Global Studies 518, 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. PREREQUISITES: ENG 280, junior standing, or consent of instructor *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. PREREQUISITES: Junior standing, ENG 250 or 260, or consent of instructor *Units: 6.*

*Also listed as English 510*

*Prerequisite: Junior standing, ENG 250 or 260, or consent of instructor*

### **ETST 583: *LATINX STUDIES (IN ENGLISH)***

This course covers the main cultural issues in Latin@ communities. It concentrates on the Latin@s of the United States, the definitions of these communities, and their cultural expressions. Through theoretical materials as well as literature, film, historical documents, testimony, etc., this course addresses a variety of subjects related to Latin@ culture. Taught in English. PREREQUISITES: One 300-level Spanish course, its equivalent, or consent of instructor *Units: 6.*

*Also listed as Spanish 466*

*Prerequisite: One 300-level Spanish course, its equivalent, or consent of instructor*

### **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, Césaire, Laye, Condé, Chamoiseau, Contant, and Glissant. PREREQUISITES: One 400-level French course or consent of instructor *Units: 6.*

*Also listed as French 588*

*Prerequisite: One 400-level French course or consent of instructor*

### **ETST 590: *TUTORIAL IN ETHNIC STUDIES***

*Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **ETST 591: *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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **ETST 595: INTERNSHIP IN ETHNIC STUDIES**

Practical experience working with diverse population, focused on volunteer, policy, or advocacy work. For example, students might volunteer to tutor youth in ethnically diverse educational programs, 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. 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. PREREQUISITES: Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

### **ETST 599: INDEPENDENT STUDY IN ETHNIC STUDIES**

*Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **ETST 600: SENIOR SEMINAR**

Seniors confer with the instructor during winter and spring term of their junior year to select specific topics related to a shared theme. At the start of the seminar, students read and discuss shared texts as they pursue individual projects on race and ethnicity that reflect their own topical, theoretical, and methodological interests. PREREQUISITES: ETST 110 and ETST 302 *Units: 6.*

*Prerequisite: ETST 110 and ETST 302*

### **ETST 690: TUTORIAL IN ETHNIC STUDIES**

*Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **ETST 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **ETST 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 youth in ethnically diverse educational programs, 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. 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. PREREQUISITES: Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

**ETST 699: INDEPENDENT STUDY IN ETHNIC STUDIES**

*Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

# FILM STUDIES

Professor:	R. Tapia ( <i>Spanish</i> )
Associate professors:	A. Guenther-Pal ( <i>German</i> ), V. Kononova ( <i>Russian</i> ) ( <i>on leave term(s) II, III</i> ), J. Shimon ( <i>Studio Art</i> )
Assistant professors:	A. Haydock ( <i>chair</i> ), A. Vanden Elzen ( <i>Library and Media Center</i> )
Instructor:	K. Fyfe

Film Studies at Lawrence explores cinema history, theory, and production as deeply integrated facets of a larger project of media literacy and cultural engagement. Students combine the critical study of media culture with creative practice in film, video, and new media.

In our courses, students explore the unique properties and histories of cinema and related forms. They become skilled at analyzing the formal, technical, and aesthetic elements of the medium and are able to contextualize these within a variety of interpretive frameworks such as historiography, genre, transnational and global contexts, film theory, and critical identity studies.

Our curriculum also develops personal engagement with the art of media-making through small-scale artisanal practice, in which each student participates in all key aspects of production. Students work in both 16mm film and digital media and can explore a wide range of emerging forms including creative nonfiction, handmade cinema, animation, installation, and new media. We encourage experimental and cross-media projects.

Film studies invites interdisciplinary approaches, and the course offerings at Lawrence are drawn not only from the program's core, but also from departments in the languages and cultures: French, German, Russian, and Spanish. Course offerings are also found in the departments of art, education, and history, and in the Conservatory of Music. Students can combine an interest in film studies with almost any discipline in the liberal arts.

Our faculty are committed to centering scholarly and creative works from historically marginalized groups as well as exposing students to global cinematic traditions. We believe in providing all students with radical access to the knowledge, resources, and supportive community required to participate fully as consumers, readers, and producers of media culture.

## Required for the film studies major

1. A minimum of 66 units to include:
  - a. FIST 100: *Introduction to Film Studies*
  - b. Three additional designated courses, one in each category:
    - i. Film History: FIST 210: *Film History I* or FIST 211: *Film History II*
    - ii. Film Theory: FIST 402: *Film Theory and Criticism*
    - iii. Filmmaking: FIST 370: *Avant-Doc* or FIST 371: *Documentary Forms* or FIST 372: *Animated Documentary*
  - c. 36 units of elective courses in film studies
  - d. FIST 601: *Senior Research Seminar* (6 credits) or FIST 602: *Senior Production Seminar I* (3 credits) and

FIST 603: *Senior Production Seminar II* (3 credits)

2. A *Senior Experience* that allows students to produce either a research paper or creative work. Students must complete either the senior research or production seminars (FIST 601 or FIST 602/603) as part of this requirement, and present in the senior showcase held annually near the end of Term III.

## Senior Experience in film studies

Students majoring in film studies will enroll in either the senior research or production seminar that culminates in a *Senior Experience*. The *Senior Experience* will be at least one term and may be more depending on the route the student pursues. The experience will allow students to create either a creative media project or a research paper which they will present in the senior showcase held annually near the end of Term III. Students interested in pursuing an interdisciplinary *Senior Experience* that integrates their interests in film studies with another major are strongly encouraged to consult with their advisors and relevant department chairs to plan and negotiate their overall *Senior Experience* as early as possible.

## Required for the film studies minor

1. A minimum of 36 units to include:
  - a. FIST 100: *Introduction to Film Studies*
  - b. One course in each category:
    - i. Film History: FIST 210: *Film History I* or FIST 211: *Film History II*
    - ii. Film Theory: FIST 402: *Film Theory and Criticism*
    - iii. Filmmaking: FIST 370: *Avant-Doc* or FIST 371: *Documentary Forms* or FIST 372: *Animated Documentary*
  - c. 12 units of electives in film studies

## Courses - Film Studies

### FIST 100: *INTRODUCTION TO FILM STUDIES*

An introduction to both cinema studies and film/video production, this course will provide an overview of historical, analytical, and theoretical approaches to cinema and introduce a broad range of basic production skills including the fundamentals of nonlinear editing. Through hands-on work and the study of a diverse selection of films rooted in different cultures, times, and ideologies, students will begin to develop the critical means for engaging with cinema and culture in discussion, writing, and creative work. *Units: 6.*

### FIST 105: *INTRODUCTION TO COMPUTER DESIGN*

An introduction to computer design utilizing the Adobe Creative Suite (Photoshop, InDesign, Illustrator, & Premiere) programs, emphasizing the creative development and implementation through a variety of 2D, 3D, & 4D media. Class work is based on exercises that strengthen visual research capabilities, design aesthetics, and output techniques with a variety of programs and equipment. Assigned projects address fundamental technical and conceptual problems suggested through artistic and commercial practice. Lectures, readings, discussions, and critiques explore elements of concept and design pertinent to design mediums and platforms. *Units: 6.*

*Also listed as Studio Art 105*

### **FIST 110: *INTERDISCIPLINARY MEDIA***

A course designed to provide students an opportunity to study interdisciplinary approaches to art making and knowledge seeking. Topics will vary based on instructors' areas of expertise and interests. May be repeated for credit when topic is different. *Units: 1 TO 98.*

*Also listed as Studio Art 125*

### **FIST 191: *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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **FIST 210: *FILM HISTORY I***

A foundation course on the history of cinema in a global and transnational context, Film History I focuses on "silent" film (early film to the present day) and the transition to sound. Topics include creative and technological practices; national cinemas in context; narrative, documentary, and experimental modes. PREREQUISITES: FIST 100 or consent of instructor *Units: 6.*

*Prerequisite: FIST 100 or consent of instructor*

### **FIST 211: *FILM HISTORY II***

A foundations course on the history of cinema in a global and transnational context, Film History II focuses on the sound era. Topics include creative and technological practices; studio, avant-garde, and postcolonial cinemas; independent, contemporary, and digital film; narrative, documentary, and experimental modes. PREREQUISITES: FIST 100 or consent of instructor *Units: 6.*

*Prerequisite: FIST 100 or consent of instructor*

### **FIST 222: *SOUND DESIGN***

An introduction to film sound studies paired with hands-on exploration of cinematic audio recording and editing techniques, with emphasis on sound/image relationships and the use of sound to create meaning. Students will engage in close readings of critical and theoretical texts, view and discuss film screenings, and produce a series of short audio and video exercises, culminating in a final video project showcasing the creative use of film sound. PREREQUISITES: FIST 100 or consent of instructor *Units: 6.*

*Also listed as Studio Art 224*

*Prerequisite: FIST 100 or consent of instructor*

### **FIST 231: *PHOTOGRAPHY***

An introduction to traditional black-and-white darkroom photography within a fine art context. Medium-format and 35mm SLR camera operations are covered along with darkroom instruction on processing film and making gelatin silver prints. Historic and contemporary ideas about photography as a medium are examined through projects, readings, lectures, demonstrations, discussions, critiques, and visiting artist presentations. PREREQUISITES: Any 100-level Studio Art course *Units: 6.*

*Also listed as Studio Art 230*

*Prerequisite: Any 100-level Studio Art course*

### **FIST 240: NEW MEDIA IN ART**

An introduction to new media within a fine art context. Digital photography, experimental video, sound, photo book design, and blogging are covered as students use the Internet as a venue for presenting projects. The evolution of technology, new media theory, contemporary art discourse, and visual culture are examined through projects, readings, lectures, demonstrations, discussions, critiques, and visiting artist presentations. Mac-based. When scheduled on Tuesday-Thursday, class will dismiss early for University Convocations. PREREQUISITES: ART 100 or ART 110 *Units: 6.*

*Also listed as Studio Art 240*

*Prerequisite: ART 100 or ART 110*

### **FIST 241: ECOCINEMA: AESTHETICS AND ENVIRONMENTAL JUSTICE**

This course examines the growing genre of ecocinema through film screenings, literary, political, and theoretical works that delve into the intersections among aesthetics, political accountability, and environmental issues. We will consider the role of creative work in addressing environmental conditions and connecting struggles for social and environmental justice. Students will learn about video production and will have the opportunity to create their own short films. *Units: 6.*

*Also listed as Environmental Studies 241*

### **FIST 245: INTERARTS: INSTALLATIONS**

In this course students make projects that engage with space. Lectures, discussions, readings, and critiques will investigate contemporary interdisciplinary practices that involve site-specific installation of works of art, everyday objects, performances, projections, etc. Interactive works and immersive virtual reality will also be considered. Students will create a self-designed installation project that will be planned and executed over the duration of the term. PREREQUISITES: FIST 100, ART 100, ART 105, or ART 110, or consent of instructor *Units: 1 TO 98.*

*Also listed as Studio Art 245*

*Prerequisite: FIST 100, ART 100, ART 105, or ART 110, or consent of instructor*

### **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. PREREQUISITES: GER 312 *Units: 6.*

*Also listed as German Studies 377*

*Prerequisite: GER 312*

### **FIST 278: 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 German Studies 278*

### **FIST 287: RUSSIAN THROUGH FILM**

This course will examine topics in Russian film. Topics may include specific genres (e.g. the sad comedy), the work of a director or tradition, films important for a specific historical moment (e.g. the Thaw or World War Two), or films devoted to a specific theme. Students will expand their Russian vocabulary, improve fluency, increase speaking confidence and gain cultural knowledge by viewing Russian films and analyzing the psychology of the characters. 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. May be repeated when topic is different. *Units: 6.*

*Also listed as Russian 287*

*Prerequisite: RUSS 250 or consent of instructor*

### **FIST 290: INTRODUCTION TO GAME STUDIES**

This course will provide students with an introduction to game studies through the close reading of scholarly literature and playing of games from a critical perspective. An emphasis will be placed on the ways video game reflect culture while exploring topics of diversity and representation. Students will participate in class discussion, conduct academic research, and apply knowledge by creating a game. *Units: 6.*

### **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. PREREQUISITES: Sophomore level or above *Units: 6.*

*Also listed as History 300, Gender Studies 323*

*Prerequisite: Sophomore level or above*

### **FIST 302: CINEMATICALY 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. PREREQUISITES: FREN 202 or consent of instructor *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*. PREREQUISITES: Sophomore standing or consent of instructor *Units: 6.*

*Also listed as History 305*

*Prerequisite: Sophomore standing or consent of instructor*

### **FIST 309: HOLLYWOOD GOES TO HIGH SCHOOL**

Year after year, Hollywood turns out movies that are set in schools and present images of teachers and teens. Many of these films address typical coming-of-age issues, societal fear of teen crime and delinquency and, of course, the search for romance. A subset of these films provide powerful and culturally enduring images of teachers and teaching. High school movies also provide insight into the fantasies, anxieties, dreams, and assumptions prevalent in American culture. This course will examine the world and worldview found in Hollywood high school movies and the extent to which the stories they tell make us who we are.

PREREQUISITES: Sophomore standing *Units: 6.*

*Also listed as Education Studies 309*

*Prerequisite: Sophomore standing*

### **FIST 318: TOPICS IN FILMMAKING**

This course allows for an in-depth examination of various aspects of filmmaking, with a dual focus on close reading of related film studies texts and practical exploration of advanced techniques, culminating in a final video project. *Units: 6.*

*Also listed as Studio Art 318*

### **FIST 319: PRINCIPLES OF EDITING**

A theoretical and practical introduction to connecting images and sound in a compelling way. The goal is to promote understanding of film, video, and new media as tools for creative expression and to help students think critically and make informed choices about editing. PREREQUISITES: FIST 100 or consent of instructor *Units: 6.*

*Also listed as Studio Art 319*

*Prerequisite: FIST 100 or consent of instructor*

### **FIST 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.

*Topic for*

This course *Units: 6.*

*Also listed as Russian 320*

### **FIST 324: GENDER AND CINEMA**

This course examines gender and film in an international context. Topics include the construction of femininity and masculinity in film, feminist and queer film theories, analysis of film using intersectional and formal approaches, women behind the camera, and gender and genre. PREREQUISITES: FIST 100, GEST 100, the equivalent, or consent of instructor *Units: 6.*

*Also listed as Gender Studies 324*

*Prerequisite: FIST 100, GEST 100, the equivalent, or consent of instructor*

**FIST 325: BLACK, BROWN, AND QUEER ON FILM: RACE, GENDER, AND SEXUALITY ON FILM**

Visual culture has long defined that which is not white, not queer, and not male as deviant from the visual norm. This course will explore the way in which film culture has traditionally positioned people it defines as deviant from the racial, ethnic, gender or sexual norm and the ways in which filmmakers have responded to that positioning. PREREQUISITES: Sophomore standing or consent of instructor *Units: 6.*

*Also listed as Ethnic Studies 425, Gender Studies 325*

*Prerequisite: Sophomore standing or consent of instructor*

**FIST 330: INTRODUCTION TO LATIN AMERICAN AND SPANISH FILM**

An introduction to the critical analysis of Latin American and Spanish film. Selected films represent various countries, genres and directors from Latin America and Spain. Readings of relevant film theory, class discussions and composition tasks prepare students for other advanced courses in the Spanish program. PREREQUISITES: SPAN 202, its equivalent, or consent of instructor; not open to native speakers of Spanish. *Units: 6.*

*Also listed as Spanish 430*

*Prerequisite: SPAN 202, its equivalent, or consent of instructor; not open to native speakers of Spanish.*

**FIST 331: INTERMEDIATE PHOTOGRAPHY**

A continuation of ART 230 with an introduction to pinhole and 4x5 view cameras along with expanded darkroom instruction on sheet film processing and the cyanotype print. The history of photography and contemporary art issues related to the medium are examined through projects, readings, lectures, demonstrations, discussions, critiques, and visiting artist presentations. PREREQUISITES: ART 230 *Units: 6.*

*Also listed as Studio Art 330*

*Prerequisite: ART 230*

**FIST 340: INTERMEDIATE NEW MEDIA IN ART**

A continuation of Art 240 or 245 using new media within a contemporary art context. Digital photography, experimental video, social media, performance, and installation are covered while using the Internet and campus spaces as venues for projects. Contemporary art discourse is examined through projects, readings, lectures, demonstrations, discussions, critiques, and visiting artist presentations. Mac-based. When scheduled on Tuesday-Thursday, class will dismiss early for University Convocations. PREREQUISITES: ART 240 or ART 245 *Units: 6.*

*Also listed as Studio Art 340*

*Prerequisite: ART 240 or ART 245*

**FIST 345: SCREENWRITING**

An exploration of the plot, character, and theme in the work of short films and scripts followed by the creation of one or more short screenplays. PREREQUISITES: FIST 100 or consent of instructor *Units: 6.*

*Prerequisite: FIST 100 or consent of instructor*

### **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. PREREQUISITES: Sophomore standing; EAST 150 recommended *Units: 6*.

*Also listed as East Asian Studies 350, Chinese and Japanese 350*

*Prerequisite: Sophomore standing; EAST 150 recommended*

### **FIST 354: HISTORY OF RUSSIAN AND SOVIET FILM**

This course will introduce the student to the rich and varied tradition of Russian and Soviet cinema from the Pre-Revolutionary period to the present. Works by major filmmakers will be viewed and discussed in the context of the culture, economy, society, and politics of the time. Taught in English. PREREQUISITES: Sophomore standing *Units: 6*.

*Also listed as Russian 354, History 354*

*Prerequisite: Sophomore standing*

### **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 Studies 357*

### **FIST 360: CHINESE CONTEMPORARY FILM IN ENGLISH**

Using feature films and documentaries from the so-called Fifth [1982-] and Sixth Generations [beginning in the 1990s] of film directors in China, this course provides a visual record of the immense political, economic, and social changes in China since the Reform and Opening up period at the end of the Cultural Revolution. Taught in English. PREREQUISITES: Sophomore standing; EAST 150 or EAST 420 recommended *Units: 6*.

*Also listed as East Asian Studies 360, Chinese and Japanese 360*

*Prerequisite: Sophomore standing; EAST 150 or EAST 420 recommended*

### **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 monstrosity 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 Studies 361*

### **FIST 362: *VAMPIRES, MONSTERS, AND MAN-EATERS***

This course examines the borders of the human through the figures of the vampire, monster, and femme fatale in literature, film, and the visual arts. Featured in the works of canonized authors as well as within popular culture, “monstrousness” can provide valuable insights into numerous aspects of German history and psychosexual relations. Possible texts include the early vampire film *Nosferatu*, Wedekind’s Lulu tragedies, Patrick Süskind’s *Das Parfum*, and paintings by H.R. Giger. PREREQUISITES: GER 312 *Units: 6.*

*Also listed as German Studies 462, Gender Studies 362*

*Prerequisite: GER 312*

### **FIST 370: *AVANT-DOC***

An exploration of personal, experimental, and emerging approaches to documentary filmmaking through video projects, readings, screenings, lecture, discussion, and critique. This course examines both contemporary practice and historical intersections among filmmaking traditions, with a focus on engaging with critical dialogues and diverse ways of articulating relationships between maker, subject, and audience. PREREQUISITES: FIST 100 or consent of instructor *Units: 6.*

*Also listed as Studio Art 372*

*Prerequisite: FIST 100 or consent of instructor*

### **FIST 371: *DOCUMENTARY FORMS***

This course presents a broad overview of contemporary and historical documentary filmmaking practice through readings, screenings, discussion, and short video projects. Students will engage with critical dialogues and explore several distinct approaches to documentary production, including rhetorical, observational, participatory, and reflexive forms, culminating in a completed short documentary. PREREQUISITES: FIST 100 or consent of instructor *Units: 6.*

*Also listed as Studio Art 371*

*Prerequisite: FIST 100 or consent of instructor*

### **FIST 372: *ANIMATED DOCUMENTARY***

This course examines animated documentary as an emerging hybrid form that raises unique ethical considerations and interesting possibilities for representation and expression. Through readings, screenings, and creative exercises, students will learn several animation techniques and examine both contemporary practice and historical antecedents, with a focus on engaging with critical dialogues and diverse ways of articulating relationships between maker, subject, and audience. PREREQUISITES: FIST 100 or consent of instructor *Units: 6.*

*Also listed as Studio Art 373*

*Prerequisite: FIST 100 or consent of instructor*

### **FIST 380: *ARTISANAL ANIMATION***

This course explores the history and contemporary practice of artisanal and experimental animation through hands-on workshops, film and video animation projects, readings, screenings, discussion, and critique. Topics include significant artists and movements, fundamental animation principles, optical toys, direct 16mm animation, rotoscoping, sound design for animation, 2D computer animation using Photoshop, and several stop-motion techniques using animation stands and Dragonframe software. Not open to students who have

earned credit for the FIST 318 topic Artisanal Animation. PREREQUISITES: FIST 100 or consent of instructor  
*Units: 6.*

*Prerequisite: FIST 100 or consent of instructor*

### **FIST 390: TUTORIAL IN FILM STUDIES**

*Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **FIST 391: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **FIST 399: INDEPENDENT STUDY IN FILM STUDIES**

*Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **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. PREREQUISITES: Junior standing or above *Units: 6.*

*Also listed as History 400, Gender Studies 423*

*Prerequisite: Junior standing or above*

### **FIST 402: 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. PREREQUISITES: FIST100 and sophomore standing *Units: 6.*

*Prerequisite: FIST100 and sophomore standing*

### **FIST 403: IMAGE DESIGN**

This course will explore cinematic image design through hands-on workshops, film and video exercises, readings, screenings, discussion, and critique. Students will study foundational composition principles, learn new techniques in cinematography and lighting, and create short film and video projects that showcase the creative use of composition to create meaning. PREREQUISITES: FIST 100 or consent of instructor *Units: 6.*

*Also listed as Studio Art 403*

*Prerequisite: FIST 100 or consent of instructor*

### **FIST 404: GENDER AND INTERSECTIONAL IDENTITIES IN VIDEO GAMES**

In this course, students will explore gender and intersectional identities in video games from an advanced and

in-depth level. Students will analyze literature, multiple video games, and metacultural content while exploring the topics of gender and other forms of identity. Students will produce their own media content to share their findings with the gaming community. PREREQUISITES: FIST290, GEST100 or instructor approval *Units: 6.*

*Also listed as Gender Studies 404*

*Prerequisite: FIST290, GEST100 or instructor approval*

### **FIST 411: FASCISM AND FILM**

This course in French must be taken in conjunction with GER 411, taught in English. It will expand on the films made in France by Continental under the Nazi Occupation, 1940-1944. Concurrent registration in GER 411 is required. PREREQUISITES: One course in French at the 300 level or consent of instructor *Units: 2.*

*Also listed as French 411*

*Prerequisite: One course in French at the 300 level or consent of instructor*

### **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. *Units: 6.*

### **FIST 419: KOREAN MODERN HISTORY THROUGH LITERATURE AND FILM**

Using fiction, feature films, and historical texts, this course provides an in-depth introduction to modern Korean history, from the end of the Chōsun dynasty in 1910 to contemporary North and South Korea. Students will gain an understanding of Korea's colonial experience, civil war, dictatorships, development, democratization, and gender politics. PREREQUISITES: EAST 150 or consent of instructor *Units: 6.*

*Also listed as East Asian Studies 418, History 498*

*Prerequisite: EAST 150 or consent of instructor*

### **FIST 420: TOPICS IN FILM GENRE**

This topics course allows for an in-depth examination of film genre in various historical, national, theoretical, and aesthetic contexts. Course under this heading may focus on a single genre (for example, the musical) or be comparative. May be repeated when topic is different. *Units: 6.*

*Prerequisite: FIST 100 or consent of instructor*

### **FIST 422: BORROWED MUSIC IN THE MOVIES**

In this course we will explore some of the complexities, ambiguities, and powers of film musickings. Focusing primarily on pre-existing musics in filmscapes, we will pursue the multiple ways that film musickings reveal, reinforce, cross, and break constructed boundaries of space, time, identity, and community. Engaging with elements of film, film sound, and film music studies, gender and queer theory, critical race theory, and disability theory, we will experience and examine the spaces that film musickings can create and provide access to; the pleasures, violences, and possibilities of those spaces; as well as ambiguities and possibilities of interpretation. PREREQUISITES: MUCO 212 or MUCO 202 *Units: 6.*

*Also listed as Musicology 422*

*Prerequisite: MUCO 212 or MUCO 202*

### **FIST 440: 16MM FILMMAKING**

Explore the artistic use of analog film in the digital age! In this hands-on course, students will learn the fundamentals of 16mm motion picture production and post-production, practicing both traditional and contemporary workflows with an emphasis on creative use of the medium. PREREQUISITES: FIST 100 or consent of instructor *Units: 6.*

*Also listed as Studio Art 440*

*Prerequisite: FIST 100 or consent of instructor*

### **FIST 447: MIGRANTS AND GERMAN CULTURE**

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. PREREQUISITES: GER 312 or consent of the instructor *Units: 6.*

*Also listed as Ethnic Studies 382, German Studies 447*

*Prerequisite: GER 312 or consent of the instructor*

### **FIST 464: FRANCOPHONE LITERATURE AND SCREEN ADAPTATIONS**

Focusing on the works of writers and filmmakers such as Sembene Ousmane, Joseph Zobel, Aimé Césaire, D.T. Niane, Dani Kouyate, Euzhan Palcy and Raoul Peck the course examines the interface between the literary and filmic media in raising consciousness about societal challenges, nationhood, power and identity. It also analyzes the strengths and weaknesses of each medium in accomplishing these objectives.

PREREQUISITES: 300-level French course or consent of instructor *Units: 6.*

*Also listed as French 464*

*Prerequisite: 300-level French course or consent of instructor*

### **FIST 480: SPANISH CINEMA**

This course studies significant Spanish films from the 20th and 21st centuries as cultural and historical documents with the goal of discussing social and political change in Spain through the lens of cinema. Topics may include the genesis of Spanish film, representations of the Second Republic, the Civil War, and the Francoist dictatorship on the big screen, cinema of the transition to democracy, Spanish film from the 1990s to the 2000s, Latin American and European co-productions, and contemporary Spanish cinema in the era of streaming. This class is taught in Spanish. PREREQUISITES: SPAN 300-level class or instructor approval *Units: 6.*

*Also listed as Spanish 480*

*Prerequisite: SPAN 300-level class or instructor approval*

### **FIST 531: ADVANCED PHOTOGRAPHY**

A continuation of Art 330 with instruction in advanced analog photography practice within a contemporary art context. Project planning and implementation are emphasized as students work toward producing a self-designed project with a developed artist statement. The history of photography and contemporary art issues related to the medium are examined through readings, lectures, demonstrations, discussions, critiques, and visiting artist presentations. PREREQUISITES: ART 330 and consent of instructor *Units: 6.*

*Also listed as Studio Art 530*

*Prerequisite: ART 330 and consent of instructor*

**FIST 540: ADVANCED NEW MEDIA IN ART**

A continuation of Art 340 using new media at an advanced level. Digital photography, experimental video, social media, performance, and installation are covered while using the Internet and campus spaces as venues for projects. Contemporary art discourse is examined through projects, readings, lectures, demonstrations, discussions, critiques, and visiting artist presentations. Mac-based. When scheduled on Tuesday-Thursday, class will dismiss early for University Convocations. PREREQUISITES: ART 340 and consent of instructor  
*Units: 6.*

*Also listed as Studio Art 540*

*Prerequisite: ART 340 and consent of instructor*

**FIST 580: DIS(RE)MEMBERING THE NATION: CONTEMPORARY FILM & FICTION OF SPAIN AND LATIN AMERICA**

A thematic analysis of film and fiction produced in the late and post-dictatorial context of Spain and several Latin American countries. The course studies the cultural processes of historical memory, collective trauma, oblivion, and questioning of national narratives in selected works from the past four decades. Readings include Manuel Puig's *Kiss of the Spider Woman*, Ariel Dorfman's *Death and the Maiden*, and Carmen Martin Gaité's *The Back Room*, as well as films by Lucrecia Martel, Victor Erice, Pablo Larraín, and Guillermo del Toro, among others. PREREQUISITES: One 400-level course in Spanish or consent of instructor  
*Units: 6.*

*Also listed as Spanish 580*

*Prerequisite: One 400-level course in Spanish or consent of instructor*

**FIST 590: TUTORIAL IN FILM STUDIES**

*Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

**FIST 591: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

**FIST 599: INDEPENDENT STUDY IN FILM STUDIES**

*Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

**FIST 601: SENIOR RESEARCH SEMINAR**

Intended to serve as a capstone experience for film studies students with a research concentration. The seminar will explore research methodologies related to research in film history and theory. PREREQUISITES: Senior standing and declared major in film studies  
*Units: 6.*

*Prerequisite: Senior standing and declared major in film studies*

**FIST 602: SENIOR PRODUCTION SEMINAR I**

The seminar will serve as a critique group for senior film projects and explore practical issues pertinent to contemporary film practice. PREREQUISITES: Senior standing and a declared major in film studies *Units: 3.*

*Prerequisite: Senior standing and a declared major in film studies*

### **FIST 603: SENIOR PRODUCTION SEMINAR II**

The seminar will serve as a critique group for senior film projects and explore practical issues pertinent to contemporary film practice. PREREQUISITES: FIST 602, senior standing and declared major in film studies *Units: 3.*

*Prerequisite: FIST 602, senior standing and declared major in film studies*

### **FIST 690: TUTORIAL IN FILM STUDIES**

*Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **FIST 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **FIST 699: INDEPENDENT STUDY IN FILM STUDIES**

*Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

# FRENCH

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.

## Required for the major in French and Francophone studies

Students who complete the major in French and Francophone Studies will demonstrate proficiency in all four language skills (listening, speaking, reading, and writing) at the intermediate-high to advanced-low level according to the American Council of Teachers of Foreign Languages (ACTFL) guidelines. Moreover, they will analyze critically primary texts in the French language and demonstrate knowledge of the diversity of the French-speaking world. By the culmination of the major, they will be able to apply one or more critical/theoretical approaches to original inquiry in the discipline of French and Francophone Studies and to explain the interconnectedness of various aspects of cultural production articulating French and Francophone identity.

Students complete the major by taking a minimum of 60 units beyond FREN 202, including:

1. 12 to 18 units at the 300 level,
2. at least 12 units at the 400 level,
3. at least 12 units at the 500 level, and
4. FREN 600: *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.

### THE FRENCH PORTFOLIO MUST INCLUDE:

1. A list of all courses taken for the major
2. A list of works included in the portfolio
  - a. 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
3. 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 video recording of an oral presentation in place of one essay.

## 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, or teacher 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.

## Required for the minor in French

Students complete a French minor by taking a minimum of 36 units beyond FREN 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.

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 minors' 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.

## Teacher certification in French (K-12)

French majors can seek certification to teach French at the elementary and secondary levels. To be certified, students must spend a term in a French-speaking country studying the language and culture and must pass an oral and writing proficiency test. Students can add an endorsement in a second area (such as another language or English as a second language) by completing the appropriate minor. Students who plan to seek teacher certification should review the requirements in the Education section of the catalog and meet with the director of teacher education, preferably before the end of the sophomore year.

## Off-campus study

The department urges students to take advantage of the international study programs in France, Senegal, Morocco, or Quebec.

## 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 [placement exams](#) 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 FREN 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.

## Courses - French

### **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. PREREQUISITES: FREN 101 *Units: 6.*

*Prerequisite: FREN 101*

### **FREN 191: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **FREN 195: 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. PREREQUISITES: Counter Registration Required *Units: 2 OR 3.*

*Prerequisite: Counter Registration Required*

### **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. PREREQUISITES: FREN 102 or placement by the department *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. PREREQUISITES: FREN 200 or placement by the department *Units: 6.*

*Prerequisite: FREN 200 or placement by the department*

### **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. PREREQUISITES: FREN 200 or 201 or a minimum of three years of high school French or the equivalent *Units: 6.*

*Prerequisite: FREN 200 or 201 or a minimum of three years of high school French or the equivalent*

### **FREN 275: ADVANCED CONVERSATION AND COMPOSITION: LES MOTS ET LES IMAGES (WORDS AND IMAGES)**

In this course students advance their communicative competence and confidence through discussion and

analysis of texts, films, and works of art. The course promotes intensive building of vocabulary, perfecting of grammar, and understanding of the subtleties of word and structure choices in context. Students will gain a deeper knowledge of lifestyles, history, and artistic achievement of the French-speaking world. Activities include discussions, presentations, role-plays, and written assignments. PREREQUISITES: FREN 202 or instructor approval. *Units: 6.*

*Prerequisite: FREN 202 or instructor approval.*

### **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. PREREQUISITES: FREN 202 or consent of instructor *Units: 6.*

*Prerequisite: FREN 202 or consent of instructor*

### **FREN 302: CINEMATICALY 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. PREREQUISITES: FREN 202 or consent of instructor *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. PREREQUISITES: FREN 202 or consent of instructor *Units: 6.*

*Also listed as Global Studies 303*

*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. PREREQUISITES: FREN 202 or consent of instructor *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.*

### **FREN 390: 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.

PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **FREN 391: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **FREN 392: THE AFRICAN AND BLACK AMERICAN EXPERIENCE**

This comparative literature course examines the representations of the African and Black American experience in literature. It explores how their subaltern status on the continent and the US has been instrumental in shaping the spirit of resistance that subtend the works of writers from both literary traditions. We will examine the thematic intersections between these literatures and analyse how writers deal with colonialism, slavery, race, ethnicity, the question of belonging and humanism. This course will only count for French major/minor units with an accompanying 3 unit tutorial in French arranged with instructor. PREREQUISITES: Non for non-majors or minors in French & Francophone Studies For majors or minors in French & Francophone Studies: one 300-level French course or instructor's consent. This course will only count for French major/minor units with an accompanying 3 unit tutorial in French arranged with instructor. *Units: 6.*

*Also listed as Ethnic Studies 392, Global Studies 392*

*Prerequisite: Non for non-majors or minors in French & Francophone Studies For majors or minors in French & Francophone Studies: one 300-level French course or instructor's consent. This course will only count for French major/minor units with an accompanying 3 unit tutorial in French arranged with instructor.*

### **FREN 395: 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. PREREQUISITES: Counter Registration Required *Units: 2 OR 3.*

*Prerequisite: Counter Registration Required*

### **FREN 399: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **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. PREREQUISITES: Must be attending the LU Francophone Seminar *Units: 6.*

*Also listed as Anthropology 450, Global Studies 402*

*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. PREREQUISITES: Must be attending the LU Francophone Seminar *Units: 6.*

*Also listed as Global Studies 403*

*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. PREREQUISITES: Must be attending the LU Francophone Seminar *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. PREREQUISITES: Must be attending the LU Francophone Seminar *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. PREREQUISITES: Must be attending the LU Francophone Seminar *Units: 3.*

*Also listed as Global Studies 404, 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. PREREQUISITES: At least one 300-level course in French or consent of instructor. *Units: 6.*

*Prerequisite: At least one 300-level course in French or consent of instructor.*

### **FREN 411: FASCISM AND FILM**

This course in French must be taken in conjunction with GER 411, taught in English. It will expand on the films made in France by Continental under the Nazi Occupation, 1940-1944. Concurrent registration in GER 411 is required. PREREQUISITES: One course in French at the 300 level or consent of instructor *Units: 2.*

*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. PREREQUISITES: One 300-level French course or consent of instructor *Units: 6.*

*Also listed as Global Studies 421*

*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. PREREQUISITES: One 300-level course or consent of instructor *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. PREREQUISITES: One 300-level course or consent of instructor *Units: 6.*

*Also listed as Global Studies 445*

*Prerequisite: One 300-level course or consent of instructor*

### **FREN 452: *SENEGALESE LITERATURE***

The Senegalese novel is among the most important in Francophone Africa with classic authors such as Abdoulaye Sadj, Malick Fall, and Aminata Sow Fall. This course focuses on the study of the novels of these and other authors from Saint-Louis, a city in the North of Senegal that is richly steeped in the history of the country. It critically analyzes their socio-cultural themes and place in the discourse of Senegalese nationhood. PREREQUISITES: One 300-level French course or consent of instructor *Units: 6.*

*Prerequisite: One 300-level French 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. PREREQUISITES: One 300-level course or consent of instructor *Units: 6.*

*Prerequisite: One 300-level course or consent of instructor*

### **FREN 464: *FRANCOPHONE LITERATURE AND SCREEN ADAPTATIONS***

Focusing on the works of writers and filmmakers such as Sembene Ousmane, Joseph Zobel, Aimé Césaire, D.T. Niane, Dani Kouyate, Euzhan Palcy and Raoul Peck the course examines the interface between the literary and filmic media in raising consciousness about societal challenges, nationhood, power and identity. It

also analyzes the strengths and weaknesses of each medium in accomplishing these objectives.

PREREQUISITES: 300-level French course or consent of instructor *Units: 6.*

*Also listed as Film Studies 464*

*Prerequisite: 300-level French course or consent of instructor*

### **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." PREREQUISITES: One 300-level French course or consent of instructor *Units: 6.*

*Prerequisite: One 300-level French course or consent of instructor*

### **FREN 485: JOYS AND PAINS OF RACE IN FRANCE**

This seminar examines the history and contemporary life of "race" in France, from 18th-century French essays on the "races" of man, to the removal of the word "race" in 2018 from Article 1 of the French Constitution. Alongside literary/film written and oral analysis, we will deepen our historical and socio-cultural knowledge of French and American concepts, e.g. universalism, laïcité, intersectionality, "color-blindness," minorités visibles. PREREQUISITES: One 300-level French course or consent of instructor. *Units: 6.*

*Also listed as Ethnic Studies 485*

*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. PREREQUISITES: One 400-level French course or consent of instructor *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. PREREQUISITES: One 400-level French course or consent of instructor *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, Djébar, Cixous, Bugul, Kristeva, Sebbar, Sand, Colette, and Hébert. PREREQUISITES: One 400-level French course or consent of instructor *Units: 6.*

*Also listed as Gender Studies 503*

*Prerequisite: One 400-level French course or consent of instructor*

### **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. PREREQUISITES: One 400-level course in French or consent of instructor *Units: 6.*

*Prerequisite: One 400-level course in French or consent of instructor*

### **FREN 525: *LA CHOSE FRANCO-ARABE: THE FRANCO-ARAB THING***

This seminar draws on France's fraught history as a colonial power and its cultivated self-image as an evolved European nation with a distinct cultural standing. The course's primary focus will be the current influence of the Middle East and North Africa on France and French hopes and fears for its national identity. Literary readings, films, and news media will inform students' presentations and essays. PREREQUISITES: 300-level French course or consent of instructor *Units: 6.*

*Prerequisite: 300-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. PREREQUISITES: One 400-level course or consent of instructor *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 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. PREREQUISITES: One 400 level French course or consent of instructor *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, Césaire, Laye, Condé, Chamoiseau, Contant, and Glissant. PREREQUISITES: One 400-level French course or consent of instructor *Units: 6.*

*Also listed as Ethnic Studies 584*

*Prerequisite: One 400-level French course or consent of instructor*

### **FREN 590: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **FREN 591: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **FREN 595: 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. PREREQUISITES: Counter Registration Required *Units: 2 OR 3.*

*Prerequisite: Counter Registration Required*

### **FREN 599: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **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 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **FREN 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **FREN 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. PREREQUISITES: Counter Registration Required *Units: 2 OR 3.*

*Prerequisite: Counter Registration Required*

**FREN 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.

PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

# FRESHMAN STUDIES

Associate professor:

M. Smith (*Religious Studies, chair term III*)

*First-Year Studies* has been the cornerstone of the Lawrence curriculum for over 70 years. Originally 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 *First-Year Studies* in their first two terms on campus. Each section of the course includes about fifteen people, allowing for close relationships between students and teachers. Because each section uses the same reading list, *First-Year Studies* also helps students join in the life of a larger intellectual community, one that now includes generations of Lawrentians.

In keeping with such goals, *First-Year 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 writings by Natasha Trethewey and Tony Kushner, Plato's *Republic*, the periodic table of the elements, Stravinsky's *Rite of Spring* and Miles Davis's *Kind of Blue*.

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 does it mean to be human? Are there limits to human knowledge? How should we respond to injustice and suffering?

In addition to raising these questions, *First-Year Studies* serves more immediate and practical goals. The course encourages lively discussion and introduces students to the conventions of academic writing. In all of these ways, the course helps students to develop the skills needed for success in college and in later life.

Transfer students should plan to take FRST 201: *Studies in the Liberal Arts* to fulfill the *Freshman Studies* requirement.

## Courses - First Year Studies

### FRST 100: *FIRST YEAR STUDIES I*

Required of first-year 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. PREREQUISITES: Registration Assigned by First Year Studies Program Director *Units: 6*.

*Prerequisite: Registration Assigned by First Year Studies Program Director*

### FRST 101: *FIRST YEAR STUDIES II*

Required of first-year students. A continuation of First-Year Studies I, this course is designed to help students refine their abilities as readers, writers, and thinkers. As in First-Year 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. PREREQUISITES: Registration Assigned by First Year Studies Program Director *Units: 6.*

*Prerequisite: Registration Assigned by First Year Studies Program Director*

### **FRST 201: STUDIES IN LIBERAL ARTS**

Required of qualified transfer students. Through the study of works representing a variety of intellectual and cultural traditions, students refine 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. PREREQUISITES: Admitted as a transfer student by the Office of Admissions. *Units: 6.*

*Prerequisite: Admitted as a transfer student by the Office of Admissions.*

# GENDER STUDIES

<b>Professors:</b>	B. Haines ( <i>Psychology</i> ) (on leave term(s) I, II), M. Rico ( <i>History</i> )
<b>Associate professors:</b>	I. Albrecht ( <i>Philosophy, chair terms II and III</i> ) (on leave term(s) I), E. Carlson ( <i>Art History, chair term I</i> ) (on leave term(s) III), C. Daughtry ( <i>Anthropology</i> ), A. Guenther-Pal ( <i>German</i> ), J. McQuinn ( <i>Conservatory of Music</i> ), K. Privatt ( <i>Theatre Arts, James G. and Elthel M. Barber Professor of Theatre and Drama</i> )
<b>Assistant professors:</b>	A. Draheim ( <i>Psychology</i> ), A. Vanden Elzen ( <i>Library and Media Center</i> )
<b>Visiting assistant professor:</b>	J. Pruett
<b>Instructor:</b>	M. Quiason

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.

## Required for the major in Gender Studies

Students who major in gender studies will be able to describe scholarly debates over definitions of gender and explain why gender studies emphasizes the culturally constructed nature of gender. They will articulate a variety of disciplinary perspectives on gender and demonstrate familiarity with a range of theoretical models in gender studies, and they will apply one or more theoretical models in gender studies to an original scholarly inquiry.

The major in gender studies requires:

1. Two core courses:
  - a. GEST 100 *Introduction to Gender Studies*
  - b. GEST 240 *Methods in Gender Studies*
2. Either GEST 300 *Queer Theory* or GEST 301 *Intersectional Feminist Theories*
3. One course from ANTH/HIST category (GEST 110: *Gender and Feminism in Historical Perspective* or GEST 350: *Anthropology of Gender*)
4. One course from PSYC/BIOL category (GEST 180: *The Biology of Human Reproduction* or GEST 270: *The Psychology of Gender*)
5. Five additional 6-unit courses in (or cross-listed with) GEST; at least one must be at level 400 or above. A 600-level capstone course may count toward one of these five
6. A 600-level senior capstone project OR large project in a comparable course as a *Senior Experience*

No more than 6 units of independent study may be substituted for one course

## Senior Experience in Gender Studies

Students majoring in gender studies will enroll in a *Senior Experience* that is approved by the Gender Studies Advisory Committee 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 Advisory Committee.

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.

## Required for the minor in gender studies

1. Two core courses:
  - a. GEST 100 *Introduction to Gender Studies*
  - b. GEST 240 *Methods in Gender Studies*
2. Either GEST 300 *Queer Theory* or GEST 301 *Intersectional Feminist Theories*
3. Three additional 6-unit courses with gender content:
  - a. Two must be cross-listed in GEST, and one may be a GEST-component course (requires advisor and instructor approval)
  - b. At least two of the courses must be 200-level or above
  - c. Six units of independent study may be substituted for one course

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.

## Courses - Gender Studies

### **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 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 and laboratory. Primarily for non-science majors; credit not applicable to the biology major. *Units: 6.*

*Also listed as Biology 100*

### **GEST 191: 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. PREREQUISITES: Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

### **GEST 195: 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. 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. PREREQUISITES: Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

### **GEST 205: DIVERSITY IN HUMAN SEXUALITY**

The general goal of this course is to examine the diversity of human sexuality in contemporary American society. Students will explore various social, cultural, clinical, and health perspectives of human sexuality. Topics may include gender and gender roles, love and intimacy, communication, sexual expression, contraception, pregnancy, childbirth, sexual coercion, challenges to sexual functioning, sexual transmitted infections and HIV/AIDS, and commercial sex. *Units: 6.*

*Also listed as Psychology 205*

### **GEST 210: GENDER, SPORTS AND SOCIETY**

This lecture/discussion course applies the interdisciplinary study of gender--the social creation and cultural representation of femininity and masculinity--to sport cultures. The course addresses how sports are shaped by gender, race, class and sexuality. Exams and projects engage topics including athletic bodies, social stratification, media, fandom, nationality and citizenship, ability and disability, sport economics, fitness and body image. *Units: 6.*

### **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. PREREQUISITES: Sophomore standing or consent of instructor *Units: 6.*

*Also listed as History 335*

*Prerequisite: Sophomore standing or consent of instructor*

### **GEST 222: 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. PREREQUISITES: Sophomore standing *Units: 6.*

*Also listed as Musicology 221*

*Prerequisite: Sophomore standing*

### **GEST 240: METHODS IN GENDER STUDIES**

This course explores Gender Studies knowledge production, including devising research questions, data gathering, writing practices, and analytical approaches. We explore the origins and ideas behind feminist and queer approaches to historical research, literary analysis, ethnography and oral history, science studies, and cultural analysis, and how methodologies combine in interdisciplinary scholarship. Students will strengthen Gender Studies understanding while developing writing skills through a research paper. PREREQUISITES: GEST 100 or any two GEST courses *Units: 6.*

*Prerequisite: GEST 100 or any two GEST courses*

### **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. PREREQUISITES: GEST 100 or consent of instructor *Units: 6.*

*Prerequisite: GEST 100 or consent of instructor*

### **GEST 261: FEMINISM AND PHILOSOPHY**

A consideration of the contribution of feminism to a range of subjects of philosophical inquiry, including: the philosophy of mind, ethics and the history of philosophy. PREREQUISITES: One course in philosophy, sophomore standing, or consent of instructor *Units: 6.*

*Also listed as Philosophy 260*

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

### **GEST 270: THE PSYCHOLOGY OF GENDER**

An examination of theory and research on gender identity, gender roles, discrimination, and gender similarities and differences. Topics include gender stereotypes, gender identity development, sexual orientation, sex education, as well as intersections of gender with other aspects of identity. PREREQUISITES: Sophomore standing *Units: 6.*

*Also listed as Psychology 310*

*Prerequisite: Sophomore standing*

### **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.*

*Prerequisite: GEST 100, or another GEST class and consent of instructor*

### **GEST 283: BEYOND "WHO LIVES? WHO DIES? WHO TELLS YOUR STORY?": GENDER IN ADOLESCENT & YOUNG ADULT LITERATURE**

This seminar engages students in critically reading literature for and about adolescents that focuses on depictions and constructions of gender and sexuality. Readings may include novels/graphic novels, poetry, and memoir, as well as scholarship on young adult literature with approaches drawn from gender, literacy, literary, ethnic, and disability studies. Discussion, short papers, and final project. PREREQUISITES: Sophomore standing *Units: 6.*

*Also listed as Education Studies 283*

*Prerequisite: Sophomore standing*

### **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. PREREQUISITES: GEST 100, or another GEST class and consent of instructor *Units: 6.*

*Prerequisite: GEST 100, or another GEST class and consent of instructor*

### **GEST 301: INTERSECTIONAL FEMINIST THEORIES**

What is feminism? What are its central tenets, and how have they changed? How do they affect me now? These questions and more animate our exploration of feminist theory and practice, culminating in a final independent paper. The course includes core texts in feminist theory, with particular attention to standpoint theory, essentialism and constructionism, women-of-color feminisms, intersectionality, and work in Western and non-Western feminisms. PREREQUISITES: GEST 100 and either GEST 240 or two GEST courses numbered 100-299, or consent of instructor. *Units: 6.*

*Prerequisite: GEST 100 and either GEST 240 or two GEST courses numbered 100-299, or consent of instructor.*

### **GEST 315: GENDER IN 20TH-CENTURY AFRICA**

An examination of the changing roles of African men and women in the 20th century. The course will focus on the rapid social transformations of the 20th century — colonialism, abolition of slavery, the spread of Christianity and Islam, urbanization, the birth of new nations — and their challenges to traditional understandings of what it meant to be a man or woman. PREREQUISITES: Junior standing or some gender studies background *Units: 6.*

*Also listed as History 220*

*Prerequisite: Junior standing or some gender studies background*

### **GEST 320: STRONG NATIONS: PERSPECTIVES OF CONTEMPORARY NATIVE AMERICAN WOMEN**

An interdisciplinary examination of issues facing Native American women today. This course explores the ways gender, race and ethnicity shape identity as well as narrative constructions of nation in regional contexts. Readings by contemporary indigenous women authors, with field trips to federally recognized tribal lands and discussion with Native American women leaders, activists, scholars, musicians, artists and business leaders from a variety of nations. *Units: 6.*

*Also listed as Ethnic Studies 300*

### **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. PREREQUISITES: Sophomore level or above *Units: 6.*

*Also listed as Film Studies 300, History 300*

*Prerequisite: Sophomore level or above*

### **GEST 324: GENDER AND CINEMA**

This course examines gender and film in an international context. Topics include the construction of femininity and masculinity in film, feminist and queer film theories, analysis of film using intersectional and formal approaches, women behind the camera, and gender and genre. PREREQUISITES: FIST 100, GEST 100, the equivalent, or consent of instructor *Units: 6.*

*Also listed as Film Studies 324*

*Prerequisite: FIST 100, GEST 100, the equivalent, or consent of instructor*

### **GEST 325: BLACK, BROWN, AND QUEER ON FILM: RACE, GENDER, AND SEXUALITY ON FILM**

Visual culture has long defined that which is not white, not queer, and not male as deviant from the visual norm. This course will explore the way in which film culture has traditionally positioned people it defines as deviant from the racial, ethnic, gender or sexual norm and the ways in which filmmakers have responded to that positioning. PREREQUISITES: Sophomore standing or consent of instructor *Units: 6.*

*Also listed as Film Studies 325, Ethnic Studies 425*

*Prerequisite: Sophomore standing or consent of instructor*

### **GEST 345: THEORIZING THE FEMALE BODY IN EAST ASIAN ART**

This course explores how the female body and the gendering of space has been addressed in murals, paintings, performance, film, and popular culture during the course of East Asian art history. We will discuss how social and political issues were defined through images of bodies in Japan, Korea, and China in the context of national identity formation, historical reconstruction, subjectivity, and sexuality. Students will also work to develop and refine the quality of their communication skills by presenting and debating their ideas throughout the course. PREREQUISITES: Sophomore standing *Units: 6.*

*Also listed as East Asian Studies 345, Art History 345*

*Prerequisite: Sophomore standing*

### **GEST 350: ANTHROPOLOGY OF GENDER**

An anthropological approach to the study of gender and a/sexuality, and how they intersect with other dimensions of social difference such as race, class, and ethnicity. Topical, ethnographic approach to examining these intersections. Focus on issues such as sexual behavior, reproduction, parenting, trans\* identity, work, communication, and violence. PREREQUISITES: ANTH 110 or GEST 100 *Units: 6.*

*Also listed as Anthropology 306*

*Prerequisite: ANTH 110 or GEST 100*

### **GEST 351: ARCHAEOLOGY OF GENDER AND SOCIAL CLASS**

An examination of the relationship between gender, social class, and material culture. Focus on how social roles and statuses are reflected in the archaeological record and on the problems in identifying and determining social roles and statuses in prehistory. Readings include studies from both the Old and New Worlds and modern theoretical approaches. PREREQUISITES: ANTH 120 *Units: 6.*

*Also listed as Anthropology 320*

*Prerequisite: ANTH 120*

### **GEST 353: BUDDHISM AND GENDER**

This discussion-based course investigates the ways in which women and gender minorities participate in Buddhist culture around the world. By reading texts by and about Buddhist women, this course will explore the extent to which gender affects social status, leadership roles, and access to education in Buddhist communities in South Asia, East Asia, and the United States. *Units: 6.*

*Also listed as Religious Studies 353*

### **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 monstrosity 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 Studies 361, Film Studies 361*

### **GEST 362: VAMPIRES, MONSTERS, AND MAN-EATERS**

This course examines the borders of the human through the figures of the vampire, monster, and femme fatale in literature, film, and the visual arts. Featured in the works of canonized authors as well as within popular culture, “monstrosity” can provide valuable insights into numerous aspects of German history and psychosexual relations. Possible texts include the early vampire film *Nosferatu*, Wedekind’s *Lulu* tragedies, Patrick Süskind’s *Das Parfum*, and paintings by H.R. Giger. PREREQUISITES: GER 312 *Units: 6.*

*Also listed as Film Studies 362, German Studies 462*

*Prerequisite: GER 312*

### **GEST 370: GENDER AND SEXUALITY IN MODERN AND CONTEMPORARY ART**

This discussion-based course examines the role gender has played in the development of Western art from the modern and post-modern periods. The student should expect to achieve an understanding of the following topics: how artists have represented, theorized, and politicized gender in their work, the gendering of the art historical canon and its marginalized artists, and how the act of looking in art reception is informed by gender and sexuality. PREREQUISITES: ARHI 101 or GEST 100 or approval of instructor *Units: 6.*

*Also listed as Art History 370*

*Prerequisite: ARHI 101 or GEST 100 or approval of instructor*

### **GEST 390: TUTORIAL STUDIES IN GENDER STUDIES**

Advanced study, arranged and carried out under the direction of an advisor. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **GEST 391: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **GEST 395: 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. 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. PREREQUISITES: Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

### **GEST 399: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **GEST 404: GENDER AND INTERSECTIONAL IDENTITIES IN VIDEO GAMES**

In this course, students will explore gender and intersectional identities in video games from an advanced and in-depth level. Students will analyze literature, multiple video games, and metacultural content while exploring the topics of gender and other forms of identity. Students will produce their own media content to share their findings with the gaming community. PREREQUISITES: FIST290, GEST100 or instructor approval *Units: 6.*

*Also listed as Film Studies 404*

*Prerequisite: FIST290, GEST100 or instructor approval*

### **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. PREREQUISITES: One 300-level Spanish course, its equivalent, or consent of instructor *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 and discussion of recent and current events in Spain with a focus on issues of gender and sexuality, immigration, and nationalism. Students study and present on topics that affect Spanish society today by reading, watching and listening to a variety of media sources, articles and theoretical readings. PREREQUISITES: One 300-level Spanish course, its equivalent, or consent of instructor *Units: 6.*

*Also listed as Spanish 316*

*Prerequisite: One 300-level Spanish course, its equivalent, or consent of instructor*

### **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. PREREQUISITES: Junior standing or consent of instructor *Units: 6.*

*Also listed as History 430*

*Prerequisite: Junior standing or consent of instructor*

### **GEST 421: *MUSIC AND GENDER***

In this course we will explore some of the relationships between western musickings and gender identities in specific contexts. We will consider musickings' functions as reflections of, reactions to, and active participants in gender construction, experience, and expression. We will examine musicking as a normative force and as a space for being and making in defiance of or complex interaction with hegemonic control. We will explore ambiguities and possibilities of queer musicology, virtualities, and intersectionalities. PREREQUISITES: MUCO 212 or MUCO 202 *Units: 6.*

*Also listed as Musicology 421*

*Prerequisite: MUCO 212 or MUCO 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. PREREQUISITES: Junior standing or above *Units: 6.*

*Also listed as Film Studies 400, History 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. PREREQUISITES: Junior standing, an intermediate course in English or gender studies, or consent of instructor *Units: 6.*

*Also listed as English 515*

*Prerequisite: Junior standing, an intermediate course in English or gender studies, or consent of instructor*

**GEST 446: GENDER AND THE ENLIGHTENMENT**

This course will examine writings by both men and women that reflect on the changing social roles for women in eighteenth-century Britain. Focusing on women's labor, reproduction, reading, and writing, the course will consider to what extent women could participate in the project of the Enlightenment. PREREQUISITES: Junior standing, ENG 230, or consent of instructor *Units: 6.*

*Also listed as English 446*

*Prerequisite: Junior standing, ENG 230, or consent of instructor*

**GEST 476: NINETEENTH CENTURY AMERICAN WOMEN WRITERS**

An exploration of 19th century women writers, including Sigourney, Harper, Stowe, Jacobs, Dickinson, Harding Davis, Chopin, Lazarus, Johnson, Zitlaka-sa and/or others. PREREQUISITES: Junior standing, an intermediate course in English, or consent of instructor. *Units: 6.*

*Also listed as English 476*

*Prerequisite: Junior standing, an intermediate course in English, or consent of instructor.*

**GEST 477: DICKINSON**

In this lecture/discussion course, we will grapple with the difficult poetry of Emily Dickinson, one of the greatest, and most mythologized, of American poets. Cutting through the myths of Dickinson, we will attempt to get to the truth of Dickinson by careful readings of her poetry and archival investigations of its historical and material contexts. Assignments will include short weekly papers, presentations, and a substantial final research project. PREREQUISITES: Junior standing or one course in English at the 200-level or above, or consent of instructor. *Units: 6.*

*Also listed as English 477*

*Prerequisite: Junior standing or one course in English at the 200-level or above, or consent of instructor.*

**GEST 493: MUSIC AND GENDER IN CROSS-CULTURAL PERSPECTIVE**

This course examines the relationship between the constructions of gender identities and music performance and practice, and looks at history and development of approaches, theories, and studies regarding this relationship. Each week contains theoretical readings from gender studies, women's studies, or feminist scholarship as well as ethnomusicological case studies from a variety of locations around the world. PREREQUISITES: MUCO 212 or MUCO 202 or GEST 100 or GLST 100 or consent of instructor. *Units: 6.*

*Also listed as Musicology 493*

*Prerequisite: MUCO 212 or MUCO 202 or GEST 100 or GLST 100 or consent of instructor.*

### **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, Djébar, Cixous, Bugul, Kristeva, Sebbar, Sand, Colette, and Hébert. PREREQUISITES: One 400-level French course or consent of instructor *Units: 6.*

*Also listed as French 503*

*Prerequisite: One 400-level French course or consent of instructor*

### **GEST 506: *CONTEMPORARY AFRICAN-AMERICAN WOMEN POETS***

In this lecture/discussion course, we'll look at the great stylistic variety of poetry that Black women have been writing during the past twenty years. Students will consider poetry through the lenses of critical race and gender criticism and will write weekly short papers and a substantial research paper. Poets may include Marilyn Nelson, Natasha Trethewey, Claudia Rankine, Tracy K. Smith, Nikky Finney and others. PREREQUISITES: ENG 250, ENG 260, or junior standing; or consent of instructor *Units: 6.*

*Also listed as Ethnic Studies 506, English 506*

*Prerequisite: ENG 250, ENG 260, or junior standing; or consent of instructor*

### **GEST 560: *TOPICS IN GENDER AND SOCIAL DEVELOPMENT***

This course examines social development with a particular focus on gender issues. Topics include gender identity in intersection with other types of identity development (e.g., ethnicity), sex education, gender role socialization, sexual orientation development, and parenting. *Units: 6.*

*Also listed as Psychology 560*

*Prerequisite: PSYC 260 or 265, or PSYC 310, or consent of instructor*

### **GEST 590: *TUTORIAL STUDIES IN GENDER STUDIES***

Advanced study, arranged and carried out under the direction of an advisor. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **GEST 591: *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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **GEST 595: *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. 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. PREREQUISITES: Counter Registration Required *Units: 1 TO 98*.

*Prerequisite: Counter Registration Required*

### **GEST 599: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98*.

*Prerequisite: Counter Registration Required.*

### **GEST 690: TUTORIAL STUDIES IN GENDER STUDIES**

Advanced study, arranged and carried out under the direction of an advisor. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98*.

*Prerequisite: Counter Registration Required.*

### **GEST 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98*.

*Prerequisite: Counter Registration Required.*

### **GEST 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. 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. PREREQUISITES: Counter Registration Required *Units: 1 TO 98*.

*Prerequisite: Counter Registration Required*

### **GEST 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98*.

*Prerequisite: Counter Registration Required.*

# GEOSCIENCES

**Professors:** M. Bjornerud (*Walter Schober Professor of Environmental Studies*), J. Clark (*chair*), A. Knudsen (*on leave term(s) III*)

**Assistant professor:** R. Ribbons (*on leave term(s) I*)

If “geosciences” makes you think of dusty collections of rocks, minerals and old bones, visit the Lawrence geosciences department. You will discover a thriving group of faculty members and students who consider the geosciences to be a way of seeing the Earth, a lens through which the planet’s past and present come simultaneously into focus.

Lawrence geosciences 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 mapping the roots of an ancient mountain belt in Michigan’s Upper Peninsula, instrumenting a watershed in eastern Wisconsin, acquiring thermal drone imagery over landslides along lake Michigan, examining microscopic rock structures with image-analysis software, and conducting geochemical and crystallographic studies with research equipment shared with the chemistry department. All geosciences 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 geosciences program. Recent destinations for the annual department field trip include the Driftless area, Wyoming, Ontario, 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.

Students will also examine the essential role of environmental justice in geosciences. All planetary inhabitants need access to fresh air, water, and food resources. Historically many anthropogenic systems and structures have restricted access to these essential resources for specific groups of people. The lack of equitable access to natural resources is increasingly recognized as a critical issue to address for social and environmental justice. This is especially timely in a world striving towards providing clean water resources, working towards climate action, and protecting biodiversity, as outlined by the United Nations Sustainable Development Goals.

In many ways, a major in geosciences is ideal for a liberal arts degree. The discipline draws not only upon one’s observational and analytical abilities but also upon one’s aesthetic and creative instincts.

## Required for the major in geosciences

Students who major in geosciences will learn to visualize earth processes over temporal and spatial scales, conduct research from hypothesis testing to data analysis and interpretation, and communicate scientific

information proficiently in both written and spoken form.

The major in geosciences requires the following:

1. Required foundational courses
  - a. One of the following introductory geosciences courses:
    - i. GEOS 110 *Introduction to the Geosciences*
    - ii. GEOS 125 *Natural Hazards*
    - iii. GEOS 150 *Introduction to Environmental Science*
  - b. GEOS 210 *History of Earth and Life*
  - c. GEOS 240 *The Material World: Geochemistry of Minerals, Rocks, and Water*
  - d. One of the following:
    - i. GEOS 360 *Earth Surface Processes*
    - ii. GEOS 370 *Tectonophysics*
2. Three courses from the following:
  - a. GEOS 214 *Climate and Climate Change*
  - b. GEOS 250 *Hot Rocks: Magmatism and Metamorphism*
  - c. GEOS 265 *Biogeochemistry*
  - d. GEOS 314 *Soil Science*
  - e. GEOS 340 *Advanced Geochemistry*
  - f. GEOS 360 *Earth Surface Processes*
  - g. GEOS 370 *Tectonophysics*
  - h. GEOS 430 *Watershed Hydrology*
3. Nine additional units in the geosciences in courses numbered 200 or higher. The following courses may also be used to meet this requirement: CHEM 212, ANTH 220, BIOL 235, or BIOL 420.
4. Courses in other sciences and mathematics
  - a. Introductory lab courses from two of the other natural sciences:
    - i. CHEM 115 or 116
    - ii. PHYS 141 or 151
    - iii. BIOL 130 or 150 or 230
  - b. One course from mathematics or focused on statistics:
    - i. MATH 107 or 117 or 120 or 140 or 207, or BIOL 170
5. Courses for the *Senior Experience*:
  - a. GEOS 580 *Junior Seminar* (3 units)
  - b. GEOS 620 *Senior Capstone* (3 units)

## **Required for the interdisciplinary major in natural sciences in geosciences and a secondary discipline**

Geosciences students who have strong secondary interests in physics, chemistry, or biology may construct a major involving geosciences and one of these sciences using the interdisciplinary major in the natural sciences.

The requirements for the interdisciplinary major with geosciences as the primary field are:

1. One of the following introductory geosciences courses:
  - a. GEOS 110: *Introduction to the Geosciences*,
  - b. GEOS 125: *Natural Hazards*, or
  - c. GEOS 150: *Introduction to Environmental Science*
2. GEOS 210: *History of Earth and Life*
3. PHYS 141: *Principles of Classical, Relativistic, and Quantum Mechanics* and 151: *Principles of Classical Physics*
4. Either of the following:
  - a. BIOL 130: *Integrative Biology: Cells to Organisms*, 150: *Integrative Biology: Organisms to Ecosystems*, and 170: *Integrative Biology: Experimental Design and Statistics*
  - b. CHEM 115: *Principles of Chemistry: Structure and Reactivity* and 116: *Principles of Chemistry: Energetics and Dynamics*
5. At least 10 additional six-unit courses in the sciences (biology, chemistry, geosciences, and physics) numbered 200 or above, with at least five in the geosciences and at least three in the secondary discipline
6. Courses for the *Senior Experience*:
  - a. GEOS 580 *Junior Seminar* (3 units)
  - b. GEOS 620 *Senior Capstone* (3 units)

## Senior Experience in geosciences

The *Senior Experience* in geosciences comprises two 3-unit courses (GEOS 580 and 620), typically offered in the spring term of the junior year and the winter term of the senior year respectively.

The junior seminar (GEOS 580) 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 geosciences faculty, each student identifies a substantive research question and designs a plan by which to investigate that question.

In the senior capstone (GEOS 620), students work with faculty mentors to carry out these research plans, sometimes building upon work that they conducted during summer research on campus, in the field, or through programs at other universities as well as independent study work. By the end of GEOS 620, each student presents their research results and analyses to the department as a whole. Some students opt to continue their capstone research throughout their senior year as an honors project.

## Required for the minor in geosciences

1. One of the following introductory geosciences courses:
  - a. GEOS 110: *Introduction to the Geosciences*
  - b. GEOS 125: *Natural Hazards*
  - c. GEOS 150: *Introduction to Environmental Science*
2. GEOS 210: *History of Earth and Life*

3. Any two of the following:
  - a. GEOS 214: *Climate and Climate Change*
  - b. GEOS 240: *The Material World: Geochemistry of Minerals, Rocks, and Water*
  - c. GEOS 250: *Hot Rocks: Magmatism and Metamorphism*
  - d. GEOS 265: *Biogeochemistry*
  - e. GEOS 314: *Soil Science*
  - f. GEOS 340: *Advanced Geochemistry*
  - g. GEOS 360: *Earth Surface Processes*
  - h. GEOS 370: *Tectonophysics*
  - i. GEOS 430: *Watershed Hydrology*
4. An additional twelve units in geosciences courses numbered 200 or higher

## Teacher certification in geosciences/earth science or broad-field science

Students can seek teacher certification to teach geosciences/earth science at the secondary level. Certification requires a major in geosciences with a course in astronomy, environmental science and oceanography and one course in each of the other science disciplines. Students also have the option of seeking broad-field science certification by completing a minimum of two courses in each of two other science disciplines. Because state requirements are subject to change, students who plan to seek teacher certification should review the requirements in the Education section of the catalog and meet with the director of teacher education, preferably before the end of the sophomore year.

## Courses - Geosciences

### GEOS 110: *INTRODUCTION TO THE GEOSCIENCES*

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.*

### GEOS 125: *NATURAL HAZARDS*

Natural disasters are commonplace and are becoming increasingly costly in terms of economic impact and loss of human life. Through readings, lectures, and interactive labs we examine the root causes of natural hazards such as landslides, flooding, earthquakes, and tsunamis. We consider also the role humans have in elevating common hazards into humanitarian disasters, including the potential impact of global climate change on future events. *Units: 6.*

### GEOS 150: *ENVIRONMENTAL SCIENCE*

Presents principles of biology, chemistry, geology, and physics 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. This course may not be taken on a Satisfactory/Unsatisfactory basis. PREREQUISITES: Freshman or sophomore standing; consent of instructor required for juniors and seniors *Units: 6.*

*Also listed as Environmental Studies 150*

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

### **GEOS 191: DIRECTED STUDY IN GEOSCIENCES**

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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **GEOS 195: INTERNSHIP IN GEOSCIENCES**

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 geoscience 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **GEOS 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. PREREQUISITES: GEOL/GEOS 110, or GEOL/GEOS 125, or GEOL/GEOS 150 *Units: 6.*

*Also listed as Environmental Studies 230*

*Prerequisite: GEOL/GEOS 110, or GEOL/GEOS 125, or GEOL/GEOS 150*

### **GEOS 213: GEOENVIRONMENTAL HEALTH AND JUSTICE**

A course investigating the links between geology and health, with a particular focus on issues of environmental justice. The course considers topics such as human lead exposure from soil and water, the links between air pollution and asthma, and environmental health concerns presented by a changing climate. PREREQUISITES: GEOL/GEOS 110, ENST 150, or CHEM 116 *Units: 6.*

*Also listed as Environmental Studies 202*

*Prerequisite: GEOL/GEOS 110, ENST 150, or CHEM 116*

### **GEOS 214: CLIMATE AND CLIMATE CHANGE**

In this class we will cover the fundamental scientific knowledge about climate, and the long-term patterns and variation in climates over Earth's history. Students will be able to evaluate and explain major climate drivers in the past, and how past and future human activities are altering climates at both local and global scales. PREREQUISITES: GEOL 110 or GEOS 110 or GEOL 150 or GEOS 150 or CHEM 212 *Units: 6.*

*Also listed as Environmental Studies 235*

*Prerequisite: GEOL 110 or GEOS 110 or GEOL 150 or GEOS 150 or CHEM 212*

### **GEOS 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. Lecture and laboratory. PREREQUISITES: GEOS 110; high school physics recommended *Units: 6.*

*Also listed as Environmental Studies 237*

*Prerequisite: GEOS 110; high school physics recommended*

### **GEOS 240: THE MATERIAL WORLD: GEOCHEMISTRY OF MINERALS, ROCKS AND WATERS**

Low-temperature geochemical processes drive the formation, weathering, and alteration of rocks and minerals and govern the composition of waters at the Earth's surface. In studying these principles, we will investigate questions about the Earth's environment from both modern systems and deep geological time. Course includes a three-day field trip to northern Wisconsin in the middle of the term. One lab per week. PREREQUISITES: GEOL/GEOS 110 or GEOL/GEOS 125, or GEOL/GEOS 150, and CHEM 115 *Units: 6.*

*Also listed as Environmental Studies 240*

*Prerequisite: GEOL/GEOS 110 or GEOL/GEOS 125, or GEOL/GEOS 150, and CHEM 115*

### **GEOS 250: HOT ROCKS**

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. PREREQUISITES: GEOL/GEOS 110 and CHEM 116; GEOL/GEOS 240 and GEOL/GEOS 245 *Units: 6.*

*Prerequisite: GEOL/GEOS 110 and CHEM 116; GEOL/GEOS 240 and GEOL/GEOS 245*

### **GEOS 265: BIOGEOCHEMISTRY**

This course explores fundamental cycles between earth's major reservoirs of nutrients such as nitrogen, phosphorus, carbon and water. Through lecture and group presentations, students will gain a solid understanding of the fundamentals of biogeochemical cycles and the mechanism underlying the biological transformations of those elements. Lecture and laboratory PREREQUISITES: BIOL 130 or GEOL/GEOS 110 *Units: 6.*

*Also listed as Environmental Studies 265, Biology 265*

*Prerequisite: BIOL 130 or GEOL/GEOS 110*

### **GEOS 314: SOIL SCIENCE**

Taking a deeper look at the world beneath our feet, this class focuses on soil formation and development over time and the interactions between soils and other components of the Earth system. We explore the linkages between above-ground and below-ground biotic communities and how they biotic and physical worlds interact with geology to provide the fruitful resource of soil. Exams and laboratory providing hands-on experience with soils. PREREQUISITES: GEOS 110, or ENST 150, or instructor approval *Units: 6.*

*Prerequisite: GEOS 110, or ENST 150, or instructor approval*

### **GEOS 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. PREREQUISITES: GEOL 240 and CHEM 115, or consent of instructor; CHEM 116 recommended *Units: 6*.

*Also listed as Geology 340, Environmental Studies 330*

*Prerequisite: GEOL 240 and CHEM 115, or consent of instructor; CHEM 116 recommended*

### **GEOS 360: EARTH SURFACE PROCESSES**

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. PREREQUISITES: GEOL/GEOS 110 and 240 or consent of instructor; PHYS 141 or 151 recommended. *Units: 6*.

*Also listed as Environmental Studies 335*

*Prerequisite: GEOL/GEOS 110 and 240 or consent of instructor; PHYS 141 or 151 recommended.*

### **GEOS 370: TECTONOPHYSICS**

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. PREREQUISITES: GEOL/GEOS 240 or consent of instructor *Units: 6*.

*Prerequisite: GEOL/GEOS 240 or consent of instructor*

### **GEOS 390: TUTORIAL IN GEOSCIENCE**

Advanced work, arranged and carried out in consultation with an instructor. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98*.

*Prerequisite: Counter Registration Required.*

### **GEOS 391: DIRECTED STUDY IN GEOSCIENCES**

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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98*.

*Prerequisite: Counter Registration Required.*

### **GEOS 395: INTERSHIP IN GEOSCIENCES**

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 geoscience 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98*.

*Prerequisite: Counter Registration Required.*

### **GEOS 399: INDEPENDENT STUDY IN GEOSCIENCE**

Advanced research, arranged in consultation with the department. Students considering an honors project should register for this course, for one or more terms. PREREQUISITES: Counter Registration Required. *Units:*

1 TO 98.

*Prerequisite: Counter Registration Required.*

### **GEOS 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.

PREREQUISITES: GEOL 110; PHYS 141 or 151 recommended *Units: 6.*

*Also listed as Geology 430, Environmental Studies 430*

*Prerequisite: GEOL 110; PHYS 141 or 151 recommended*

### **GEOS 520: SEMINAR IN SELECTED TOPICS IN GEOSCIENCE**

An opportunity for students to read and analyze primary literature on significant topics in geology.

*Topic for*

*Units: 1 TO 98.*

*Prerequisite: GEOS 110, GEOS 125, or GEOS 150, or consent of instructor*

### **GEOS 550: SEMINAR IN FIELD GEOSCIENCE**

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, the Rocky Mountains, the Lake Superior Region, Hawaii, or Puerto Rico. May be repeated for credit when topic is different. *Units: 3.*

*Prerequisite: GEOL/GEOS 110, or GEOL/GEOS 125, or GEOL/GEOS 150, and consent of instructor*

### **GEOS 580: JUNIOR SEMINAR IN GEOSCIENCE**

The goal of the Junior Seminar is to engage geosciences majors in the scientific process. The course begins with consideration of the history of the geosciences 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 (GEOS 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. PREREQUISITES: Declared geology or geosciences major or minor and junior standing, or consent of instructor. *Units: 3.*

*Prerequisite: Declared geology or geosciences major or minor and junior standing, or consent of instructor.*

### **GEOS 590: TUTORIAL IN GEOSCIENCE**

Advanced work, arranged and carried out in consultation with an instructor. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **GEOS 591: DIRECTED STUDY IN GEOSCIENCES**

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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **GEOS 595: INTERNSHIP IN GEOSCIENCES**

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 geoscience 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **GEOS 599: INDEPENDENT STUDY IN GEOSCIENCE**

*Units: 1 TO 98.*

### **GEOS 620: SENIOR CAPSTONE IN GEOSCIENCE**

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. PREREQUISITES: GEOS 580, declared geology major or minor and senior standing, or consent of instructor. *Units: 3.*

*Prerequisite: GEOS 580, declared geology major or minor and senior standing, or consent of instructor.*

### **GEOS 690: TUTORIAL IN GEOSCIENCE**

Advanced work, arranged and carried out in consultation with an instructor. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **GEOS 691: DIRECTED STUDY IN GEOSCIENCES**

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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **GEOS 695: INTERNSHIP IN GEOSCIENCE**

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 geoscience 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

**GEOS 699: *INDEPENDENT STUDY IN GEOSCIENCE***

Advanced research, arranged in consultation with the department. Students considering an honors project should register for this course, for one or more terms. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

# GERMAN

Associate professor:

A. Guenther-Pal (*chair*)

Visiting assistant professors:

M. Carone, D. Lange

## ***Did you know:***

- *German is the official language or co-language of 9 countries and that it is a minority language throughout the globe including in Poland, Namibia, Brazil, and Romania? **It is the most spoken native language in the European Union.***
- *The U.S. poet Audre Lorde taught at the Free University in Berlin in the 1980s and 1990s, helping spur the Black German movement?*
- *The Sorbs/Wends are a Slavic minority who have maintained many of their cultural traditions and practices in eastern Germany?*
- *Between 23% and 38% of the populations of Austria, Germany and Switzerland have a migrant background?*
- *The first Institute of Sexology was founded in Berlin in 1919?*
- *Germany is home to the largest Turkish population outside of Turkey?*

***Why study German?*** A relevant field for the 21st century, German Studies emphasizes the diversity of the German-speaking world. Of course, German has long been a crucial language of the arts, philosophy, and the social and natural sciences. The German-speaking countries have played a significant role in European and global world history, while united Germany is one of the driving forces behind European integration and economic development. The Germanophone world offers some of the most innovative literature, music, art, film and other forms of cultural expression and a breadth of multicultural perspectives. As a result, German is an important language—not just in Germany, Austria, Liechtenstein, and the German-speaking cantons of Switzerland—but also throughout the world.

***German Studies at Lawrence University.*** Our German Studies department embraces cultural studies. In our classes, you learn the German language, of course, but you also engage with literature, history, and culture, including popular culture—film, television and popular literature. Lawrence's German Studies courses approach language as part of a larger context; even our beginning classes are also a cultural studies curriculum.

As a German Studies student, you flex your critical thinking skills and work among multiple interdisciplinary frameworks. Take courses drawn from many intellectual traditions, including, literary studies, film studies, queer and trans studies, gender studies, history, critical ethnic and race studies, disability studies, and postcolonialism. Our faculty work in multiple programs including: Ethnic Studies, Film Studies, Gender Studies, and Global Studies.

We view all cultural artifacts as “readable.” This means you encounter not just literature, but also film and television, history, comics, music, art and visual culture, architecture, politics, social media, fashion, and much more. This exciting mix provides access to a dynamic, diverse, and interdependent international community, a global community in which the German-speaking countries are ever more important. The knowledge and skills you acquire in German Studies are applicable to a wide variety of careers and offer a lifetime of cultural rewards.

**Off-campus Study.** Study in the German-speaking world in one of our affiliated programs in Berlin, Freiburg, and Vienna or work with us to find a program that meets your specific needs. On campus, maintain a connection to German language and culture at our lunch and dinner tables or at departmental events.

## Required for the major in German Studies

The German Studies major requirements are structured so as to offer students the flexibility to select courses based on their individual interests. Attain proficiency in the language after completing the sequence GER101⇒GER102⇒GER201⇒GER202⇒GER285. If you have had previous experience in German, take the [placement assessment](#). After GER285 (or equivalent), the only required courses are GER312: *Reading Texts and Contexts* and the *Senior Experience* (either GER600: *Senior Seminar* or an independent study).

Students who complete the major in German Studies can expect to achieve the following:

- At least intermediate-high to advanced-low level proficiency in the four language skills (listening, speaking, reading and writing);
- The ability to engage critically and analytically with a variety of literary and cultural texts (e.g., poetry, film, drama, material culture, visual art, historical documents, novels, popular music) by situating them in their aesthetic, historical, political, social and (inter-)cultural contexts;
- Demonstrate knowledge of Germanophone cultures as diverse, dynamic, multi-lingual, and global;
- At the culmination of the major, execute the research and writing skills to carry out an independent project relevant to the discipline of German Studies using primary and secondary resources.

The major in German Studies requires:

1. 60 units beyond GER 202, including GER 312: *Reading Texts and Contexts*. At least 36 of these units must be taken at Lawrence. Twelve units taught in English may count toward the major, but companion tutorials taught in German taken with courses taught in English 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 (see *Senior Experience* below).
3. Students who expect to graduate present a portfolio by the second week of their final term. The student's advisor will review a portfolio consisting of the following materials submitted electronically:
  - a. a brief reflection statement in which students evaluate their intellectual development as German Studies majors
  - b. a list of courses taken for the major
  - c. sample *Lesejournale* or other short writing assignments from all German Studies courses numbered 300 and above taken at Lawrence
  - d. four papers from upper-level courses, two of which may be from courses taken abroad
  - e. the capstone paper

## Senior Experience in German Studies

The German Studies department's *Senior Experience* consists of an independent research project that explores a question of the student's own choosing relevant to the discipline. Students hone their research and writing skills through the Senior Seminar (GER600) or independent study. They typically develop and explore a research question during Fall Term and complete the writing of the project during Winter Term of their senior year. Beyond the completion of a capstone project, other important components of the Senior Experience are advanced instruction in academic research and writing, evaluation of primary and secondary resources, peer and instructor feedback, utilization of various theoretical perspectives, and extensive revision.

Students undertaking a capstone in another discipline or who are wishing to receive teacher certification should work with all concerned departments/programs to assess the feasibility of an interdisciplinary capstone.

## Required for the minor in German Studies

1. Thirty-six units beyond GER 202, including GER 312: *Reading Texts and Contexts*. At least 24 of these units must be taken at Lawrence. Only six units taught in English may count toward the minor, but tutorials taught in German taken in conjunction with English courses may count as German Studies credits.

## Teacher certification in German (K-12)

German Studies majors can seek certification to teach German at the elementary and secondary levels. To be certified, students must spend at least one term in a German-speaking country studying the language and culture. They must also pass an oral and writing proficiency test. Students can add an endorsement in a second area (such as another language or English as a second language) by completing the appropriate minor. Students who plan to seek teacher certification should review the requirements in the Education Studies section of the catalog and meet with the director of teacher education, preferably before the end of the sophomore year.

## Courses - German Studies

### GER 101: *BEGINNING GERMAN 1*

The first course of a two-term sequence that introduces students to the basics of German. Students practice the four skills of speaking, writing, reading, and listening all within a German cultural studies context. *Units: 6*.

### GER 102: *BEGINNING GERMAN 2*

A continuation of German 101. Students build on their language proficiency with continued practice in the four skills of speaking, writing, reading, and listening all within a German cultural studies context. **PREREQUISITES:** GER 101 or the equivalent *Units: 6*.

*Prerequisite: GER 101 or the equivalent*

### GER 191: *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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **GER 195: 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. PREREQUISITES: Counter Registration Required. *Units: 2 OR 3.*

*Prerequisite: Counter Registration Required.*

### **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. PREREQUISITES: GER 102 or the equivalent *Units: 6.*

*Prerequisite: GER 102 or the equivalent*

### **GER 202: INTERMEDIATE GERMAN II**

Special emphasis on building reading and writing skills, expanding vocabulary, and developing cultural knowledge of the German-speaking countries. Cultural units may include "literary and art history, the environment, multiculturalism and diversity, and politics. PREREQUISITES: GER 201 or the equivalent *Units: 6.*

*Prerequisite: GER 201 or the equivalent*

### **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 works from broader continental contexts (Africa, Asia, Europe) and more modern adaptations. Students will be introduced to various interpretative approaches (e.g. feminist, Marxist, psychoanalytic, postcolonial, structuralist) that will enable them to analyze tale types, themes, and motives across cultures. Taught in English. Course will count toward the humanities general education requirement for BA and BA/BMus students. *Units: 6.*

### **GER 278: 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 278*

### **GER 285: ADVANCED COMPOSITION AND CONVERSATION**

This course follows GER202. Students improve and refine writing, speaking, and cultural analysis skills through the study of a variety of written texts (e.g. poetry, drama), films, and visual art. The discussion-based course allows students to acquire deeper knowledge of the language, history, and culture of the German-speaking countries. Students prepare grammar exercises, essays, presentations, and other assignments that expand

students engagement with German cultural studies. PREREQUISITES: GER 202 or consent of instructor *Units: 6.*

*Prerequisite: GER 202 or consent of instructor*

### **GER 290: *BERLIN: EXPERIENCING A GREAT CITY (IN ENGLISH)***

This course introduces students to one of the world's great cities. Classwork 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. Taught in English. Not open to students who have previously received or need to receive credit for GER 389. *Units: 2 OR 4.*

*Also listed as Global Studies 290*

### **GER 312: *READING TEXTS AND CONTEXTS***

This course serves as an introduction to German cultural studies and prepares students for upper-level course work in the major and minor. Students encounter the objects, methods, and theories of the interdisciplinary field German Studies, from film and literature to material culture; genre analysis to the close reading of poetry; and New Historicism to critical whiteness studies. The course is conducted primarily as a discussion seminar. PREREQUISITES: GER 285 or consent of instructor *Units: 6.*

*Prerequisite: GER 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. PREREQUISITES: Sophomore standing or consent of instructor *Units: 6.*

*Also listed as Global Studies 355*

*Prerequisite: Sophomore standing or consent of instructor*

### **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. May be repeated when topic is different. *Units: 6.*

*Also listed as Film Studies 357*

### **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 monstrosity 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 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. PREREQUISITES: GER 312 *Units: 6.*

*Prerequisite: GER 312*

### **GER 377: *INTRO TO GERMAN FILM INTRODUCTION TO GERMAN FILM***

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. PREREQUISITES: GER 312 *Units: 6.*

*Also listed as Film Studies 277*

*Prerequisite: GER 312*

### **GER 378: *BLACK EUROPE RESISTANCE, PERFORMANCE, & SELF-MAKING (IN ENGLISH)***

This course dispels racial myths of the European continent, introduces the Black Diaspora beyond the African American context, pushes the boundaries of belonging and national identity in Europe, and presents black individuals/collectives as historical agents and transnational actors on and beyond the continent. Course materials may consist of literature, poetry, music videos, film, and art. Assessments include short reflection papers, research papers, and oral presentations. 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 Global Studies 378, Ethnic Studies 378*

### **GER 388: *GERMAN DRAMA***

Study of German dramatic literature that may or may not culminate in a workshop performance of a play or portions of plays. Students will situate German plays in their literary, historical and cultural context and also perform short dramatic readings. Assignments may also include short essays and oral presentations. PREREQUISITES: GER 312 *Units: 6.*

*Prerequisite: GER 312*

**GER 389: *BERLIN: EXPERIENCING A GREAT CITY***

An introduction to one of the world's great cities. Classwork includes the history, culture and literature of Berlin and preparations for day-long walking tours that students will lead. Students will do some readings and discussions in German and write their comparative paper in German. Students must complete both the classroom portion of the course and the Berlin trip to receive credit. Taught in English. Not open to students who have previously received credit for GER 290. PREREQUISITES: GER 312 *Units: 2 OR 6.*

*Also listed as Global Studies 389*

*Prerequisite: GER 312*

**GER 390: *TUTORIAL STUDIES IN GERMAN***

Individual study arranged and carried out in close consultation with an instructor. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

**GER 391: *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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

**GER 395: *INTERSHIP 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. PREREQUISITES: Counter Registration Required. *Units: 2 OR 3.*

*Prerequisite: Counter Registration Required.*

**GER 399: *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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

**GER 412: *LITERATURE AND SOCIAL PROBLEMS***

Few would question literature's status as art, but literary texts are often also locations where authors explore imaginary solutions to real social problems. Unlike political pamphlets or non-fiction accounts, literature lets readers experience various problems and issues as they impact the lives of individual characters caught in difficult situations, e.g., class, ethnic, and gender conflicts, ecological disasters. PREREQUISITES: GER 312 *Units: 6.*

*Prerequisite: GER 312*

**GER 415: *FROM CALIGARI TO CABARET: THE CULTURE OF THE WEIMAR REPUBLIC (1918-1933)***

This course explores the aesthetic and cultural trends of the Weimar Republic (1918-1933), one of the most vibrant periods of German history. With particular emphasis on gender, race, and sexuality in modernity, we examine film, visual art, literary works, magazines, music and cultural phenomena such as the "new woman," the body beautiful, and the "Third Sex." Taught in German as a discussion seminar. PREREQUISITES: GER312 or equivalent *Units: 6.*

*Prerequisite: GER312 or equivalent*

#### **GER 416: KINDER- UND JUGENDLITERATUR**

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. PREREQUISITES: GER 312 or consent of instructor *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. PREREQUISITES: GER 312 *Units: 6.*

*Prerequisite: GER 312*

#### **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. May be repeated when topic is different. *Units: 6.*

*Prerequisite: GER 312*

#### **GER 421: GRIMMS MÄRCHEN**

This course examines the entire corpus of the Grimm's fairy tales, from the well-known to the obscure. Students will learn to find structural similarities and to situate the tales in their historical, social and literary context. PREREQUISITES: GER 312 or consent of instructor *Units: 6.*

*Prerequisite: GER 312 or consent of instructor*

#### **GER 422: DER DEUTSCHE KRIMI: NARRATIVES OF CRIME AND DETECTION**

In this course we will examine the development of crime and detective fiction in the German-speaking countries through close reading of several different media--novels, short stories, film, radio drama, television, and essays. PREREQUISITES: GER 312 or instructor approval *Units: 6.*

*Prerequisite: GER 312 or instructor approval*

#### **GER 431: TOPICS IN GERMAN-JEWISH STUDIES**

Study of German-Jewish authors, intellectual figures, and topics from the Enlightenment to the present. This course will examine the role of dual identities, issues of assimilation/acculturation, Jewish identification and the notion of Jewish self-hatred. Representative writers include Mendelssohn, Heine, Kafka, Freud, Benjamin, Celan, Becker, Hilsenrath, and Honigsmann. May be repeated when topic is different. *Units: 6.*

*Prerequisite: GER 312*

#### **GER 447: MIGRANTS AND GERMAN CULTURE**

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. PREREQUISITES: GER 312 or consent of the instructor *Units: 6.*

*Also listed as Ethnic Studies 382, Film Studies 447*

*Prerequisite: GER 312 or consent of the instructor*

#### **GER 462: VAMPIRES, MONSTERS, AND MAN-EATERS**

This course examines the borders of the human through the figures of the vampire, monster, and femme fatale in literature, film, and the visual arts. Featured in the works of canonized authors as well as within popular culture, “monstrousness” can provide valuable insights into numerous aspects of German history and psychosexual relations. Possible texts include the early vampire film *Nosferatu*, Wedekind’s *Lulu* tragedies, Patrick Süskind’s *Das Parfum*, and paintings by H.R. Giger. PREREQUISITES: GER 312 *Units: 6.*

*Also listed as Film Studies 362, Gender Studies 362*

*Prerequisite: GER 312*

#### **GER 465: TOPICS IN CONTEMPORARY GERMAN CULTURE**

This course explores recent developments in German culture: recent literature, visual culture, music and other arts, as well as topics from politics and society. May be repeated when topic is different. *Units: 6.*

*Prerequisite: GER 312*

#### **GER 590: TUTORIAL STUDIES IN GERMAN**

Individual study arranged and carried out in close consultation with an instructor. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

#### **GER 591: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

#### **GER 595: 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. PREREQUISITES: Counter Registration Required. *Units: 2 OR 3.*

*Prerequisite: Counter Registration Required.*

#### **GER 599: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **GER 600: SENIOR SEMINAR**

This two-term course serves as the Senior Experience for German Studies majors. Students explore potential topics, develop the scope of their project, conduct research, write and revise, and review each other's work. By the end of the course, they will produce an independently researched scholarly or creative project demonstrating their knowledge of the discipline. The course is conducted primarily as a workshop. PREREQUISITES: Declared major in German *Units: 2 TO 4.*

*Prerequisite: Declared major in German*

### **GER 690: TUTORIAL STUDIES IN GERMAN**

Individual study arranged and carried out in close consultation with an instructor. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **GER 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **GER 695: INTERSHIP 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. PREREQUISITES: Counter Registration Required. *Units: 2 OR 3.*

*Prerequisite: Counter Registration Required.*

### **GER 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

# GLOBAL STUDIES

<b>Professors:</b>	C. Skran ( <i>Government, Edwin &amp; Ruth West Professorship of Economics and Social Science, chair term III</i> ) (on leave term(s) I), R. Tapia ( <i>Spanish</i> )
<b>Associate professors:</b>	P. Blitstein ( <i>Dean of Faculty Office</i> ), J. Brozek ( <i>Government, Stephen Edward Scarff Professor of International Affairs</i> ), D. Chang ( <i>French and Francophone Studies, Margaret Banta Humleker Professor of French Cultural Studies, chair terms I and II</i> ) (on leave term(s) III), S. Downing ( <i>Conservatory of Music</i> ), E. Kern ( <i>History</i> ) (on leave term(s) II, III), L. Khor ( <i>English</i> ) (on leave term(s) III), M. Smith ( <i>Religious Studies</i> ), B. Vance ( <i>History</i> ) (on leave term(s) II, III)
<b>Assistant professors:</b>	H. Caruthers ( <i>Economics</i> ), T. Jimenez-Anglada ( <i>Spanish</i> ), N. Lin ( <i>Art History</i> )

Global studies is an interdisciplinary major that investigates the broad range of cultural, political, social and economic forces at play historically and today. Global studies majors will understand the global influences on the lives of individuals and will be sensitive to different identities, practices, thought systems, institutions and structures, particularly their roots, scope and linkages. They will recognize their place in the global community, including their impact—for good or ill—on cultural, political, economic and environmental issues. Global studies majors will possess the foundation necessary to lead responsible, meaningful, engaged lives in a connected, diverse and ever-changing world.

The global studies curriculum is designed to give students a structure in which to explore a range of interests. An introductory course introduces students to the diverse perspectives on globalization and models of interdisciplinary investigation. Global studies majors will choose a set of electives from one of four thematic groupings, all of which include approaches from multiple disciplines. In order to maintain a dynamic, up-to-date listing, electives that will count toward each of the tracks in the global studies major will be listed on the departmental website. This structure balances the breadth and depth of students' academic training and ensures that global studies majors will develop the ability to ask interconnected, interdisciplinary questions. Students may, in close consultation with their academic advisor, self-design a thematic track.

## Required for the major in global studies

1. GLST 100: *Intro to Global Studies* (6 units)
2. The equivalent of a minor in one additional language (~30 to 66 units, depending on incoming students' initial proficiency, i.e., where they begin their minor, and on the requirements of the chosen language.) Alternatively, some students may choose to fulfill the language requirement through the completion of GER+3 courses in one language plus three terms (or the equivalent of one year) in either a second language or mathematics/statistics/modeling. The combination of languages must clearly contribute to a particular project or career ambition, be approved by an advisor in global studies and demonstrate coherence with respect to the chosen track. Languages acquired during an off-campus experience are acceptable as long as the student achieves linguistic and cultural competency equivalent to the GER language competency requirement.
3. In consultation with a global studies faculty advisor, students must choose a set of eight six-unit thematically connected electives that meet the goals of one track listed below. Students and advisors should consult the departmental website carefully when selecting courses that count toward their track in the global studies major. All electives must satisfy the following requirements.

- a. Three six-unit courses from the arts, humanities, or musicology at the introductory or intermediate level (course numbers 100-300 or above);
  - b. Three six-unit courses from the social sciences at the introductory or intermediate level (course numbers 100-300 or above);
  - c. Two six-unit courses at the advanced level (course number 400+). One course must be from the social sciences; the other comes from the fields of arts, humanities, or musicology.
  - d. No more than two 100-level courses may count toward the elective requirements, and no more than two upper-level language department courses may be double-counted for the track and the language minor (or minor equivalent).
  - e. The core courses normally count within this portion of the requirements.
4. Required global experience at an off-campus site (local, domestic or abroad)
- Global studies students are required to participate in a globally engaged off-campus experience. Most students will fulfill this requirement through an approved Lawrence study abroad program. However, we recognize study abroad is not feasible for all students. Therefore, the off-campus global experience may also include local projects with global connections. Examples include working with the Fox Valley Refugee Resettlement Agency, the Hispanic Chamber of Commerce, the Hmong-American Partnership of the Fox Cities, the Northeast Wisconsin Chinese Association or with the City of Appleton's Office of Diversity & Inclusion. These projects must include 10 weeks of engagement, be connected to either the global studies primary language or track, and be pre-approved by a global studies advisor.
5. Completion of the *Senior Experience* in global studies (see below).

## GLOBAL STUDIES TRACKS

### *Nations and Identities*

Nations remain a central form of organization in the global world. Nations lie at the center of our interlocking system of political and economic institutions, and they also provide the organizing principle behind national languages and cultures, ethnic identities and even sporting events. Although nations claim to be ancient, modern nations only began to develop in the 18th century, and their future is by no means assured. This track seeks to approach global studies through an emphasis on the construction and function of nation, with attention given as well to newer, transnational forms of identity. Since the study of the nation requires a broad sense of the history of the nation, the reasons it developed and the variety of forms it has taken, there is a significant history component to this track, along with an emphasis on classes offered in government. In addition, classes in literature, culture and the arts will enrich students' understanding of how national identities are constructed and become emotionally compelling, as well as how they are contested through migration and integration, through devolution into smaller units, and by institutions and practices that transcend national boundaries. Students who choose the Nations and Identities track should choose two of the following core courses: GOVT 226: Identity Politics and Ethnic Conflict; GOVT 260: European Democracies; HIST 295: Nationalism in Modern History; HIST 315: Empire and Nation in Russian History; GLST 361: Western Encounters with China; GLST 340: International Politics.

### *Global Cities*

One of the central signs for globalization and even modernity is the importance of cities. Much of what is most exciting and new in our world stems from the cultural and ethnic mixing that takes place in global cities. Many Lawrence students aim to work in American cities that cater to the "creative class"—that is, young people who

seek to participate in the new opportunities opened up by education and technology. This cities track will prepare students for thinking about the history of urbanization and our interconnected world by understanding the socio-cultural, economic and political complexities of the nature and evolution of major cities. Depending on course content, examined cities may include (but are not limited to): Algiers, Athens, Beijing, Berlin, Buenos Aires, Cairo, Dakar, Paris, Istanbul, Moscow, Istanbul, Jerusalem, Johannesburg, Mexico City, Buenos Aires, Seoul, Shanghai and Tokyo. Students who choose the Global Cities track should choose two of the following core courses: GLST 246: Comparative Politics of Less Developed Countries; RLST 365: Faith and Power in the Mediterranean; GER 290/388: Berlin: Experiencing a Great City; GLST 352: Colonialism & Global Structures; GLST 284: The Spectacle of Edo Japan.

### *Human Security*

Human security is the study of global violence through the lens of the individual, with particular emphasis on vulnerable and marginalized communities. It includes multiple forms of vulnerability and structural violence, including discrimination, displacement, genocide, disease, poverty and environmental stress. This track offers students the opportunity to understand human security and vulnerable populations through an interdisciplinary lens, including narratives and other representations of human agency and social scientific analysis of the policies and institutions designed to address these challenges. Students who choose the Human Security track should choose two of the following core courses: GLST 248: Social Entrepreneurship; ECON 200: Development Economics; MUCO 493: Music and Gender in Cross-Cultural Perspective; ENG 516: Literature and Human Rights; GLST 518: Narratives of Inequality; GLST 271: Global Environmental Politics.

### *Arts and Exchange*

One path to understanding our global world is in the artistic expressions (including literature, performing arts, visual arts and film) through which identities are staked out and claimed. This track offers students the opportunity to think about the arts from the perspective of global systems, exchanges and regulations. Students will be encouraged to consider how economic systems, international organizations, the movement of people and the commodification and commercialization of cultural practices affect artistic production, notions of ownership and meaning across borders. Students who choose the Arts and Exchange track should choose two of the following core courses: HIST 105: Cross-Cultural Interactions Along the Silk Road; GLST 207: Intro to International Economics; ENG 280: Postcolonial Writers; GOVT 480: International Organizations; GLST 494: Music and the Environment.

## **Senior Experience in global studies**

The global studies major culminates in a *Senior Experience* consisting of a six-unit senior seminar. The seminar brings together students from all tracks, and it includes a set of common readings that revisit important theoretical issues in the field global studies. The readings will also highlight disciplinary differences in the objects of inquiry available to scholars of global studies and show again how interdisciplinary inquiry produces deeper understanding. Students' work in the seminar culminates with a portfolio showcasing their work in the major, and they will present that work to other members of the seminar. The portfolio will consist of the two components listed below. Together, the *Senior Experience* components will demonstrate that a student has developed interdisciplinary and intercultural proficiency.

1. A written, critical reflection on the student's off-campus global experience, with particular emphasis on curricular connections and personal development.
2. A revised version of a substantial (10–15 pages) paper written on a global topic and in an advanced (400+ level) course counting toward the global studies major.

## Courses - Global Studies

### **GLST 100: INTRODUCTION TO GLOBAL STUDIES**

What does it mean to think globally? This discussion-based course invites students to explore how networks and flows of people, wealth, goods, ideas and information across vast distances have shaped human experience. Course materials draw on insights from a range of disciplines, enabling students to apply global perspectives to the study of issues such as identity, war, migration, commerce, artistic expression and communication. **PREREQUISITES:** Freshman or sophomore standing only; consent of instructor required for juniors and seniors *Units: 6.*

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

### **GLST 105: CROSS-CULTURAL INTERACTIONS ALONG THE SILK ROAD, 200 BCE - 1400 CE**

The so-called "Silk Road" was the world's first superhighway, linking East Asia to the Mediterranean. The peoples along the way not only traded luxury goods, but also ideas, technology, and more. This course offers a thematic examination of the dynamic, cross-cultural interactions along the ancient and medieval Silk Road. (G & C) *Units: 6.*

*Also listed as History 105, East Asian Studies 105*

### **GLST 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.*

*Also listed as History 110*

### **GLST 130: ART OF ISLAMIC CULTURES**

This course introduces students to the rich artistic traditions generated by Islamic cultures from the 7th century onward. While considering the Umayyad, Abbasid, Ilkhanid, and Mughal dynasties, among others, we examine architecture, illuminated manuscripts, metalwork, ceramics, and more. A broad selection of readings and activities supplements class discussions on themes that include the role of art in Islam, relationships between art and power, and the importance of cross-cultural exchange. *Units: 6.*

*Also listed as Art History 130*

### **GLST 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.*

*Also listed as Government 140*

**GLST 160: EAST ASIA IN THE PREMODERN WORLD**

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 History 160, East Asian Studies 140, Ethnic Studies 121*

**GLST 165: EAST ASIA IN THE MODERN WORLD**

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 History 165, East Asian Studies 150*

**GLST 191: DIRECTED STUDY IN GLOBAL 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: 1 TO 98.*

**GLST 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) **PREREQUISITES:** Sophomore standing or consent of instructor *Units: 6.*

*Also listed as History 205*

*Prerequisite: Sophomore standing or consent of instructor*

**GLST 206: PERCHANCE TO DREAM: A COMPARATIVE HISTORY OF DREAMS FROM ANTIQUITY TO PRESENT**

For centuries, dream interpretation has been integrated into philosophical discourse, used as a political tool, and touted as proof of otherworldly activities. This seminar will examine dream theories as products of socio-cultural development in different historical contexts. *Units: 6.*

*Also listed as History 206*

**GLST 207: INTRODUCTION TO INTERNATIONAL ECONOMICS**

This course aims to develop an understanding of international economic issues and policies in open economies. The course will provide a general body of knowledge on topics such as gains from trade; patterns of trade; effect of trade on welfare; exchange rate policy regimes; international organizations; financial crises; and the effect of government policies on trade and the exchange rate. You will get exposed to economic modeling and learn analytical tools that can be applied to understand the changing world economy and analyze problems in international economic policy. You are encouraged to explore the potential and limitations of international economics in dealing with real-world problems. This course will assist you in improving your

economic writing skills as well as your ability to read critically and understand discussions on international economic issues in the press. PREREQUISITES: ECON 100 *Units: 6.*

*Also listed as Economics 205*

*Prerequisite: ECON 100*

### **GLST 208: *THE ATLANTIC WORLD***

Between 1400 and 1800 the peoples living on the coasts of the Atlantic Ocean forged personal, cultural, economic, and political relationships which tied Africa, Europe, and the Americas into an integrated “Atlantic World.” This course investigates those connections and contemplates the usefulness of the Atlantic World as a concept. (G&C or NA) PREREQUISITES: Sophomore standing or consent of instructor *Units: 6.*

*Also listed as History 207*

*Prerequisite: Sophomore standing or consent of instructor*

### **GLST 217: *HUMANITARIANISM AND VIOLENCE IN RELIGIOUS TRADITIONS***

This course will examine the religious motivations that have led religious groups to embrace global norms like human rights or reject them and turn to violence. We will examine liberation theology in Latin America and the writings of extremist thinker Sayyid Qutb. Much of the class will be centered on case studies such as Myanmar's Rohingya crisis where religion, immigration, and questions of human rights are at play. Offered in conjunction with Ripon College, with online interactions and travel to local places of worship. PREREQUISITES: Sophomore standing *Units: 6.*

*Also listed as Religious Studies 217*

*Prerequisite: Sophomore standing*

### **GLST 220: *TOPICS IN GLOBAL STUDIES***

An intermediate course with a rotating topic determined by faculty in the Global Studies program. Topics will be wide-ranging, but will include a global perspective and contribute to one of the four global studies thematic tracks (human security, global cities, nations and identities, or arts and exchange). May be repeated when topic is different. *Units: 6.*

### **GLST 245: *APPLE, GOOGLE, FACEBOOK***

The rhetoric surrounding technology invokes revolution and newness, but the products and services fit with the individualism of American (and global) views of self and society. We will examine both the positive visions offered by tech thinkers like Steward Brand and Ray Kurzweil, as well as the destructive results that occur as corporations “move fast and break things.” Students will complete a video critique of a digital platform. PREREQUISITES: Sophomore standing *Units: 6.*

*Also listed as Religious Studies 245*

*Prerequisite: Sophomore standing*

### **GLST 246: *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. PREREQUISITES: Sophomore standing and one of GOVT 110 or GOVT

140 *Units: 6.*

*Also listed as Government 245*

*Prerequisite: Sophomore standing and one of GOVT 110 or GOVT 140*

### **GLST 248: SOCIAL ENTREPRENEURSHIP**

Social entrepreneurs all over the world adopt and implement innovative ideas in order to address some of the world's most pressing problems. In this course, students will study the many dimensions of social entrepreneurship, especially those ventures that address problems of human security. Students will work with a team to propose an entrepreneurial solution to one such problem. **PREREQUISITES:** Sophomore standing or consent of instructor *Units: 6.*

*Also listed as Innovation & Entrepreneurship 245, Government 248*

*Prerequisite: Sophomore standing or consent of instructor*

### **GLST 270: THEORIES OF THE GLOBAL**

We live in an interconnected world of culture, goods, services and decisions exceeding national borders, but how do we understand what is happening and why? This seminar will complement economics and politics by considering postcolonialism, Marxism, feminism, critical theory and cultural studies in understanding global trends. Students will engage with critical paradigms and cultural artifacts in reading responses, written papers and a culminating project. *Units: 6.*

### **GLST 271: 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. **PREREQUISITES:** Sophomore standing or ENST 150 or GOVT 110 *Units: 6.*

*Also listed as Government 270, Environmental Studies 270*

*Prerequisite: Sophomore standing or ENST 150 or GOVT 110*

### **GLST 273: LONDON, A CITY SHAPED BY MIGRATION**

This class studies the lasting effects of migration on London as a global city. We will analyze historic and current influxes of people and how they have changed the structure, identity, and culture of London. Students will explore London neighborhoods and meet people who have found a new home here. Assignments and experiential learning will allow students to fully engage with London in a meaningful way. *Offered at the London Centre.* **PREREQUISITES:** Must be attending the Lawrence London Centre. *Units: 6.*

*Also listed as History 273*

*Prerequisite: Must be attending the Lawrence London Centre.*

### **GLST 280: POSTCOLONIAL WRITERS**

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, English 280*

### **GLST 284: THE SPECTACLE OF EDO JAPAN**

This course will focus on the diverse artistic production and consumption practices within Edo-period Japan (1603-1868). Topics include the revival of classical Heian narratives like *The Tale of Genji*, the rise of an urban bourgeois culture, the prints and paintings depicting kabuki actors, courtesans, and ghosts, the reification of the tea ceremony and encounters with the West through trade. PREREQUISITES: ARHI 101 or 175 or sophomore standing *Units: 6.*

*Also listed as Art History 284, East Asian Studies 284*

*Prerequisite: ARHI 101 or 175 or sophomore standing*

### **GLST 285: THE TRANSFORMATION OF THE MODERN CITY: TOKYO, SEOUL AND SHANGHAI (1860-1945)**

This course explores the transformation of the cityscape in Tokyo, Seoul, and Shanghai. Topics include the emergence of the modern artist, the search for an “avant-garde” of the East, the modernization of public and private spaces, the introduction of film and photography and the rise of the “modern girl.” PREREQUISITES: ARHI 101 or 175 or sophomore standing *Units: 6.*

*Also listed as Art History 285, East Asian Studies 285*

*Prerequisite: ARHI 101 or 175 or sophomore standing*

### **GLST 286: THE POLITICS OF POWER IN MODERN AND CONTEMPORARY CHINESE ART**

Over the past century, China has witnessed the arrival of Western Imperialism, mass rebellion, revolution, and radical reconstruction under the Communist regime. This class will trace how artists attempted to intervene in social life to change its course of development and how art continues to affect radical social change. PREREQUISITES: ARHI 101 or 175 or sophomore standing *Units: 6.*

*Also listed as Art History 286, East Asian Studies 286*

*Prerequisite: ARHI 101 or 175 or sophomore standing*

### **GLST 290: BERLIN: EXPERIENCING A GREAT CITY (IN ENGLISH)**

This course introduces students to one of the world's great cities. Classwork 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. Taught in English. Not open to students who have previously received or need to receive credit for GER 389. *Units: 2 OR 6.*

*Also listed as German Studies 290*

### **GLST 291: FLD EXPERIENCE GLOBAL STUDIES**

This topics course will allow students to experience sites that highlight global issues (political, religious, environmental, or cultural) through a one- or two-week field experience accompanied by at least one professor. Students should register for this course in the term prior to the planned travel. Some field experiences will require registration in the term following the field experience in order to complete a research project.

*Topic for 2018-19: Four Communities of Senegal*

This class prepares students for a December trip to Senegal. It will give students the opportunity to experience

the largest slave trading center on the Atlantic coast, and spend time in the current capital, Dakar. Students will learn about the lasting legacy of colonialism, the practice of Islam in Africa, and the challenges of urbanization in developing countries. This course will be conducted in English. Students will complete and present independent research during winter term. *Units: 3.*

### **GLST 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) PREREQUISITES: Sophomore standing or consent of instructor *Units: 6.*

*Also listed as Ethnic Studies 223, History 295*

*Prerequisite: Sophomore standing or consent of instructor*

### **GLST 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. PREREQUISITES: FREN 202 or consent of instructor *Units: 6.*

*Also listed as French 303*

*Prerequisite: FREN 202 or consent of instructor*

### **GLST 308: HALF THE SKY: CHINESE WOMEN'S HISTORY**

This course examines important questions about the lives of women in the last thousand years of Chinese history. Through an exploration of primary sources in translation, classic works of fiction, film, memoirs, and oral histories, we will address theoretical questions fundamental to both women's studies and Chinese history. (G & C) PREREQUISITES: Sophomore standing or consent of instructor *Units: 6.*

*Also listed as History 308, East Asian Studies 308*

*Prerequisite: Sophomore standing or consent of instructor*

### **GLST 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) PREREQUISITES: Sophomore standing or consent of instructor; HIST 320 or 325 recommended *Units: 6.*

*Also listed as Ethnic Studies 320, History 315*

*Prerequisite: Sophomore standing or consent of instructor; HIST 320 or 325 recommended*

### **GLST 330: INTRODUCTION TO FILM**

An introduction to the critical analysis of Latin American and Spanish film. Students will study a series of films

and pertinent readings through class discussions, different types of assignments, and presentations. The course is organized around the central topic of the relationship between audiovisual representation and power. Students will explore different ways in which Latin American and Spanish cinema has portrayed hegemonic and non-hegemonic identities along lines of race, ethnicity, gender, sexuality, and socioeconomic status. Class taught in Spanish. Units: 6. PREREQUISITES: SPAN 202, its equivalent, or official placement and consent of instructor. Students who successfully completed SPAN 430 cannot register for GLST 330. *Units: 6.*

*Also listed as Spanish 330*

*Prerequisite: SPAN 202, its equivalent, or official placement and consent of instructor. Students who successfully completed SPAN 430 cannot register for GLST 330.*

### **GLST 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. PREREQUISITES: GOVT 110 or 140 or sophomore standing *Units: 6.*

*Also listed as Government 340*

*Prerequisite: GOVT 110 or 140 or sophomore standing*

### **GLST 352: COLONIALISM AND GLOBAL STRUCTURES**

An overview of European colonialism in Africa and Asia, this course focuses on colonial ideologies in the 19th and 20th centuries. It will investigate the myths and realities of colonialism and compare the colonial practices of the Belgians, Dutch, English and French. Our analysis will be informed by essays written by leading colonial theorists, novels and films. Lecture/discussion with response essays and a final project. PREREQUISITES: Sophomore standing *Units: 6.*

*Also listed as Religious Studies 352*

*Prerequisite: Sophomore standing*

### **GLST 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. PREREQUISITES: Sophomore standing or consent of instructor *Units: 6.*

*Also listed as German Studies 355*

*Prerequisite: Sophomore standing or consent of instructor*

### **GLST 361: WESTERN ENCOUNTERS WITH CHINA: PERCEPTIONS AND MISPERCEPTIONS**

This course examines Western encounters with China. Students will analyze and assess Western perceptions and misperceptions of China through a variety of primary sources in translation and relevant secondary studies. (G & C or E) PREREQUISITES: Sophomore standing *Units: 6.*

*Also listed as East Asian Studies 361, History 361*

*Prerequisite: Sophomore standing*

**GLST 365: *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. PREREQUISITES: GOVT 110 or GOVT 140 or sophomore standing *Units: 6.*

*Also listed as Government 365*

*Prerequisite: GOVT 110 or GOVT 140 or sophomore standing*

**GLST 378: *BLACK EUROPE: RESISTANCE, PERFORMANCE, & SELF-MAKING (IN ENGLISH)***

This course dispels racial myths of the European continent, introduces the Black Diaspora beyond the African American context, pushes the boundaries of belonging and national identity in Europe, and presents black individuals/collectives as historical agents and transnational actors on and beyond the continent. Course materials may consist of literature, poetry, music videos, film, and art. Assessments include short reflection papers, research papers, and oral presentations. 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 Ethnic Studies 378, German Studies 378*

**GLST 389: *BERLIN: EXPERIENCING A GREAT CITY***

An introduction to one of the world's great cities. Classwork includes the history, culture and literature of Berlin and preparations for day-long walking tours that students will lead. Students will do some readings and discussions in German and write their comparative paper in German. Students must complete both the classroom portion of the course and the Berlin trip to receive credit. Taught in English. Not open to students who have previously received credit for GER 290. PREREQUISITES: GER 312 *Units: 2 OR 6.*

*Also listed as German Studies 389*

*Prerequisite: GER 312*

**GLST 390: *TUTORIAL IN GLOBAL STUDIES***

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. *Units: 1 TO 98.*

**GLST 391: *DIRECTED STUDY IN GLOBAL 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: 1 TO 98.*

**GLST 392: *THE AFRICAN AND BLACK AMERICAN EXPERIENCE***

This comparative literature course examines the representations of the African and Black American experience in literature. It explores how their subaltern status on the continent and the US has been instrumental in shaping the spirit of resistance that subtend the works of writers from both literary traditions. We will examine the thematic intersections between these literatures and analyse how writers deal with colonialism, slavery,

race, ethnicity, the question of belonging and humanism. This course will only count for French major/minor units with an accompanying 3 unit tutorial in French arranged with instructor. PREREQUISITES: Non for non-majors or minors in French & Francophone Studies For majors or minors in French & Francophone Studies: one 300-level French course or instructor's consent. This course will only count for French major/minor units with an accompanying 3 unit tutorial in French arranged with instructor. *Units: 6.*

*Also listed as Ethnic Studies 392, French 392*

*Prerequisite: Non for non-majors or minors in French & Francophone Studies For majors or minors in French & Francophone Studies: one 300-level French course or instructor's consent. This course will only count for French major/minor units with an accompanying 3 unit tutorial in French arranged with instructor.*

### **GLST 399: INDEPENDENT STUDY IN GLOBAL STUDIES**

Independent study is an opportunity to go beyond the established curriculum and undertake 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. *Units: 1 TO 98.*

### **GLST 401: FIELD EXPERIENCE IN DEVELOPMENT**

Students engaged in this course will have the opportunity to do field research in a developing country. Each student will develop and implement a project that concerns a political, economic, social, or environmental issues that is important in the country visited. Past Field Experiences have taken place in Sierra Leone, Ghana, Jamaica, and Morocco. Students will also have the opportunity to learn from both national and local leaders in the country of research, and to participate in community engaged learning through volunteer activities. Class members will actually travel during either winter or spring break. Students should register for GOVT 401 in the term prior to the planned travel. They should also register in the subsequent term, when they will present their research to the wider Lawrence community. [ Note: two terms of GOVT 401 are considered the equivalent of a six unit 400-level GOVT course].

*Location for 2021-22: Students will travel to a TBA location during spring break (March 2022).. Admission is by application to Prof. Skran. Students should register for both winter and spring terms 2022.*

Planned Location for 2022-23 To be determined PREREQUISITES: ENST 300, GOVT 248, GOVT 500 and RLST 240 *Units: 3.*

*Also listed as Economics 206, Environmental Studies 311*

*Prerequisite: ENST 300, GOVT 248, GOVT 500 and RLST 240*

### **GLST 402: 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. PREREQUISITES: Must be attending the LU Francophone Seminar *Units: 6.*

*Also listed as French 400, Anthropology 450*

*Prerequisite: Must be attending the LU Francophone Seminar*

### **GLST 403: 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. PREREQUISITES: Must be attending the LU Francophone

Seminar *Units: 6.*

*Also listed as French 401*

*Prerequisite: Must be attending the LU Francophone Seminar*

#### **GLST 404: SENEGALESE MUSIC**

This course is part of the Lawrence Francophone Seminar in which students study in French-speaking West Africa for ten weeks. PREREQUISITES: Must be attending the LU Francophone Seminar *Units: 3.*

*Also listed as Music Repertoire-Perf Study 405, French 404*

*Prerequisite: Must be attending the LU Francophone Seminar*

#### **GLST 420: ADVANCED TOPICS IN GLOBAL STUDIES**

An advanced discussion-focused course with a rotating topic determined by faculty in the global studies program. Topics will be wide-ranging, but will include a global perspective and contribute to one of the four global studies thematic tracks (human security, global cities, nations and identities, or arts and exchange). May be repeated when topic is different. *Units: 6.*

#### **GLST 421: 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. PREREQUISITES: One 300-level French course or consent of instructor *Units: 6.*

*Also listed as French 420*

*Prerequisite: One 300-level French course or consent of instructor*

#### **GLST 425: TOPICS IN INTERNATIONAL SECURITY**

*Units: 6.*

*Also listed as Government 425*

*Prerequisite: GOVT 140 or GOVT 340 or consent of instructor*

#### **GLST 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. PREREQUISITES: One 300-level course or consent of instructor *Units: 6.*

*Also listed as French 445*

*Prerequisite: One 300-level course or consent of instructor*

#### **GLST 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*  
This course

*Topic for Fall 2022: Comparative Authoritarianism*

Prerequisites: GOVT 215, or GOVT 245, or consent of instructor.

This course explores reasons for the persistence and apparent resilience of authoritarianism despite successive “waves” of democracy in the decades since World War II. Course materials will address the following questions: What are the different types of authoritarian regimes? What are the strategies authoritarian elites use to stay in power? What are the limitations of these strategies? Why do mass protests against authoritarian rulers arise when they do? And how do authoritarian regimes leave legacies long after their collapse? *Units: 6.*

*Also listed as Government 446*

*Prerequisite: GOVT 215, or GOVT 245, or consent of instructor.*

**GLST 470: TOPICS IN ETHNOMUSICOLOGY - REGIONS**

An examination of music of a particular geographic region or diasporic group. Topics and prerequisites may vary from year to year. May be repeated when topic is different.

*Units: 6.*

*Also listed as Musicology 470*

*Prerequisite: MUCO 212 or MUCO 202 or consent of instructor*

**GLST 471: PERFORMING ARTS OF BALI**

This course explores the intersections of Balinese music, dance, drama, and ritual. Discussions will include how globalization, tourism, and economic and religious tensions affect the arts and performer's lives. Students will have hands-on experience learning to play Balinese gamelan instruments. PREREQUISITES: MUCO 212 or MUCO 202 or consent of instructor. *Units: 6.*

*Also listed as Ethnic Studies 471, Musicology 471*

*Prerequisite: MUCO 212 or MUCO 202 or consent of instructor.*

**GLST 483: HISTORY OF NEW ORLEANS**

This course explores the history of New Orleans from the colonial era to the present. Students will investigate the multiple racial and ethnic histories of identity construction that make New Orleans so significant to American culture today. Tracing identity constructions across the course of three centuries will allow us to understand some of the stakes in contested racialized categories and linguistic policies and practices today. The course explores the dominant tropes in New Orleans history: race, sex, carnival, jazz, prostitution, slavery, free people of color, and the environment. We will map the social, cultural, and political changes that occurred in New Orleans from colonial times to the aftermath of Hurricane Katrina. PREREQUISITES: HIST 130, 131, or 132 *Units: 6.*

*Also listed as History 483*

*Prerequisite: HIST 130, 131, or 132*

**GLST 492: MUSIC AND GLOBALIZATION**

How do forces of globalization affect musicians and music-making? How do people use music to make sense of their transnational and cross-border lives and identities? What happens to the meanings in music when it travels across borders and boundaries, is performed by new musicians in different contexts, and is heard by new listeners? What happens to local or ritual meanings when it becomes commodified and commercialized? Do international copyright laws adequately protect composers and musicians when their music travels, and what about when such laws are at odds with local notions of creation and ownership? This course explores answers to these questions through case studies on a variety of musical genres and places around the world. PREREQUISITES: MUCO 212 or GLST 100 *Units: 6.*

*Also listed as Musicology 492*

*Prerequisite: MUCO 212 or GLST 100*

### **GLST 494: MUSIC AND THE ENVIRONMENT**

In many societies around the world, people use music and specialized listening skills to connect with nature, specific places, and surrounding environments. This course will explore music performance practices that express or enact these connections. Course materials will draw on ethnographic case studies and the growing fields of ecomusicology, acoustic ecology, and zoomusicology. PREREQUISITES: MUCO 212 or MUCO 202 or ENST 127 or consent of instructor *Units: 6.*

*Also listed as Environmental Studies 494, Musicology 494*

*Prerequisite: MUCO 212 or MUCO 202 or ENST 127 or consent of instructor*

### **GLST 516: LITERATURE & 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. PREREQUISITES: Junior standing, ENG 280, or consent of instructor *Units: 6.*

*Also listed as Ethnic Studies 516, English 516*

*Prerequisite: Junior standing, ENG 280, or consent of instructor*

### **GLST 518: NARRATIVES OF INEQUALITY**

Why is there so much inequality in the world? We will explore several answers to this question, focusing on economic inequality specifically. We will analyze novels and films about economic inequality and efforts to right them at home and abroad. PREREQUISITES: ENG 280, junior standing, or consent of instructor *Units: 6.*

*Also listed as Ethnic Studies 518, English 518*

*Prerequisite: ENG 280, junior standing, or consent of instructor*

### **GLST 590: TUTORIAL IN GLOBAL STUDIES**

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. *Units: 1 TO 98.*

### **GLST 591: DIRECTED STUDY IN GLOBAL 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: 1 TO 98.*

**GLST 599: *INDEPENDENT STUDY IN GLOBAL STUDIES***

Independent study is an opportunity to go beyond the established curriculum and undertake 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. *Units: 1 TO 98.*

**GLST 600: *GLOBAL STUDIES CAPSTONE SEMINAR***

The culminating experience for the Global Studies major is a senior capstone in which students will produce a three-part portfolio: a reflection on their experience in the major, a revision of a paper or project from another course, and a presentation of the reflection or revision. *Units: 3.*

**GLST 690: *TUTORIAL IN GLOBAL STUDIES***

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. *Units: 1 TO 98.*

**GLST 691: *DIRECTED STUDY IN GLOBAL 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: 1 TO 98.*

**GLST 699: *INDEPENDENT STUDY IN GLOBAL STUDIES***

Independent study is an opportunity to go beyond the established curriculum and undertake 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. *Units: 1 TO 98.*

# GOVERNMENT

<b>Professors:</b>	M. Adenwalla, A. Shober, C. Skran ( <i>Edwin &amp; Ruth West Professorship of Economics and Social Science</i> ) (on leave term(s) I)
<b>Visiting professor:</b>	E. Shackelford
<b>Associate professors:</b>	A. Balsekar, J. Brozek ( <i>Stephen Edward Scarff Professor of International Affairs</i> ), W. Hixon ( <i>Gordon R. Clapp Chair of American Studies, chair</i> ), S. Wulf

The two majors offered by the Government department - Government and International Relations (IR) - use the lens of political science to engage with our intensely political age and its intellectual challenges. Our main objective is to help students learn how to explain, interpret, and evaluate political institutions, conflicts, policies, behaviors, and beliefs. Students who major in Government or IR will learn how to employ a variety of methods to analyze political phenomena, as well as how to defend their analyses with rigorous, evidence-based argument.

The Government major includes all subfields of political science – American government, international relations, comparative politics, political theory, and public policy – and allows students to specialize in the area of their choice in upper-level courses. The International Relations major focuses on issues of conflict, cooperation, and change among international actors, as well as topics from comparative politics. IR is distinct from Global Studies because it is a social scientific field with distinct questions and methodologies, not an interdisciplinary approach that balances social science with cultural studies, humanities, art, and language.

Our introductory courses, GOVT 110 for the Government major and GOVT 140 for the IR major, provide entry points to understand central questions, theories and analytic tools of political science. Students proceeding further in either major will deepen their theoretical and methodological skills and apply those skills to substantive issues in American politics, comparative politics, international relations, and political theory.

A major in Government or International Relations prepares students for success in a wide variety of careers including public office, law, diplomacy, business, policy analysis, political consulting, foreign service, education, non-profit work, global public health, and social work. Department alumni have also pursued advanced degrees in political science, business, law, international relations, public policy, history, medicine, education, urban planning, development studies, and many other fields.

## Required for the major in government

Students who major in Government will learn how to explain, interpret, and evaluate political institutions, policies, behaviors and beliefs. They will do so by using discipline-appropriate methods to answer questions in all four subfields of political science: American politics, comparative politics, international relations, and political theory, and they will complete the major by undertaking a *Senior Experience* project in which they ask and answer a significant original research question concerning government, politics, law, or policy, in a subfield of their choice. Note: Students majoring in Government may not also major in International Relations.

1. GOVT 110: *Introduction to Political Science*
2. GOVT 271: *Research Methods in Political Science*
3. One of the following courses in American politics:
  - GOVT 211: *Flexibility and Freedom: American Federalism in Transition*
  - GOVT 220: *American Elections, Candidates, and Political Parties*
  - GOVT 360: *The American Presidency*
  - GOVT 370: *Congressional Politics*
  - GOVT 380: *Introduction to Public Policy*
4. One of the following courses in comparative politics:
  - GOVT 215: *Democracy in Comparative Perspective*
  - GOVT 245: *Comparative Politics of Developing Countries*
5. One of the following courses in international politics:
  - GOVT 140: *Introduction to International Relations*
  - GOVT 340: *Theory of International Relations*
6. One of the following courses in political theory:
  - GOVT 200: *Politics and Human Nature*
  - GOVT 315: *Founding the Just Regime*
  - GOVT 322: *Liberty and Constitutional Democracy*
  - GOVT 405: *Individuality and Community*
7. One six-unit course numbered GOVT 400 or above
8. *Senior Experience*: one six-unit course numbered GOVT 500 or above. Students may satisfy this requirement by completing a seminar, independent study, tutorial, directed study, or internship.
9. Three or more electives: Majors must complete 66 GOVT units (equivalent to eleven six-unit courses), including 54 GOVT units (equivalent to nine six-unit courses) at the 200-level or above. This typically comprises three six-unit elective courses plus those used to satisfy requirements 1-8 above. However, majors who complete two of those requirements with one course, complete more than twelve 100-level units, or complete three-unit courses will need additional elective courses to satisfy the 66 GOVT unit requirement.

## Required for the major in international relations

Students who major in International Relations will learn how to explain, interpret, and evaluate international conflict, cooperation, institutions, and behavior. Coursework will focus on the field of IR, with supplementary electives in comparative politics, American politics, and political theory. Students complete the major by undertaking a Senior Experience project in which they ask and answer a significant original research question concerning international politics, institutions, or theory. Note: Students majoring in International Relations may not also major in Government.

1. GOVT 140: *Introduction to International Relations*
2. GOVT 340: *Theory of International Relations*
3. GOVT 271: *Research Methods in Political Science*
4. One of the following courses in comparative politics:
  - GOVT 215: *Democracy in Comparative Perspective*

- GOVT 245: *Comparative Politics of Developing Countries*
5. One of the following courses in political theory:
    - GOVT 200: *Politics and Human Nature*
    - GOVT 315: *Founding the Just Regime*
  6. One of the following courses in American politics:
    - GOVT 110: *Introduction to Political Science*
    - GOVT 211: *Flexibility and Freedom: American Federalism in Transition*
    - GOVT 220: *American Elections, Candidates, and Political Parties*
    - GOVT 360: *The American Presidency*
    - GOVT 370: *Congressional Politics*
    - GOVT 380: *Introduction to Public Policy*
  7. GOVT 440: Practice of International Relations (3 units)
  8. One additional methods or experiential course of at least 3 units to complement the intended *Senior Experience* project and/or career. Acceptable courses include GOVT 475: Games & Strategy, GOVT 401: Field Experience, GOVT 446: Topics: Analyzing Political Rhetoric, a study abroad experience, a traveling classroom course with associated travel component, a credit-bearing internship related to international relations, or additional research design courses that will be developed in the future. With advisor approval, students may substitute appropriate courses in statistics, economics, history, certain upper-level language courses, or other relevant methods courses from other departments.
  9. Three additional 6-unit electives, two of which must be in International Relations or Comparative Politics and one of which must be at the 400-level or higher.
  10. *Senior Experience*: GOVT 500: Senior Seminar in International Relations & Comparative Politics. Students may also satisfy this requirement by completing a 500 or higher-level seminar, independent study, tutorial, or directed study.

## Senior Experience in government or international relations

The *Senior Experience* in both the government and international relations majors is satisfied by passing a 500- or 600-level course. It entails a 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.

## Required for the minor in government

1. GOVT 110: *Introduction to Political Science*
2. The following courses, three of which must be numbered 200 or above:
  - a. One six-unit course in American politics
  - b. One six-unit course in political theory
  - c. Two six-unit courses from the fields of comparative politics and international relations
3. One six-unit course in government at the advanced level (numbered 400 or above), excluding tutorials and independent studies

## Teacher certification in social studies

Government majors can seek certification to teach government/political science or broad-field social studies at the secondary level. For certification in broad-field social studies, students must complete the government major and a minimum of two courses each in two other social studies (anthropology/sociology, economics, history, or psychology) and at least one course in each of the remaining social studies. Students are strongly encouraged to take a course in U.S. history and a course in global history. A course in environmental studies is also required. Students who plan to seek teacher certification should review the requirements in the Education section of the catalog and meet with the director of teacher education, preferably before the end of the sophomore year.

## Off-campus study

Government students are encouraged to consider the [Washington Semester](#) in the Off-Campus Programs section of the catalog.

## Courses - Government

### **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.*

*Also listed as Global Studies 140*

### **GOVT 151: INTRODUCTION TO ENVIRONMENTAL POLICY**

This course applies principles of economics and political science to environmental issues, including pollution, resource limitation, and environmental degradation. It is designed to foster an understanding of the environmental policy-making and regulatory process in the United States and globally. *Units: 6.*

*Also listed as Environmental Studies 151, Economics 151*

### **GOVT 190: TUTORIAL STUDIES IN GOVERNMENT**

Advanced study, arranged and carried out under the direction of an instructor. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **GOVT 191: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **GOVT 195: 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. 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.

PREREQUISITES: At least one government course at 200-level or above and consent of instructor; Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: At least one government course at 200-level or above and consent of instructor; Counter Registration Required*

### **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.

PREREQUISITES: sophomore standing *Units: 6.*

*Prerequisite: sophomore standing*

### **GOVT 203: LATIN AMERICAN ECONOMIC DEVELOPMENT**

This course combines economic theory, policy and historical accounts to understand the forces shaping Latin American economic development. Students will gain an understanding of major theories and trends in Latin American development while analyzing specific development issues, including equitable growth, agriculture, migration, gender equity, education, and health. Students will complete thoughtful critiques of readings, problem sets analyzing real data, and in-depth evaluations of specific issues. PREREQUISITES: ECON 100 *Units: 6.*

*Also listed as Economics 203*

*Prerequisite: ECON 100*

### **GOVT 204: SPECIAL TOPICS IN GOVERNMENT**

This course explores a topic in American politics, comparative politics, international politics, political theory, or another government subfield which is not addressed by the Government Department's regular course offerings. *Units: 1 TO 99.*

### **GOVT 211: FLEXIBILITY AND FREEDOM: AMERICAN FEDERALISM IN TRANSITION**

Federalism is a compromise between freedom and equality. How much authority should member states have over elections? Education? The environment? Immigration? Observers characterize federalism both as a bulwark against tyranny and a perpetrator of inequality. This course considers federalism's development in the

United States and Europe, its contradictions, and its survival in a global society. PREREQUISITES: GOVT 110 or consent of instructor *Units: 6.*

*Prerequisite: GOVT 110 or consent of instructor*

### **GOVT 215: DEMOCRACY IN COMPARATIVE PERSPECTIVE**

This course examines variations in the institutional design and practice of democracy drawing on a range of national and historical cases. Course materials will address the following questions: Are there social, cultural, or economic prerequisites for democratic stability? How and why does the design of democratic institutions vary across national borders? Why does democracy sometimes produce undesirable social, political, and economic outcomes? And why and how do democracies collapse? *Units: 6.*

### **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. PREREQUISITES: GOVT 110 or consent of instructor *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. PREREQUISITES: Sophomore standing or consent of instructor *Units: 6.*

*Also listed as Ethnic Studies 226*

*Prerequisite: Sophomore standing or consent of instructor*

### **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. PREREQUISITES: Sophomore standing or consent of instructor *Units: 6.*

*Prerequisite: Sophomore standing or consent of instructor*

### **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. PREREQUISITES: Sophomore standing and one of GOVT 110 or GOVT 140 *Units: 6.*

*Also listed as Global Studies 246*

*Prerequisite: Sophomore standing and one of GOVT 110 or GOVT 140*

### **GOVT 248: SOCIAL ENTREPRENEURSHIP**

Social entrepreneurs all over the world adopt and implement innovative ideas in order to address some of the world's most pressing problems. In this course, students will study the many dimensions of social entrepreneurship, especially those ventures that address problems of human security. Students will work with a

team to propose an entrepreneurial solution to one such problem. PREREQUISITES: Sophomore standing or consent of instructor *Units: 6.*

*Also listed as Innovation & Entrepreneurship 245, Global Studies 248*

*Prerequisite: Sophomore standing or consent of instructor*

### **GOVT 252: SUSTAINABLE CITIES**

How can cities be sustainable? The increasing urbanization of the world's population, shift to service-driven economies, and growing diversity of cities make this question pressing and complicated. This course introduces economic, environmental, and social dimensions of the urban sustainability problem and explores responses to it through a two-week December study trip to London and Amsterdam and winter term studies and poster presentations. Program fee is required. Students pay their own airfare. PREREQUISITES: An introductory course in GOVT, ECON, ENST or GLST, or consent of instructor *Units: 3.*

*Also listed as Environmental Studies 252, Economics 252*

*Prerequisite: An introductory course in GOVT, ECON, ENST or GLST, or consent of instructor*

### **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. PREREQUISITES: GOVT 110 or sophomore standing *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. PREREQUISITES: Sophomore standing or ENST 150 or GOVT 110 *Units: 6.*

*Also listed as Environmental Studies 270, Global Studies 271*

*Prerequisite: Sophomore standing or ENST 150 or GOVT 110*

### **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. Students should take this course in their sophomore or junior year. PREREQUISITES: GOVT 110 or consent of instructor; seniors must obtain consent of instructor *Units: 6.*

*Prerequisite: GOVT 110 or consent of instructor; seniors must obtain 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.

PREREQUISITES: ECON 100 *Units: 6.*

*Also listed as Economics 271*

*Prerequisite: ECON 100*

### **GOVT 275: GLOBAL ECONOMIC RELATIONS**

This course covers the major concepts utilized in the field of international political economy. Major issues covered include debates about globalization, trade policy and free-trade agreements, monetary policy and currency regulation, aid and development, immigration policy and labor migration, global corporations, and international institutions such as the World Bank, IMF, and WTO. PREREQUISITES: Sophomore standing and ECON 100. GOVT 140 or GOVT 340 recommended. *Units: 6.*

*Also listed as Economics 202*

*Prerequisite: Sophomore standing and ECON 100. GOVT 140 or GOVT 340 recommended.*

### **GOVT 276: 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. PREREQUISITES: ECON 100 *Units: 6.*

*Also listed as Economics 200*

*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. PREREQUISITES: GOVT 110 recommended *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. PREREQUISITES: Sophomore standing *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 and commerce clauses; the separation of powers; and federalism. PREREQUISITES: Sophomore standing *Units:*

6.

*Prerequisite: Sophomore standing*

### **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. PREREQUISITES: GOVT 110 or sophomore standing *Units: 6.*

*Prerequisite: GOVT 110 or sophomore standing*

### **GOVT 322: LIBERTY AND CONSTITUTIONAL DEMOCRACY**

This course addresses philosophical and legal questions about liberty and constitutional democracy. To what extent should people be free to live, speak, interact, and employ property as they please? Should the scope of individual rights be defined by legal experts, majority rule, or something else? To what extent does American constitutional law guarantee such rights? Discussions with written assignments and/or exams and evaluations of class participation. PREREQUISITES: Sophomore standing *Units: 6.*

*Prerequisite: Sophomore standing*

### **GOVT 340: THEORY OF INTERNATIONAL RELATIONS**

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. PREREQUISITES: GOVT 110 or 140 or sophomore standing *Units: 6.*

*Also listed as Global Studies 340*

*Prerequisite: GOVT 110 or 140 or sophomore standing*

### **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. PREREQUISITES: GOVT 110 and GOVT 271, or consent of instructor *Units: 6.*

*Prerequisite: GOVT 110 and GOVT 271, or consent of instructor*

### **GOVT 365: 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. PREREQUISITES: GOVT 110 or GOVT 140 or sophomore standing *Units: 6.*

*Also listed as Global Studies 365*

*Prerequisite: GOVT 110 or GOVT 140 or sophomore standing*

### **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. PREREQUISITES: GOVT 110 or consent of instructor *Units: 6.*

*Prerequisite: GOVT 110 or consent of instructor*

### **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. PREREQUISITES: GOVT 271 or MATH 107 or consent of instructor *Units: 6.*

*Prerequisite: GOVT 271 or MATH 107 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.* PREREQUISITES: Must be attending the Lawrence London Centre. *Units: 6.*

*Prerequisite: Must be attending the Lawrence London Centre.*

### **GOVT 390: TUTORIAL STUDIES IN GOVERNMENT**

Advanced study, arranged and carried out under the direction of an instructor. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **GOVT 391: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **GOVT 395: 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. 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.

PREREQUISITES: At least one government course at 200-level or above and consent of instructor; Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: At least one government course at 200-level or above and consent of instructor; Counter Registration Required*

### **GOVT 399: 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. PREREQUISITES: Counter Registration Required. *Units:*

1 TO 98.

*Prerequisite: Counter Registration Required.*

### **GOVT 401: FIELD EXPERIENCE IN DEVELOPMENT**

Students engaged in this course will have the opportunity to do field research in a developing country. Each student will develop and implement a project that concerns a political, economic, social, or environmental issues that is important in the country visited. Past Field Experiences have taken place in Sierra Leone, Ghana, Jamaica, and Morocco. Students will also have the opportunity to learn from both national and local leaders in the country of research, and to participate in community engaged learning through volunteer activities. Class members will actually travel during either winter or spring break. Students should register for GOVT 401 in the term prior to the planned travel. They should also register in the subsequent term, when they will present their research to the wider Lawrence community. [ Note: two terms of GOVT 401 are considered the equivalent of a six unit 400-level GOVT course].

*Planned location for 2021-22- To be determined- during spring break March 2022. Admission is by application; contact Prof. Skran for more information about the application process.*

Planned Location for 2022-23 To be determined *Units: 3.*

*Prerequisite: ENST 300, GOVT 248, GOVT 500 and RLST 240*

### **GOVT 405: INDIVIDUALITY AND COMMUNITY**

This course studies how political theorists responded to the emergence of open societies in the West. It focuses on the scope of personal autonomy, the consequences of commerce and luxury, the best political and economic arrangements, and other topics explored by writers from the Renaissance to the Twentieth Century. PREREQUISITES: Junior standing or consent of instructor *Units: 6.*

*Also listed as Economics 415*

*Prerequisite: Junior standing or consent of instructor*

### **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  
Units: 6.*

*Also listed as Global Studies 425*

*Prerequisite: GOVT 140 or GOVT 340 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. PREREQUISITES: GOVT 220, 360, 370, or 380 *Units: 6.*

*Prerequisite: GOVT 220, 360, 370, or 380*

### **GOVT 440: PRACTICE OF INTERNATIONAL RELATIONS**

This course is designed for juniors and seniors who are completing the International Relations major. It is a career-focused course that examines the ways in which international relations is practiced on a local, national, and global scale. Activities include discussions with alumni, building connections with campus resources in graduate programs and fellowships, and the completion of a professional portfolio. PREREQUISITES: Junior standing, GOVT 340, and one additional course in IR/Comparative Politics (or consent of instructor) *Units: 3.*

*Prerequisite: Junior standing, GOVT 340, and one additional course in IR/Comparative Politics (or consent of instructor)*

### **GOVT 444: 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. PREREQUISITES: ECON 300 and ECON 380 *Units: 6.*

*Also listed as Economics 444*

*Prerequisite: ECON 300 and ECON 380*

### **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*  
This course

*Topic for Fall 2022: Comparative Authoritarianism*

Prerequisites: GOVT 215, or GOVT 245, or consent of instructor.

This course explores reasons for the persistence and apparent resilience of authoritarianism despite successive "waves" of democracy in the decades since World War II. Course materials will address the following questions: What are the different types of authoritarian regimes? What are the strategies authoritarian elites use to stay in power? What are the limitations of these strategies? Why do mass protests against authoritarian rulers arise when they do? And how do authoritarian regimes leave legacies long after their collapse? *Units: 6.*

*Also listed as Global Studies 446*

*Prerequisite: GOVT 215, or GOVT 245, or consent of instructor.*

### **GOVT 465: ENVIRONMENTAL POLITICS**

An examination of selected aspects of environmental policy in the United States. Topics include the historical development of US environmental policy, environmental justice, urban environmental issues, connections between food systems and the environment, and the application of economic reasoning to environmental policy making. PREREQUISITES: ENST 151 and junior standing, or consent of instructor *Units: 6.*

*Also listed as Environmental Studies 470*

*Prerequisite: ENST 151 and junior standing, 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, PREREQUISITES: Junior standing or consent of instructor *Units: 6.*

*Prerequisite: Junior standing or consent of instructor*

### **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. PREREQUISITES: GOVT 140, GOVT 340, or consent of instructor *Units: 6.*

*Prerequisite: GOVT 140, GOVT 340, or consent of instructor*

### **GOVT 500: SENIOR SEMINAR IN GOVERNMENT**

*Topic for Fall 2022: Leadership and Coalition Building*

Prerequisites: GOVT 271 must be completed before taking this seminar

This seminar presents a strategic analysis of political leadership and coalition building. The focus of the term is on the design and execution of senior capstone research projects. *Units: 6.*

### **GOVT 538: OUTSIDE THE MARGIN OF ERROR: POLLING AND QUANTITATIVE PREDICTION IN MODERN POLITICS**

Politicians and prognosticators have increasingly turned to “Big Data”, futures markets, and poll aggregation to predict political outcomes. The course will explore the theory and accuracy of these quantitative predictions, discuss contemporary issues of data quality, and suggest whether quantitative analysis of politics is more than entertainment for political junkies. PREREQUISITES: Junior standing and completion of the quantitative general education requirement, or consent of instructor *Units: 6.*

*Prerequisite: Junior standing and completion of the quantitative general education requirement, or consent of instructor*

### **GOVT 590: TUTORIAL STUDIES IN GOVERNMENT**

Advanced study, arranged and carried out under the direction of an instructor. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **GOVT 591: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **GOVT 595: 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. 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.

PREREQUISITES: At least one government course at the 200 level or above and consent of instructor; Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: At least one government course at the 200 level or above and consent of instructor; Counter Registration Required*

### **GOVT 599: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **GOVT 690: TUTORIAL STUDIES IN GOVERNMENT**

Advanced study, arranged and carried out under the direction of an instructor. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **GOVT 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **GOVT 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. 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.

PREREQUISITES: At least one government course at the 200 level or above and consent of instructor; Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: At least one government course at the 200 level or above and consent of instructor; Counter Registration Required*

### **GOVT 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

# HEALTH AND SOCIETY

<b>Professors:</b>	E. De Stasio ( <i>Biology, The Raymond H. Herzog Professor of Science</i> ) (on leave term(s) I), S. Debbert ( <i>Chemistry, chair</i> )
<b>Associate professors:</b>	I. Albrecht ( <i>Philosophy</i> ) (on leave term(s) I), M. Ansfield ( <i>Psychology</i> ), B. Jenike ( <i>Anthropology, Edward F. Mielke Professor of Ethics in Medicine, Science and Society</i> ) (on leave term(s) II, III), M. Jenike ( <i>Anthropology</i> )
<b>Assistant professor:</b>	J. Smith ( <i>Ethnic Studies</i> )

As students build expertise in the social sciences, humanities, and natural sciences, the interdisciplinary minor in Health and Society will allow them to explore how social, cultural, biological, and environmental factors contribute to the complexities of individual and population health. Students will learn to recognize the complicating factors that affect the application of biomedicine to human health and will gain an understanding of the intersection of human health and social inequalities in both local and global contexts.

The Health and Society minor is designed to augment pre-professional course work for any career in health care, including nursing, medicine, health care administration, public health, physical or occupational therapy, and genetic counseling. In addition to gaining facility with multiple disciplinary frameworks related to wellness, disability, and illness, students will be asked to explore and assess their own values, experiences, and skills relative to possible career paths within health care or public health. The goal is to prepare students well for meaningful lives of service with a broad liberal arts approach, including an understanding of the intersection of society, environment, and human health.

## Required for the minor in health and society

The minor in health and society requires 6 1/3 courses or 5 1/3 courses + 100 hours of engaged learning. Courses from three different departments are required to complete the minor (prerequisites for elective courses are indicated in parentheses):

1. One course that places medical practice in a global or community setting:
  - a. ANTH 314: *Global Health* (sophomore standing)
  - b. ANTH 342: *Medical Anthropology* (ANTH 110 or ANTH 140)
  - c. ETST 303: *Race, Ethnicity, and Health* (sophomore standing)
  - d. PHIL 120: *Biomedical Ethics*
2. Two of the following courses covering cultural and psychosocial aspects of health and illness or disability:
  - a. ANTH 377: *Culture and Aging* (ANTH 110 or sophomore standing)
  - b. ANTH 542: *Anthropology and Public Health* (junior standing and ANTH 342 or 340)
  - c. ANTH 551: *Anthropology of Biomedicine* (junior standing and ANTH 342 or 200)
  - d. ANTH 552: *Disability and Culture* (junior standing and ANTH 110 or 342)
  - e. ENST 127: *Environmental Justice and Citizenship*

- f. PHIL 370: *Advanced Studies in Bioethics* (PHIL 120)
- g. PSYC 245: *Health Psychology* (sophomore standing; not to be taken by students taking PSYC 270)
- h. PSYC 250: *Psychopathology* (PSYC 100 or sophomore standing)
- i. PSYC 260: *Developmental Psychology* (PSYC 100 or sophomore standing)
- j. PSYC 335: *Clinical Psychology* (PSYC 281 and 250 or 290)
- k. PSYC 350: *Psychopharmacology & Behavior* (sophomore standing; 1 biology course recommended)

l. Or additional core course(s) from above: ANTH 314 or 342, or ETST 303

3. Two courses in the biological, biochemical, or environmental basis of human health:

- a. ANTH 340: *Human Biology, Evolution, and Health* (ANTH 140 or BIOL 150 or consent of instructor)
- b. ANTH 344: *Nutritional Anthropology* (ANTH 140 or consent of instructor)
- c. BIOL 100: *The Biology of Human Reproduction* OR BIOL 103: *Biotechnology & Society*
- d. BIOL 222: *Parasitology* (BIOL 130 and 150)
- e. BIOL 226: *Microbiology* (BIOL 130 and 150)
- f. BIOL 260: *Genetics* (BIOL 130 or ANTH 140)
- g. BIOL 370: *Human Physiology* (BIOL 130 and 150)
- h. BIOL 430/431: *Immunology* (430: BIOL 130 and 150 and junior standing; 431: junior standing only)
- i. GEOS 125: *Natural Hazards*
- j. GEOS 213: *Geology & Health* – (GEOS 110, ENST 150, or CHEM 116)

4. HESO 380: *Health Career Exploration and Self-Reflection*

5. One additional elective from the lists above OR Engaged Learning: a minimum of 100 hours of internship, paid employment, or volunteer work in the area of health care delivery, policy, or other work with vulnerable populations. This work need not be credit-bearing, but must be registered through The Career Center.

Students may wish to emphasize certain aspects of health and society. For example, students with interests in gender and health would be well-served to include one or more of the following courses: ANTH 314, 342, PSYC 245, BIOL 260 in addition to GEST 100; those interested in Global Health issues should consider ANTH 314, ETST 303, BIOL 222, GEOS 125 or 213.

## Courses - Health and Society

### **BIOL 100: THE BIOLOGY OF HUMAN REPRODUCTION**

An introductory 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 and laboratory. Primarily for non-science majors; credit not applicable to the biology major. *Units: 6.*

*Also listed as Gender Studies 180*

### **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. PREREQUISITES: Recommended for freshmen and sophomores *Units: 6*.

*Also listed as Biomedical Ethics 120*

*Prerequisite: Recommended for freshmen and sophomores*

### **GEOS 125: NATURAL HAZARDS**

Natural disasters are commonplace and are becoming increasingly costly in terms of economic impact and loss of human life. Through readings, lectures, and interactive labs we examine the root causes of natural hazards such as landslides, flooding, earthquakes, and tsunamis. We consider also the role humans have in elevating common hazards into humanitarian disasters, including the potential impact of global climate change on future events. *Units: 6*.

### **ENST 127: ENVIRONMENTAL JUSTICE AND CITIZENSHIP**

Environmental degradation impacts some individuals and communities more than others: the poor, people of color, and certain nonhuman species and landscapes bear the brunt of our collective actions. This seminar pairs literary texts (novels, short stories and poems) with nonfiction essays on topics ranging from food production to indigenous rights. We will discuss and write about how these texts impact our understanding of fairness, justice, rights and responsibility. *Units: 6*.

### **GEOS 213: GEOENVIRONMENTAL HEALTH AND JUSTICE**

A course investigating the links between geology and health, with a particular focus on issues of environmental justice. The course considers topics such as human lead exposure from soil and water, the links between air pollution and asthma, and environmental health concerns presented by a changing climate. PREREQUISITES: GEOL/GEOS 110, ENST 150, or CHEM 116 *Units: 6*.

*Also listed as Environmental Studies 202*

*Prerequisite: GEOL/GEOS 110, ENST 150, or CHEM 116*

### **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, and host behavior. The laboratory component of the course will include both live and preserved specimens. PREREQUISITES: BIOL 150 *Units: 6*.

*Prerequisite: BIOL 150*

### **BIOL 226: 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. PREREQUISITES: BIOL 130 and BIOL 150, CHEM 116 recommended *Units: 6*.

*Prerequisite: BIOL 130 and BIOL 150, CHEM 116 recommended*

### **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. PREREQUISITES: PSYC 100 or sophomore standing *Units: 6.*

*Also listed as Biomedical Ethics 245*

*Prerequisite: PSYC 100 or sophomore standing*

### **PSYC 250: *PSYCHOPATHOLOGY***

A study of the major mental disorders. Theory and research into the origins of each disorder are examined from a variety of perspectives (psychoanalytic, biological, cognitive, behavioral, and humanistic). PREREQUISITES: PSYC 100 or sophomore standing *Units: 6.*

*Prerequisite: PSYC 100 or sophomore standing*

### **BIOL 260: *GENETICS***

A lecture and laboratory study of the principles of inheritance, gene expression, introductory genomics, sex determination, and the concepts of historical and modern eugenics and genetic engineering.

PREREQUISITES: Sophomore standing and BIOL 130 and BIOL 170 (or concurrent enrollment) or ANTH 140 *Units: 6.*

*Prerequisite: Sophomore standing and BIOL 130 and BIOL 170 (or concurrent enrollment) or ANTH 140*

### **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, social and cognitive development. A variety of theoretical perspectives are covered. PREREQUISITES: PSYC 100 or sophomore standing *Units: 6.*

*Prerequisite: PSYC 100 or sophomore standing*

### **ETST 303: *RACE, ETHNICITY AND HEALTH***

The aim of this course is to introduce students to important health issues that different racial and ethnic communities face. The course will explore in-depth a range of issues relating to racial and ethnic health disparities and it will analyze these issues via structural, systemic and cultural frameworks. *Units: 6.*

### **ANTH 314: *GLOBAL HEALTH***

An introduction to the multidisciplinary field of global health, emphasizing health inequities, transnational health issues, and partnership-based approaches to meeting important public health challenges. Topics include social and ecological determinants of health as well as strategies for prevention and care. Analysis of historical case studies and discussion of contemporary health concerns. Discussion/lecture format; writing, exams and presentations. PREREQUISITES: Sophomore Standing *Units: 6.*

*Prerequisite: Sophomore Standing*

### **PSYC 335: *CLINICAL PSYCHOLOGY***

This course focuses on the assessment and treatment of mental disorders. Each of the major approaches to conducting psychotherapy (e.g., psychodynamic, cognitive, behavioral, humanistic, etc.) is examined. Students

also start developing their clinical assessment skills. PREREQUISITES: PSYC 281 and PSYC 250 or 290  
*Units: 6.*

*Prerequisite: PSYC 281 and PSYC 250 or 290*

### **ANTH 340: HUMAN BIOLOGY, EVOLUTION, AND HEALTH**

Students will develop an understanding of modern human biology as the outcome of interactions between evolved genomes and the myriad environments in which we are born, develop and live out our lives. Topics of study will include evolutionary approaches to reproduction, growth and development, health, behavior, adaptation, and life history. PREREQUISITES: ANTH 140, BIOL 150, or consent of instructor *Units: 6.*

*Prerequisite: ANTH 140, BIOL 150, or consent of instructor*

### **ANTH 342: MEDICAL ANTHROPOLOGY**

An introduction to the comparative, cross-cultural study of health, healing, and beliefs about the body and illness. Topics covered include: (1) biocultural approaches to understanding health; (2) social determinants of health (how social inequalities become embodied); (3) medical systems, including biomedicine, as cultural systems of knowledge and practice; (4) the social construction of illness and health; and (5) an introduction to global health. PREREQUISITES: Sophomore standing, and ANTH 110 or 140 *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. PREREQUISITES: ANTH 140 or consent of instructor *Units: 6.*

*Prerequisite: ANTH 140 or consent of instructor*

### **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. PREREQUISITES: Sophomore standing; at least one prior biology course recommended *Units: 6.*

*Prerequisite: Sophomore standing; at least one prior biology course recommended*

### **BIOL 370: HUMAN PHYSIOLOGY**

An examination of how the body maintains homeostasis. The various physiological systems (e.g., respiratory and cardiovascular) will be studied at multiple levels of organization, from molecular and cellular to the macroscopic. This course is primarily aimed at students entering the health sciences. The course will have both lectures and a laboratory component. PREREQUISITES: BIOL 150 *Units: 6.*

*Prerequisite: BIOL 150*

### **PHIL 370: ADVANCED STUDIES IN BIOETHICS**

A seminar examining one particular issue or set of issues in bioethics. PREREQUISITES: PHIL 120 or two courses in philosophy *Units: 6.*

*Also listed as Biomedical Ethics 370*

*Prerequisite: PHIL 120 or two courses in philosophy*

### **ANTH 377: CULTURE AND AGING**

This course uses ethnographic studies from non-Western and Western societies to understand how the experience of aging throughout the life course not only differs cross-culturally, but also within the same society over time in response to increased longevity and biomedical advances. Of particular concern will be cultural constructions of health, well-being, disability, and dependency, including in-depth analysis of aging in Asia. PREREQUISITES: ANTH 110 or sophomore standing *Units: 6.*

*Prerequisite: ANTH 110 or sophomore standing*

### **HESO 380: HEALTH CAREER EXPLORATION AND SELF-REFLECTION**

This course will use discussion, alumni visits, and self-reflection through which students will engage in a process of exploration of careers in health care, broadly defined (ranging from medicine, physical therapy, other allied health careers, public health, and health-care related fields such as health care administration). Students will learn self-reflection and discernment based on their values and personal strengths. PREREQUISITES: sophomore standing *Units: 2.*

*Prerequisite: sophomore standing*

### **BIOL 430: IMMUNOLOGY**

This course will cover the basic concepts of immunology, including differentiation of immune cells, antibody structure and function, 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. PREREQUISITES: BIOL 130, BIOL 150, and junior standing; or consent of instructor *Units: 6.*

*Prerequisite: BIOL 130, BIOL 150, and junior standing; or consent of instructor*

### **BIOL 431: IMMUNOLOGY (LECTURE ONLY)**

This course will cover the basic concepts of immunology, including differentiation of immune cells, antibody structure and function, 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. Lecture only. PREREQUISITES: Junior standing or consent of instructor *Units: 6.*

*Prerequisite: Junior standing or consent of instructor*

### **ANTH 542: ANTHROPOLOGY AND PUBLIC HEALTH**

This advanced discussion seminar considers applied critical medical anthropology's contributions, in terms of theory, research, and practice, to addressing community and global health concerns. With a political-economic framework, we will focus on the social determinants of health and how both macrostructural forces and local conditions have to be considered for effective health development. Reading response papers, final research paper and presentation. PREREQUISITES: ANTH 342 or ANTH 340, and junior or senior standing *Units: 6.*

*Prerequisite: ANTH 342 or ANTH 340, and junior or senior standing*

### **ANTH 551: ANTHROPOLOGY OF BIOMEDICINE**

This advanced seminar, for students who have already had an introduction to medical anthropology or to poststructural anthropological theory, draws from critical theory and ethnographic research to study biomedicine as a system of knowledge and social practice, including discussion of the radical societal changes and ethical debates arising from the global application of biomedical technologies. Response papers, final research paper and presentation. PREREQUISITES: ANTH 342 or 200, and junior or senior standing *Units: 6.*

*Prerequisite: ANTH 342 or 200, and junior or senior standing*

### **ANTH 552: *DISABILITY AND CULTURE***

Disability is a social and lived category fundamental to human experience. This advanced discussion seminar draws from experiential, reflexive, phenomenological, and critical approaches in cultural and medical anthropology to cross-culturally explore the subjectivities of perceived disabilities in both local and global worlds. Topics may include: autism, learning disabilities, bipolar disorder, schizophrenia, chronic pain, d/Deaf culture, and other categories of social impairment. Papers, research paper and presentation.

PREREQUISITES: ANTH 110 or ANTH 342, and junior or senior standing *Units: 6.*

*Prerequisite: ANTH 110 or ANTH 342, and junior or senior standing*

# HISTORY

<b>Professors:</b>	P. Cohen ( <i>Patricia Hamar Boldt Professor of Liberal Studies</i> ), J. Frederick, M. Rico ( <i>chair</i> )
<b>Associate professors:</b>	P. Blitstein ( <i>Dean of Faculty Office</i> ), E. Kern ( <i>on leave term(s) II, III</i> ), B. Schlabach, B. Vance ( <i>on leave term(s) II, III</i> )
<b>Visiting assistant professor:</b>	G. Milano

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.

## Required for the major in history

Students who major in history will learn to marshal historical facts, engage in critical historical analysis, and evaluate differing historiographical traditions as they gain an understanding of the variability of human experience.

The major in history requires the following:

1. A sequence of three courses 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. HIST 101: *Introduction to Historical Methods* or HIST 203: *Introduction to Historical Methods*, taken during the freshman or sophomore year.
  - b. HIST 620: *Historiography* taken during the junior year.
  - c. HIST 650: *The Practice of History* taken during the senior year. Exceptions may be granted for majors who petition to complete a piece of advanced and original historical research in a suitable off-campus program.
2. Seven additional courses to broaden and deepen historical knowledge. One must be a seminar or independent study in which students will begin a research project to be completed in HIST 650.
  - a. One six-unit course from each of the following three categories: North America (NA), Europe (E), and Global and Comparative (G&C).
  - b. One course that covers materials up to the year 1750.
  - c. One course designated as an advanced seminar or independent study (400-599) during the junior year or during the Fall Term of the 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.

## Senior Experience in history

The *Senior Experience* in the history department consists of a collaborative one-term seminar, *The Practice of History*, 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 through their own individual projects. *The Practice of History* represents the culmination of a course sequence that includes *Introduction to Historical Methods* 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.

## Required for the minor in history

1. One introductory course in history (100-199).
2. Five additional courses in history.
  - a. No more than one may be an introductory course (100-199).
  - b. At least one must be an advanced seminar or independent study (400-599).

## Teacher certification in history or broad-field social studies

History majors can seek certification to teach history or broad-field social studies at the secondary level. For certification in broad-field social studies, students must complete the history major and a minimum of two courses each in two other social studies (anthropology/sociology, economics, government/political science, or psychology) and at least one course in each of the remaining social studies. A course in environmental studies is also required. Students who plan to seek teacher certification should review the requirements in the Education section of the catalog and meet with the director of teacher education, preferably before the end of the sophomore year.

## 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.

## 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 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) languages in addition to English and should work closely with their advisors to plan their schedules accordingly.

## Courses - History

### **HIST 105: *CROSS-CULTURAL INTERACTIONS ALONG THE SILK ROAD, 200 BCE - 1400 CE***

The so-called "Silk Road" was the world's first superhighway, linking East Asia to the Mediterranean. The peoples along the way not only traded luxury goods, but also ideas, technology, and more. This course offers a thematic examination of the dynamic, cross-cultural interactions along the ancient and medieval Silk Road. (G & C) *Units: 6.*

*Also listed as East Asian Studies 105, Global Studies 105*

### **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.*

*Also listed as Global Studies 110*

### **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 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.*

### **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 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 150: *TURBULENCE AND TRANSFORMATION: STUART ENGLAND, 1603-1714***

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. PREREQUISITES: Must be attending the Lawrence London Centre. Units: 6.*

*Prerequisite: Untrapped error in STU\_COURSE\_INFO: -1422*

### **HIST 160: *EAST ASIA IN THE PREMODERN WORLD***

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 Global Studies 160, East Asian Studies 140, Ethnic Studies 121*

### **HIST 165: *EAST ASIA IN THE MODERN WORLD***

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 Global Studies 165, 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.E. 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. All texts in English. (E) *Units: 6.*

*Also listed as Classics 150*

### **HIST 185: SURVEY OF ROMAN HISTORY**

A study of the history of Rome from its origins through the Republic and Empire to the reign of Constantine. Emphasis on political and cultural developments and the acquisition and maintenance of empire. Readings may include Livy, Tacitus, Suetonius, and the *Historia Augusta*. All texts in English. (E) *Units: 6.*

*Also listed as Classics 160*

### **HIST 191: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **HIST 195: 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. 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. PREREQUISITES: Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

### **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) PREREQUISITES: Sophomore standing or above *Units: 6.*

*Prerequisite: Sophomore standing or above*

### **HIST 202: HISTORY IN PUBLIC: COMMUNITIES, STORIES, AND MEMORY**

Introduction to the broad variety of activities and locations developed by historians to reach the general public, such as museums, libraries, and archives, historic preservation, documentary filmmaking, oral history, podcasting, historical editing, and community activism. This course examines public historians’ theoretical and ethical concerns in addition to developing relevant skills. Emphasis on experiential learning via field trips,

interviews with practitioners, and individual and group projects. *Units: 6.*

### **HIST 203: INTRODUCTION TO HISTORICAL METHODS**

A course teaching the practical skills of doing history. Emphasis is on acquiring techniques historians use for research, source interpretation, and presentation. 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 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) PREREQUISITES: Sophomore standing or consent of instructor *Units: 6.*

*Also listed as Global Studies 205*

*Prerequisite: Sophomore standing or consent of instructor*

### **HIST 206: PERCHANCE TO DREAM: A COMPARATIVE HISTORY OF DREAMS FROM ANTIQUITY TO PRESENT**

For centuries, dream interpretation has been integrated into philosophical discourse, used as a political tool, and touted as proof of otherworldly activities. This seminar will examine dream theories as products of socio-cultural development in different historical contexts. (G&C) *Units: 6.*

*Also listed as Global Studies 206*

### **HIST 207: THE ATLANTIC WORLD**

What if we think of an ocean as a meeting place and not a barrier? Between 1400 and 1800 the peoples living in west Africa, western Europe, and the Atlantic coast of the Americas encountered each other with transformative, often devastating consequences. This course investigates the creation of this "Atlantic World" and the identities formed as a result, uncovering how wars, piracy, enslavement, and resistance unfolded on ships and at sea. (G&C) PREREQUISITES: Sophomore standing or consent of instructor *Units: 6.*

*Also listed as Global Studies 208*

*Prerequisite: Sophomore standing or consent of instructor*

### **HIST 208: AFRICAN AMERICAN HISTORY TO EMANCIPATION**

This course surveys African American History from 1607 to 1865. Students will analyze the African origins of this country, the Middle Passage, the different manifestations of enslavement, and the historical changes that shaped African-American life and culture thereafter—from the Revolution to Civil War. Topics will include the gendered experiences of enslavement; slave resistance; the black abolitionist movement in the United States; Civil War; Reconstruction. (NA) PREREQUISITES: Sophomore standing. *Units: 6.*

*Also listed as Ethnic Studies 208*

*Prerequisite: Sophomore standing.*

### **HIST 209: AFRICAN AMERICAN HISTORY SINCE EMANCIPATION**

This course will explore African American History from 1865 to the present. We will examine the major themes, problems, events, structures, and personalities of African American History, paying particular attention to how

African Americans themselves shaped their experiences. We will devote some portion of each week to the close examination of a variety of primary sources, including: autobiographies, fiction, film, speeches, music, and art. (NA) PREREQUISITES: Sophomore standing *Units: 6.*

*Also listed as Ethnic Studies 209*

*Prerequisite: Sophomore standing*

### **HIST 211: WĒSKŌHSAEH: HISTORY OF THE INDIGENOUS NATIONS OF WISCONSIN**

This course traces the history of Wisconsin's Indigenous Nations from before colonization to the present. You will learn in this discussion-based course how Native Americans have shaped their history and Wisconsin history more broadly. Moreover, you will come to understand how settler and Indigenous histories themselves are constructed narratives. You will also gain important skills, including analytical writing, persuasive speaking, and historical research methods. *Units: 6.*

*Also listed as Ethnic Studies 159*

### **HIST 215: ATLANTIC SLAVE TRADE**

An examination of the Atlantic trade in enslaved Africans from its beginning in the 15th century to its eventual abolition in the 19th century. Topics include ideas of slavery in Europe and Africa; the development of the Atlantic trade; the economic, social, political, and religious effects of the slave trade in Africa and the Americas; the rise of racism; abolition and its aftermath. (G&C) PREREQUISITES: Sophomore standing or consent of instructor *Units: 6.*

*Also listed as Ethnic Studies 220*

*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.E.). 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. All texts in English. (E) PREREQUISITES: Sophomore standing or consent of instructor *Units: 6.*

*Also listed as Classics 300*

*Prerequisite: Sophomore standing or consent of instructor*

### **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. All texts in English. (E) PREREQUISITES: Sophomore standing or consent of instructor *Units: 6.*

*Also listed as Classics 310*

*Prerequisite: Sophomore standing or consent of instructor*

### **HIST 241: 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. All texts in English. *Units: 6.*

*Also listed as Classics 280*

### **HIST 242: THE FALL OF THE ROMAN REPUBLIC**

A study of the final decades of the Roman Republic from the sixth consulship of Marius to the assassination of Caesar (100 to 44 B.C.E.), focusing on political, social, and cultural changes during this tumultuous period. Topics include: Roman politics, social class and identity, and Republican art, literature, and thought. All texts in English. PREREQUISITES: Sophomore standing or consent of instructor *Units: 6.*

*Also listed as Classics 305*

*Prerequisite: Sophomore standing or consent of instructor*

### **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: imperialism, the development of parliamentary democracy, and the growth of modern industrial capitalism. Recommended for students planning to study at the London Centre. (E) PREREQUISITES: Sophomore standing *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)* PREREQUISITES: Must be attending the Lawrence London Centre. *Units: 6.*

*Prerequisite: Must be attending the Lawrence London Centre.*

### **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) PREREQUISITES: Sophomore standing or consent of instructor *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) PREREQUISITES: Sophomore standing or consent of instructor *Units: 6.*

*Prerequisite: Sophomore standing or consent of instructor*

### **HIST 266: TOPICS IN HISTORY**

The specific topic investigated changes each year. Student responsibilities may include engagement with secondary historical writings, primary source evaluation, research and essay writing. *Units: 6.*

### **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) PREREQUISITES: Sophomore standing or consent of instructor *Units: 6.*

*Prerequisite: Sophomore standing or consent of instructor*

### **HIST 273: LONDON, A CITY SHAPED BY MIGRATION**

This class studies the lasting effects of migration on London as a global city. We will analyze historic and current influxes of people and how they have changed the structure, identity, and culture of London. Students will explore London neighborhoods and meet people who have found a new home here. Assignments and experiential learning will allow students to fully engage with London in a meaningful way. *Offered at the London Centre.* PREREQUISITES: Must be attending the Lawrence London Centre. *Units: 6.*

*Also listed as Global Studies 273*

*Prerequisite: Must be attending the Lawrence London Centre.*

### **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) PREREQUISITES: Sophomore standing or consent of instructor *Units: 6.*

*Also listed as Ethnic Studies 221*

*Prerequisite: Sophomore standing or consent of instructor*

### **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) PREREQUISITES: Sophomore standing or consent of instructor. HIST 132 or 325 recommended *Units: 6.*

*Prerequisite: Sophomore standing or consent of instructor. HIST 132 or 325 recommended*

### **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)

PREREQUISITES: Sophomore standing or consent of instructor *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)

PREREQUISITES: Sophomore standing or consent of instructor *Units: 6.*

*Prerequisite: Sophomore standing or consent of instructor*

### **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)

PREREQUISITES: Sophomore standing or consent of instructor *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)

PREREQUISITES: Sophomore standing or consent of instructor *Units: 6.*

*Also listed as Ethnic Studies 223, Global Studies 295*

*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)

PREREQUISITES: Sophomore level or above *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) PREREQUISITES: Sophomore standing or consent of instructor *Units: 6*.

*Also listed as Film Studies 305*

*Prerequisite: Sophomore standing or consent of instructor*

### **HIST 308: HALF THE SKY: CHINESE WOMEN’S HISTORY**

This course examines important questions about the lives of women in the last thousand years of Chinese history. Through an exploration of primary sources in translation, classic works of fiction, film, memoirs, and oral histories, we will address theoretical questions fundamental to both women’s studies and Chinese history. (G & C) PREREQUISITES: Sophomore standing or consent of instructor *Units: 6*.

*Also listed as Global Studies 308, East Asian Studies 308*

*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) PREREQUISITES: Sophomore standing or consent of instructor; HIST 320 or 325 recommended *Units: 6*.

*Also listed as Ethnic Studies 320, Global Studies 315*

*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) PREREQUISITES: Sophomore standing or consent of instructor *Units: 6*.

*Prerequisite: Sophomore standing or consent of instructor*

### **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. (G&C) *Units: 6*.

*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) PREREQUISITES: Sophomore standing or consent of instructor *Units: 6.*

*Prerequisite: Sophomore standing or consent of instructor*

### **HIST 326: *THE SOVIET UNION AND THE SECOND WORLD WAR***

The Soviet Union emerged as one of the key victors in the Second World War (known as the Great Patriotic War in Russia). Yet the war was devastating for the country and its people and victory came at a tremendous price. This course reexamines the impact of the war on the Soviet Union, what kind of war effort took place on the Eastern Front and in the rear of the Soviet Union, and what kind of victory was achieved. To help address the themes of the course we will read a variety of works and documents including official government documents, personal diaries, letters, and memoirs many of which until recently were either unknown or unpublished in the West. PREREQUISITES: Sophomore standing *Units: 6.*

*Prerequisite: Sophomore standing*

### **HIST 335: *WOMEN IN EARLY AMERICA, 1607-1860***

An examination of the experiences of women in early America. We will uncover the hidden histories of women's lives through an intersectional approach using race, class, and gender analysis. (NA) PREREQUISITES: Sophomore standing or consent of instructor *Units: 6.*

*Also listed as Gender Studies 220*

*Prerequisite: Sophomore standing or consent of instructor*

### **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) PREREQUISITES: Sophomore standing and HIST 132 *Units: 6.*

*Prerequisite: Sophomore standing and HIST 132*

### **HIST 354: *HISTORY OF RUSSIAN AND SOVIET FILM***

This course will introduce the student to the rich and varied tradition of Russian and Soviet cinema from the Pre-Revolutionary period to the present. Works by major filmmakers will be viewed and discussed in the context of the culture, economy, society, and politics of the time. Taught in English. PREREQUISITES: Sophomore standing *Units: 6.*

*Also listed as Russian 354, Film Studies 354*

*Prerequisite: Sophomore standing*

### **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) PREREQUISITES: Sophomore standing *Units: 6.*

*Also listed as Environmental Studies 355*

*Prerequisite: Sophomore standing*

### **HIST 361: WESTERN ENCOUNTERS WITH CHINA: PERCEPTIONS AND MISPERCEPTIONS**

This course examines Western encounters with China. Students will analyze and assess Western perceptions and misperceptions of China through a variety of primary sources in translation and relevant secondary studies. (G & C or E) PREREQUISITES: Sophomore standing *Units: 6.*

*Also listed as Global Studies 361, East Asian Studies 361*

*Prerequisite: Sophomore standing*

### **HIST 366: TOPICS IN BRITISH HISTORY**

An examination of a particular topic in British History. The specific topic investigated changes each year. Student responsibilities may include engagement with secondary historical writings, primary source evaluation, research and essay writing. (E) *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. (G&C) PREREQUISITES: Sophomore standing *Units: 6.*

*Prerequisite: Sophomore standing*

### **HIST 374: VISIONS OF CONQUEST**

The creation of Colonial Latin America meant the political, cultural and spiritual reconfiguration of society on both sides of the Atlantic. In this course, we will elucidate the process of conquest through the study of historical accounts, cultural artifacts of the colonizers and colonized alike, and relevant theoretical texts. This course is held concurrently with SPAN 470. Lectures, discussion, and reading and writing assignments are in English. Students interested in work in the Spanish language who have met the prerequisites should register for SPAN 470. (G&C) PREREQUISITES: Sophomore standing *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. (G&C) PREREQUISITES: Sophomore standing; HIST 178 or HIST 179 recommended *Units: 6.*

*Also listed as Ethnic Studies 325*

*Prerequisite: Sophomore standing; HIST 178 or HIST 179 recommended*

### **HIST 384: HISTORY OF THE BOOK IN LONDON**

An introduction to the interdisciplinary field of the history of the book, focusing especially on London's role as a site of book production, distribution and consumption. We will work directly with manuscripts and rare books,

studying the material history of books and writing techniques from early manuscripts to iPads. Offered at the London Centre. PREREQUISITES: Must be attending the Lawrence London Centre. *Units: 6.*

*Also listed as English 281*

*Prerequisite: Must be attending the Lawrence London Centre.*

### **HIST 385: 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. PREREQUISITES: Junior standing or consent of the instructor.

*Units: 6.*

*Also listed as English 527*

*Prerequisite: Junior standing or consent of the instructor.*

### **HIST 388: EARLY MODERN JAPAN**

This discussion course offers an overview of the early modern history of Japan. Through an analysis of literature, woodblock prints, documents, and secondary historical studies we will explore selected issues in the social and cultural history of the Tokugawa. (G & C) PREREQUISITES: Sophomore standing or consent of instructor *Units: 6.*

*Also listed as East Asian Studies 388*

*Prerequisite: Sophomore standing or consent of instructor*

### **HIST 390: 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.

PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **HIST 391: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **HIST 395: 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. 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. PREREQUISITES: Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

### **HIST 399: *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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **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.* PREREQUISITES: Junior standing or above *Units: 6.*

*Also listed as Film Studies 400, Gender Studies 423*

*Prerequisite: Junior standing or above*

### **HIST 415: *AFRICA IN THE EUROPEAN IMAGINATION***

This advanced seminar examines the conceptualization of Africa and Africans in modern European intellectual history. The course details how European thinkers explored issues of race and identity through their figurative and physical engagement with the African continent. Topics include travel narratives, the philosophy of slavery and abolition, and imperialism. *Fulfills Seminar Requirement (G & C)* PREREQUISITES: Sophomore standing *Units: 6.*

*Also listed as Ethnic Studies 415*

*Prerequisite: Sophomore standing*

### **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.* PREREQUISITES: Junior standing or consent of instructor *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.* PREREQUISITES: Junior standing or consent of instructor *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.* PREREQUISITES: Junior standing and HIST 115 or 325, or consent of instructor *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.* PREREQUISITES: Junior standing and HIST 115 or consent of instructor *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? *Fulfills seminar requirement.* (NA) PREREQUISITES: Sophomore Standing *Units: 6.*

*Prerequisite: Sophomore Standing*

### **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.* PREREQUISITES: Junior standing and HIST 131, or consent of instructor *Units: 6.*

*Also listed as Ethnic Studies 420*

*Prerequisite: Junior standing and HIST 131, or consent of instructor*

### **HIST 476: TOPICS IN THE HISTORY OF THE AMERICAS**

This seminar explores the history of the Americas (primarily outside the United States). May be repeated when topic is different. *Units: 6.*

*Prerequisite: Junior Standing*

### **HIST 478: TOPICS IN ENVIRONMENTAL HISTORY**

An in-depth examination of a particular topic in environmental history, suitable for majors in history and environmental studies. Students from other majors should consult the instructor before registering. May be repeated for credit when topic is different.

*Units: 6.*

*Also listed as Environmental Studies 478*

*Prerequisite: HIST 355*

### **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.* PREREQUISITES: Sophomore standing or consent of instructor *Units: 6.*

*Prerequisite: Sophomore standing or consent of instructor*

### **HIST 480: RECONSIDERING THE 1960s**

A seminar examining the major themes and issues of the decade. Topics include the Vietnam War, Great Society Programs, the Civil Rights Movement, the American Indian Movement, and feminism. Fiction, oral narrative, and the developing historiographical literature will be employed as aids in addressing the period. (NA) *Fulfills seminar requirement.* PREREQUISITES: Junior standing and HIST 132 *Units: 6.*

*Prerequisite: Junior standing and HIST 132*

### **HIST 482: GLOBAL CITY: THE HISTORY OF NEW YORK**

This seminar will examine the rise of New York City to global preeminence over the past four centuries as an entrepot and incubator of commerce, culture and people. It will emphasize the challenges of building unity and community in a city marked by racial, class, ethnic, religious and gender difference. Students will produce a substantial research paper on an aspect of the city's history. *Fulfills seminar requirement.* (NA) PREREQUISITES: Sophomore standing *Units: 6.*

*Prerequisite: Sophomore standing*

### **HIST 483: HISTORY OF NEW ORLEANS**

This course explores the history of New Orleans from the colonial era to the present. Students will investigate the multiple racial and ethnic histories of identity construction that make New Orleans so significant to American culture today. Tracing identity constructions across the course of three centuries will allow us to understand some of the stakes in contested racialized categories and linguistic policies and practices today. The course explores the dominant tropes in New Orleans history: race, sex, carnival, jazz, prostitution, slavery, free people of color, and the environment. We will map the social, cultural, and political changes that occurred in New Orleans from colonial times to the aftermath of Hurricane Katrina. *Fulfills seminar requirement.* PREREQUISITES: HIST 130, 131, or 132 *Units: 6.*

*Also listed as Global Studies 483*

*Prerequisite: HIST 130, 131, or 132*

### **HIST 485: TOPICS IN INTERNATIONAL AND COMPARATIVE HISTORY**

An advanced seminar in modern international and/or comparative history. The course combines review of key theoretical and historiographical issues with research and analysis of primary sources. Possible topics include: Secret Intelligence in the Twentieth and Twenty-First Centuries; the History of the Cold War; and the International History of the Second World War. (G&C) *Fulfills seminar requirement.* May be repeated when topic is different.

*Topic for Fall 2022: Fascism and Nazism*

Prerequisites: Junior standing or consent of instructor

This course examines the history and politics of fascism and Nazism in Italy, Germany, and other national contexts from Brazil to Japan. We begin with basic concepts and debates on fascism and Nazism and explore a range of topics, including political and intellectual origins, the mobilization of cultural, gender, and racial difference, as well as the radical deployment of violence. In addition to reading recent scholarship on fascism, we examine fascist art, propaganda and film. We end the term with a look at twenty-first century neo-fascism and authoritarianism. *Units: 6.*

*Prerequisite: Junior standing or consent of instructor*

**HIST 492: THE ART OF HEALING: A HISTORY OF CHINESE MEDICINE**

This course offers an interdisciplinary exploration of the history of Chinese medicine. Students will study the canonical literature of the discipline, and analyze the ways in which those texts and ideas have been reshaped in modern and contemporary practice. Topics include: forensic medicine, gender, religion, and public health. (G&C). Fulfills seminar requirement. PREREQUISITES: Junior standing *Units: 6.*

*Also listed as East Asian Studies 492*

*Prerequisite: Junior standing*

**HIST 498: ADVANCED TOPICS IN HISTORY**

A seminar that provides in-depth study of a specific topic in history. May be repeated when topic changes.

*Topic for Fall 2022: Modern Korean History through Literature and Film*

Using fiction, feature films, and historical texts, this course provides an in-depth introduction to modern Korean history, from the end of the Chōsun dynasty in 1910 to contemporary North and South Korea. Students will gain an understanding of Korea's colonial experience, civil war, dictatorships, development, democratization, and gender politics.

Prerequisites: EAST 150 or consent of instructor *Units: 6.*

*Also listed as East Asian Studies 418, Film Studies 419*

*Prerequisite: EAST 150 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. (NA) PREREQUISITES: Sophomore standing *Units: 6.*

*Prerequisite: Sophomore standing*

**HIST 590: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

**HIST 591: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **HIST 595: *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. 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **HIST 599: *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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **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. PREREQUISITES: Junior standing or consent of instructor *Units: 6.*

*Prerequisite: Junior standing or consent of instructor*

### **HIST 650: *THE PRACTICE OF HISTORY***

A seminar culminating in an original and substantial piece of historical research. Students will be guided through 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. PREREQUISITES: Senior standing *Units: 6.*

*Prerequisite: Senior standing*

### **HIST 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **HIST 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **HIST 695: *INTERSHIP 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. 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **HIST 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

# INNOVATION & ENTREPRENEURSHIP

Professors:	C. Skran ( <i>Government, Edwin &amp; Ruth West Professorship of Economics and Social Science, chair</i> ) (on leave term(s) I), T. Troy ( <i>Theatre Arts, J. Thomas and Julie E. Hurvis Professor of Theatre and Drama</i> ) (on leave term(s) I, II, III)
Associate professors:	A. Galambos ( <i>Economics, Dwight and Marjorie Peterson Professor of Innovation</i> ), B. Pertl ( <i>Conservatory of Music</i> )
Visiting assistant professor:	M. Clayville ( <i>Conservatory of Music</i> )
Lecturer:	G. Vaughan

## Program description

The mission of the Innovation and Entrepreneurship (I&E) interdisciplinary area is to enable students to further pursue their passion through innovative and entrepreneurial ventures in courses and co-curricular activities. It is important to note that we use the word “innovative” in a particular sense, referring to creative, original thinking that leads to new ideas, products, or services that create value for society. Similarly, we use “entrepreneurial” in a specific way, referring to taking initiative and creating positive change in the world. Finally, our use of the word “venture” includes both for-profit and non-profit ventures, and more broadly any initiative to deliver a product or service in a sustainable way.

Innovation and entrepreneurship, understood in this sense, fit naturally into a liberal education. The cultivation of innovative, entrepreneurial thought and action requires one to approach problems from multiple perspectives, to think creatively beyond the status quo, to create and deliver coherent, persuasive arguments. These are essential skills that a liberal education aims to impart to its recipients. The I&E program is one place among many where Lawrence’s curriculum attempts to develop the ability to create what did not exist before. I&E courses attempt to enhance the ability to generate new ideas or processes. Graduates who embrace innovative and entrepreneurial attitudes and methods will be better equipped to create fulfilling lives for themselves—lives that extend their liberal arts experience.

## Required for the interdisciplinary area in innovation and entrepreneurship

1. Three core courses:
  - a. I-E 100: *In Pursuit of Innovation*
  - b. I-E 110: *Financial Literacy*
  - c. I-E 300: *Entrepreneurial Ventures*
2. At least one elective from:
  - MUEP 280: *The Entrepreneurial Musician*
  - GOVT 248: *Social Entrepreneurship*
  - ECON 223: *Quantitative Decision-Making*
  - ECON 405: *Economics of Innovation and Entrepreneurship*
  - I-E 212: *Corporate Finance*
  - Other courses in which aspects of innovation or entrepreneurship are central
3. A second course from 2. above, or an additional course that is directly relevant to innovation and entrepreneurship. At this time these include:

- ART 245: *Interarts: New Media Projects*
  - ART 320: *Intermediate Printmaking* or Art 520: *Advanced Printmaking*
  - ART 600: *Studio Art Senior Seminar*
  - ECON 400: *Industrial Organization*
  - ECON 430: *Economic Growth & Poverty Traps*
  - PHYS 340: *Optics*
  - RLST 245: *Apple, Google, Facebook*
  - A course in social science research methods
4. Practicum: A 3-unit course or internship such as Rabbit Gallery, KidsGive, Start-up Theatre, Internship in Studio Art (ART 395, 595, or 695), or others, including the option of a 400-level (or higher) IS to continue a project started in a course.

## Courses - Innovation & Entrepreneurship

### **I-E 100: *IN PURSUIT OF INNOVATION***

This course acquaints students with various aspects of innovation and entrepreneurship, broadly understood. Topics cover methodologies, theories, and history of innovation. The course focuses largely on projects pursued by teams which conceive and conduct ventures that illuminate innovation and entrepreneurship. Class activities include lectures, discussions, student presentations. Experienced guest experts will offer advice and guidance to student teams. May not be taken on an S/U basis. PREREQUISITES: Sophomore standing *Units: 6*.

*Prerequisite: Sophomore standing*

### **I-E 110: *FINANCIAL LITERACY***

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. PREREQUISITES: Sophomore standing *Units: 6*.

*Prerequisite: Sophomore standing*

### **I-E 191: *DIRECTED STUDY IN INNOVATION & ENTREPRENEURSHIP***

*Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

### **I-E 195: *PRACTICUM IN INNOVATION & ENTREPRENEURSHIP***

An opportunity for students to gain practical experience with innovation and entrepreneurship in the context of a for-profit or not-for-profit organization, an ongoing student venture (e.g., Rabbit Gallery, Greyfell Theatre, Paper Fox Printmaking Workshop, or KidsGive), or a startup venture. The academic component of the internship includes readings related to the substance of the internship, discussions with the faculty supervisor, and may include a written report appropriate to the discipline. Course grades are based on this academic work and participation in a group project. PREREQUISITES: Counter Registration Required *Units: 1 TO 98*.

*Prerequisite: Counter Registration Required*

### **I-E 212: *CORPORATE FINANCE***

This course studies the function of finance and the flow of funds within the corporation. Topics include financial

analysis, decision making, capital acquisition and use, and strategic planning. Three competencies will be emphasized: numeracy through financial analysis, decision-making based on financial information, and communication skills through conveying analyses and decisions to the end user (the board, shareholders, other stakeholders). Lecture with case studies assignments, and exams. PREREQUISITES: I-E 110 *Units: 6.*

*Prerequisite: I-E 110*

### **I-E 245: SOCIAL ENTREPRENEURSHIP**

Social entrepreneurs all over the world adopt and implement innovative ideas in order to address some of the world's most pressing problems. In this course, students will study the many dimensions of social entrepreneurship, especially those ventures that address problems of human security. Students will work with a team to propose an entrepreneurial solution to one such problem. PREREQUISITES: Sophomore standing or consent of instructor *Units: 6.*

*Also listed as Global Studies 248, Government 248*

*Prerequisite: Sophomore standing or consent of instructor*

### **I-E 255: START-UP THEATRE**

Open to students from theatre, economics, and other students interested in entrepreneurship in the performing arts. Topics change each year. May be repeated when topic is different up to 6 total units. PREREQUISITES: Sophomore standing *Units: 1 TO 3.*

*Also listed as Theatre Arts 255, Economics 255*

*Prerequisite: Sophomore standing*

### **I-E 280: THE ENTREPRENEURIAL MUSICIAN**

A broad introduction to entrepreneurship for musicians, dancers, thespians, visual artists, and other interested students. 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 visiting entrepreneurs. This is a project-oriented course with extensive speaking that will challenge convention, push you to new realms of creative thought, and stretch the boundaries of collaborative learning. Are you ready to unleash the power of the liberal arts? *Units: 6.*

*Also listed as Music 280*

### **I-E 285: THE ELOQUENT MUSICIAN**

Course explores and promotes the art of speaking elegantly and knowledgeably about music in the context of live musical performance, and writing engagingly about music for a general audience. Course designed for music majors and other students with strong musical background and interest in interactive concerts and other public programs. PREREQUISITES: Major in music or consent of instructor *Units: 6.*

*Also listed as Music Repertoire-Perf Study 285*

*Prerequisite: Major in music or consent of instructor*

### **I-E 295: TOPICS IN INNOVATION AND ENTREPRENEURSHIP**

Topics will vary from year-to-year. May be repeated when topic is different. *Units: 6.*

### **I-E 300: ENTREPRENEURIAL VENTURES**

This course provides a thorough introduction to business models and business plans as relevant for both non-profit and for-profit ventures. 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. PREREQUISITES: I-E 110 and one of: I-E 100, I-E 280, or I-E 245 *Units: 6.*

*Prerequisite: I-E 110 and one of: I-E 100, I-E 280, or I-E 245*

### **I-E 390: TUTORIAL IN INNOVATION & ENTREPRENEURSHIP**

*Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

### **I-E 391: DIRECTED STUDY IN INNOVATION & ENTREPRENEURSHIP**

*Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

### **I-E 395: PRACTICUM IN INNOVATION & ENTREPRENEURSHIP**

An opportunity for students to gain practical experience with innovation and entrepreneurship in the context of a for-profit or not-for-profit organization, an ongoing student venture (e.g., Rabbit Gallery, Greyfell Theatre, Paper Fox Printmaking Workshop, or KidsGive), or a startup venture. The academic component of the internship includes readings related to the substance of the internship, discussions with the faculty supervisor, and may include a written report appropriate to the discipline. Course grades are based on this academic work and participation in a group project. PREREQUISITES: Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

### **I-E 399: INDEPENDENT STUDY IN INNOVATION & ENTREPRENEURSHIP**

*Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

### **I-E 495: ADVANCED TOPICS IN INNOVATION AND ENTREPRENEURSHIP**

This course will offer opportunities to explore special topics in Innovation and Entrepreneurship. Topics will be taught at an advanced level, so the course will build on previous work in Innovation and Entrepreneurship. May be repeated when topic is different.

*Topic for Fall 2022: Advanced Financial Modeling*

*Prerequisites: I-E 300 or permission of instructor*

This course covers advanced financial modeling and is based on the on-line Breaking into Wall Street program. Students will use Excel to learn key concepts and processes, including building financial and valuation models for companies. Students will also student how to model mergers and acquisitions. *Units: 6.*

*Prerequisite: I-E 300 or permission of instructor*

### **I-E 590: TUTORIAL IN INNOVATION & ENTREPRENEURSHIP**

*Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

**I-E 591: DIRECTED STUDY IN INNOVATION & ENTREPRENEURSHIP**

*Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

**I-E 595: PRACTICUM IN INNOVATION & ENTREPRENEURSHIP**

An opportunity for students to gain practical experience with innovation and entrepreneurship in the context of a for-profit or not-for-profit organization, an ongoing student venture (e.g., Rabbit Gallery, Greyfell Theatre, Paper Fox Printmaking Workshop, or KidsGive), or a startup venture. The academic component of the internship includes readings related to the substance of the internship, discussions with the faculty supervisor, and may include a written report appropriate to the discipline. Course grades are based on this academic work and participation in a group project. PREREQUISITES: Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

**I-E 599: INDEPENDENT STUDY IN INNOVATION & ENTREPRENEURSHIP**

*Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

**I-E 690: TUTORIAL IN INNOVATION & ENTREPRENEURSHIP**

*Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

**I-E 691: DIRECTED STUDY IN INNOVATION & ENTREPRENEURSHIP**

*Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

**I-E 695: PRACTICUM IN INNOVATION & ENTREPRENEURSHIP**

An opportunity for students to gain practical experience with innovation and entrepreneurship in the context of a for-profit or not-for-profit organization, an ongoing student venture (e.g., Rabbit Gallery, Greyfell Theatre, Paper Fox Printmaking Workshop, or KidsGive), or a startup venture. The academic component of the internship includes readings related to the substance of the internship, discussions with the faculty supervisor, and may include a written report appropriate to the discipline. Course grades are based on this academic work and participation in a group project. PREREQUISITES: Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

**I-E 699: INDEPENDENT STUDY IN INNOVATION & ENTREPRENEURSHIP**

*Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

# LATIN AMERICAN STUDIES

**Professors:** G. Fares (*Spanish, chair*), J. Frederick (*History, chair*), D. Richeson (*Conservatory of Music*), R. Tapia (*Spanish*), T. Troy (*Theatre Arts*), J. Thomas and Julie E. Hurvis (*Professor of Theatre and Drama*) (on leave term(s) I, II, III)

**Associate professors:** J. Encarnacion (*Conservatory of Music*), D. Fitz (*Economics*)

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.

## Required for the minor in Latin American studies

Students must take six courses (at least 36 units), including:

1. Core requirements: 2 courses (normally 12 units), from the following list:

- ECON 203: *Latin American Economic Development*
- HIST 178: *Colonial Latin American History*
- HIST 179: *Modern Latin American History 1821-Present*
- HIST 371: *The Rise and Fall of American Empires*
- HIST 374/SPAN 570: *Visions of the Conquest*
- HIST 378/ETST 325: *Ethnicity in Latin America*
- HIST 422: *Revolt and Revolution in Latin America*
- HIST 476: *Top: Disasters That Made The Americas*
- SPAN 320: *Introduction to Literary Texts*
- SPAN 425, 426/ARHI 270, 271: *Latin American Visual Art*
- SPAN 430: *Introduction to Film*
- SPAN 466: *Latin@ Studies*
- SPAN 521: *Latin American Literature*
- SPAN 577: *Space as Text*
- SPAN 580: *Dis(re)membering the Nation: Contemporary Film & Fiction of Spain and Latin America*
- SPAN 585: *Buenos Aires*

2. Electives: 4 courses (normally 24 units). 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 term to term; 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. Courses not included on this list may be used as electives provided they meet the above requirements.

- Conservatory courses with consent of the instructor and of one of the Program co-chairs.

- 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.
- At least 60 percent of the units must be taken on the Appleton campus.

## Courses - Latin American Studies

### **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.*

### **SPAN 320: INTRODUCTION TO LITERARY TEXTS**

An introduction to the critical analysis of texts that represent various periods, genres and authors in Latin American and Spanish literature. Readings of texts and theory, class discussions and composition tasks prepare students for other advanced courses in the Spanish program. PREREQUISITES: SPAN 202, its equivalent, or consent of instructor. *Units: 6.*

*Prerequisite: SPAN 202, its equivalent, or consent of instructor.*

### **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. PREREQUISITES: Sophomore standing; HIST 178 or HIST 179 recommended *Units: 6.*

*Also listed as History 378*

*Prerequisite: Sophomore standing; HIST 178 or HIST 179 recommended*

### **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. (G&C) PREREQUISITES: Sophomore standing *Units: 6.*

*Prerequisite: Sophomore standing*

### **HIST 374: VISIONS OF CONQUEST**

The creation of Colonial Latin America meant the political, cultural and spiritual reconfiguration of society on both sides of the Atlantic. In this course, we will elucidate the process of conquest through the study of historical accounts, cultural artifacts of the colonizers and colonized alike, and relevant theoretical texts. This course is held concurrently with SPAN 470. Lectures, discussion, and reading and writing assignments are in English. Students interested in work in the Spanish language who have met the prerequisites should register for SPAN 470.(G&C) PREREQUISITES: Sophomore standing *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. (G&C) PREREQUISITES: Sophomore standing; HIST 178 or HIST 179 recommended *Units: 6.*

*Also listed as Ethnic Studies 325*

*Prerequisite: Sophomore standing; HIST 178 or HIST 179 recommended*

### **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. PREREQUISITES: One 300-level Spanish course, its equivalent, or consent of instructor *Units: 6.*

*Also listed as Gender Studies 410*

*Prerequisite: One 300-level Spanish course, its equivalent, or consent of instructor*

### **SPAN 425: 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. PREREQUISITES: One 300-level course in Spanish or consent of instructor *Units: 6.*

*Also listed as Art History 275*

*Prerequisite: One 300-level course in Spanish or consent of instructor*

### **SPAN 466: LATINX STUDIES (IN ENGLISH)**

This course covers the main cultural issues in Latin@ communities. It concentrates on the Latin@s of the United States, the definitions of these communities, and their cultural expressions. Through theoretical materials as well as literature, film, historical documents, testimony, etc., this course addresses a variety of subjects related to Latin@ culture. Taught in English. PREREQUISITES: One 300-level Spanish course, its equivalent, or consent of instructor *Units: 6.*

*Also listed as Ethnic Studies 583*

*Prerequisite: One 300-level Spanish course, its equivalent, or consent of instructor*

**SPAN 577: SPACE AS TEXT**

A geocritical analysis of the role of space and borders in contemporary literature. We will examine the critical theory on the topic and apply those insights to texts mainly from or about Latin American and the Atlantic regions. We will include spatial representations from the visual arts and films. Seminar with exams, presentations, and papers. In Spanish. PREREQUISITES: One 400-level course in Spanish or consent of instructor *Units: 6.*

*Prerequisite: One 400-level course in Spanish or consent of instructor*

**SPAN 580: DIS(RE)MEMBERING THE NATION: CONTEMPORARY FILM & FICTION OF SPAIN AND LATIN AMERICA**

A thematic analysis of film and fiction produced in the late and post-dictatorial context of Spain and several Latin American countries. The course studies the cultural processes of historical memory, collective trauma, oblivion, and questioning of national narratives in selected works from the past four decades. Readings include Manuel Puig's *Kiss of the Spider Woman*, Ariel Dorfman's *Death and the Maiden*, and Carmen Martin Gaité's *The Back Room*, as well as films by Lucrecia Martel, Victor Erice, Pablo Larrain, and Guillermo del Toro, among others. *Units: 6.*

*Also listed as Film Studies 580*

*Prerequisite: One 400-level course in Spanish or consent of instructor*

# LINGUISTICS

<b>Professors:</b>	K. Sung ( <i>Chinese and Japanese, Wendy and K.K. Tse Professor of East Asian Studies</i> ), B. Williams ( <i>Education, chair term III</i> )
<b>Associate professor:</b>	M. Phelan ( <i>Philosophy</i> )
<b>Assistant professor:</b>	M. Rodriguez Guerra ( <i>Spanish</i> )
<b>Visiting assistant professors:</b>	A. Adler ( <i>Chinese and Japanese</i> ), A. Galambosh ( <i>French and Francophone Studies</i> )
<b>Instructor:</b>	C. Despres-Berry ( <i>Center for Academic Success</i> )

What is language, and how does it work? Linguistics is the field of study that explores the nature and structure of language, how it develops and changes, and how it is used to create and convey meaning as well as to mark identity and group affiliation. At Lawrence, linguistics is an interdisciplinary area of study taught by faculty from multiple departments, affording students the opportunity to examine language-related questions from different disciplinary perspectives.

Core areas of linguistics include the study of sound patterns in language (phonology), the formation of words (morphology), and the structure of phrases and sentences (syntax). Linguists also study how these structures relate to meaning (semantics) and how language is used in context (pragmatics). Core courses for the major and minor include the study of phonology, syntax, and morphology or lexical semantics (word meanings).

Beyond the core are many subspecialties and closely allied fields that examine language types and variations (such as those related to geography, ethnicity, or social class), how language is produced and perceived, how people acquire their first and second languages, how people use language to perform speech acts (like insulting or promising), how computers process natural languages or are used to study language, and many more. These fields are represented by elective offerings in the program, which give students the chance to explore diverse topics of interest.

The major in linguistics also requires language study beyond the general education requirements, which may be undertaken in a study abroad program. Seniors integrate their linguistics knowledge and skills in a capstone Senior Seminar, which satisfies the program's *Senior Experience* requirement.

For students seeking to teach English as a second language, whether in the U.S. or abroad, the program offers a separate minor in Teaching ESL, which may be taken on its own or together with the linguistics major or minor.

## Required for the major in linguistics

A student who completes the major in linguistics will demonstrate understanding of theories and methods involved in answering questions about language and present and discuss findings of linguistic research, both others' and their own.

The major in linguistics requires the following:

1. LING 150: *Introduction to Linguistics*
2. The following courses:
  - LING 340: *Syntax*
  - LING 350: *Phonology*
  - Either LING 380: *Morphology* or LING 335: *Lexical Semantics*
3. One of the following courses:
  - LING 325: *Sociolinguistics*
  - LING 400: *Philosophy of Language*
  - LING 405: *How to Do Things With Words*
  - LING 470: *Cognitive Linguistics*
4. Four additional courses in linguistics, which could include additional courses from #2 or 3. Students are encouraged to select courses that develop an area of emphasis leading to the *Senior Experience*.
5. One of the following:
  - Study of two languages other than English, each for three terms (i.e. first-year level)
  - Completion of the fifth term of one language other than English (i.e. second-year level)
  - Study of one language other than English for four terms and the completion of an off-campus language program
6. LING 650: *Senior Seminar*

## Senior Experience in linguistics

Students satisfy the *Senior Experience* requirement in Linguistics by participating in LING 650: *Senior Seminar*, a course in which they identify a research question on a topic of interest, review relevant literature, and develop a research proposal. The course culminates in a paper and an oral presentation to faculty and students in the linguistics program. Students pursuing a double major are encouraged to find a topic that combines their interests in both fields.

## Required for the minor in linguistics

1. LING 150: *Introduction to Linguistics*
2. Two of the following:
  - LING 340: *Syntax*
  - LING 350: *Phonology*
  - Either LING 380: *Morphology* or LING 335: *Lexical Semantics*
3. One of the following:
  - LING 325: *Sociolinguistics*
  - LING 400: *Philosophy of Language*
  - LING 405: *How to Do Things with Words*
  - LING 470: *Cognitive Linguistics*
4. Two additional courses in linguistics, which could include additional courses from #2 or 3.

## Required for the minor in teaching English as a second language

1. Three courses in linguistics:
  - a. LING 150: *Introduction to Linguistics*
  - b. LING 360: *Second Language Acquisition*
  - c. LING 362: *The Structures of English*
2. Two courses in education:
  - a. EDST 350: *Ethnicity, Cultural Diversity, and Education*
  - b. EDUC 565: *Methods in Teaching English Learners*

Students pursuing teacher certification in English as a second language should consult the Education section of the catalog for additional certification requirements.

## Courses - Linguistics

### 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 160: *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. PREREQUISITES: Recommended for freshmen and sophomores *Units: 6.*

*Also listed as Philosophy 150*

*Prerequisite: Recommended for freshmen and sophomores*

### LING 191: *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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### LING 208: *MACHINE LEARNING*

An overview of techniques used to discover structural patterns and make predictions using complex datasets that are prevalent in today's world. The central machine learning tasks of classification, clustering, and regression will be explored, along with methods for training models and evaluating predictions. This course will be taught in a workshop format. Assignments will involve the use of statistical software. PREREQUISITES: CMSC 150, or CMSC 205, or CMSC 210, or consent of instructor *Units: 6.*

*Also listed as Statistics 208, Computer Science 208*

*Prerequisite: CMSC 150, or CMSC 205, or CMSC 210, or consent of instructor*

### **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 225: LANGUAGE AND THE CITY**

This course examines the origins and consequences of linguistic diversity in London, using insights from sociolinguistics. We will use the city of London as a kind of laboratory in which to study how social forces influence language use and the ways that languages influence social structure. **PREREQUISITES:** Must be attending the Lawrence London Centre *Units: 6.*

*Prerequisite: Must be attending the Lawrence London Centre*

### **LING 232: SIGNIFYING IDENTITY: THE SEMIOTICS OF EMBODYING MUSICAL GENRE AFFILIATIONS**

The exploration of how people embody and display their identities as they relate to musical genres. From Doc Martens to zoot suits, body mod to makeup, we will learn about the semiotics of musical genre affiliations, paying attention to how embodied expressions of affiliation intersect with different aspects of identities such as ethnicity, queerness, or race. Class includes discussions, projects, and speakers.

**PREREQUISITES:** Sophomore Standing *Units: 6.*

*Also listed as Musicology 232, Anthropology 332*

*Prerequisite: Sophomore Standing*

### **LING 255: INTRODUCTION TO CHINESE LANGUAGE AND CULTURE**

A survey of the Chinese language family, its linguistic structure, dialectal variations, writing system, speech registers, interaction with other languages and the internet world, and its role in reflecting cultural and societal aspects such as social class, familial hierarchy, age and gender, and Confucianism. Taught in English.

**PREREQUISITES:** CHJA 101 or consent of instructor *Units: 6.*

*Also listed as Chinese and Japanese 255*

*Prerequisite: CHJA 101 or consent of instructor*

### **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. **PREREQUISITES:** Sophomore standing; CHJA 112 recommended *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. PREREQUISITES: LING 150 and sophomore standing *Units: 6.*

*Also listed as East Asian Studies 310, Chinese and Japanese 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. PREREQUISITES: LING 150 or consent of instructor *Units: 6.*

*Prerequisite: LING 150 or consent of instructor*

### **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. PREREQUISITES: LING 150 or ANTH 110 *Units: 6.*

*Also listed as Anthropology 331*

*Prerequisite: LING 150 or ANTH 110*

### **LING 330: LANGUAGE AND CULTURE**

An introduction to the core concepts of linguistic anthropology, definitions of language, basic methods of linguistic anthropology (observation, transcription, analysis, ethnography), power and language, language discrimination, and language ideology theory. Lectures, discussions, and labs. PREREQUISITES: ANTH 110 or LING 150 *Units: 6.*

*Also listed as Anthropology 330*

*Prerequisite: ANTH 110 or LING 150*

### **LING 335: LEXICAL SEMANTICS**

This course introduces fundamental concepts and research issues in the linguistic study of word meaning. Topics include: representation of word meaning; relation between lexical, truth-conditional and context-dependent meanings; semantic relations; meaning variation; semantic properties of nouns and verbs (e.g. mass-count distinction, verb classes, aspect, semantic roles); interaction between content and function words. PREREQUISITES: LING 150 *Units: 6.*

*Prerequisite: LING 150*

### **LING 340: 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. PREREQUISITES: LING 150 or consent of instructor *Units: 6.*

*Prerequisite: LING 150 or consent of instructor*

### **LING 350: *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. PREREQUISITES: LING 150 or consent of instructor *Units: 6.*

*Prerequisite: LING 150 or consent of instructor*

### **LING 355: *CHILD LANGUAGE ACQUISITION***

Every normally developing human acquires language in early childhood. This course explores how this feat is accomplished. We will examine data on children's linguistic knowledge at different developmental stages and what types of theories might explain these data. Students will also have the opportunity to analyze real child language data. PREREQUISITES: LING 150, or PSYC 260 or PSYC 265 *Units: 6.*

*Prerequisite: LING 150, or PSYC 260 or PSYC 265*

### **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. PREREQUISITES: LING 150 or consent of instructor *Units: 6.*

*Prerequisite: LING 150 or consent of instructor*

### **LING 362: *THE STRUCTURES OF ENGLISH***

An introduction to the structures of both spoken and written English with an emphasis on analyzing and describing relationships between the form, meaning, and use of specific structures in English. We will compare how speakers and writers of a variety of Englishes, including academic English, construct meaning in context through the grammatical resources of English. PREREQUISITES: LING 150 or consent of instructor *Units: 6.*

*Prerequisite: LING 150 or consent of instructor*

### **LING 365: *HISTORY OF THE JAPANESE LANGUAGE (IN ENGLISH)***

This course explores the history of the Japanese language, including theories of its origin, the importation of the Chinese characters, Kanji, the invention of the Japanese syllabaries, Kana, the development of the writing system, lexical influence of loan words, and the evolution of both written and spoken forms in modern Japanese. The course also investigates two other languages in Japan, the Ainu and the Ryukyu languages. PREREQUISITES: Sophomore standing; one year of Japanese recommended *Units: 6.*

*Also listed as Chinese and Japanese 365, East Asian Studies 377*

*Prerequisite: Sophomore standing; one year of Japanese recommended*

### **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. PREREQUISITES: LING 150, PSYC 340, or consent of instructor *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. PREREQUISITES: SPAN 202, its equivalent, or consent of the instructor *Units: 6.*

*Also listed as Spanish 345*

*Prerequisite: SPAN 202, its equivalent, or consent of the instructor*

### **LING 377: INTRODUCTION TO SPANISH LINGUISTICS**

This course offers an introduction to linguistics based on data from Spanish. We study the sound system of Spanish, the structure of its words, and how its sentences are formed and interpreted. We also consider how Spanish has changed over time and how it differs depending on where it is spoken. Written assignments and exams. PREREQUISITES: SPAN 202, its equivalent, or consent of the instructor *Units: 6.*

*Also listed as Spanish 350*

*Prerequisite: SPAN 202, its equivalent, or consent of the instructor*

### **LING 380: 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. PREREQUISITES: LING 150 *Units: 6.*

*Prerequisite: LING 150*

### **LING 390: TUTORIAL STUDIES IN LINGUISTICS**

Available to advanced students of linguistics. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **LING 391: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **LING 399: INDEPENDENT STUDY IN LINGUISTICS**

Available to advanced students of linguistics. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **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. PREREQUISITES: One course in philosophy, junior standing, or consent of instructor; PHIL 150 recommended *Units: 6.*

*Also listed as Philosophy 400*

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

### **LING 405: HOW TO DO THINGS WITH WORDS**

An examination of major and cutting edge topics in the philosophy of language and linguistics. Where do word meanings come from? How can one word mean different things in different contexts? How do we promise or make commitments? Why do slurs hurt and jokes amuse? What is the nature of metaphor? Where does the border between what words mean and what speakers mean with words lie? These and other questions will be considered. Appropriate for students with an interest in philosophy, linguistics, or cognitive science.

PREREQUISITES: One course in philosophy, junior standing, or consent of the instructor *Units: 6.*

*Also listed as Philosophy 405*

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

### **LING 407: SPANISH IN THE U.S.**

A first approach to the study of Spanish in the United States through different lenses, including (but not limited to) the history of Spanish and its speakers in the U.S., a demographic overview of its varieties, sociopolitical factors surrounding its use, linguistic phenomena resulting from contact with English, and educational approaches to learning Spanish as a heritage language. Written assignments and exams. PREREQUISITES: 300-level course in Spanish or consent of instructor *Units: 6.*

*Also listed as Ethnic Studies 407, Spanish 407*

*Prerequisite: 300-level course in Spanish or consent of instructor*

### **LING 420: TOPICS IN LOGIC**

*Units: 6.*

*Also listed as Philosophy 420*

*Prerequisite: PHIL 150 or consent of instructor*

### **LING 430: METHODS IN LINGUISTIC ANTHROPOLOGY**

A hands-on introduction to advanced linguistic anthropology and sociolinguistics methods and relevant theories. Will cover transcription, discourse analysis, conversation analysis, and narrative analysis. Classes will be a combination of labs, workshops, and seminars. Prerequisites are non-negotiable. PREREQUISITES: Junior standing, and ANTH 210 or ANTH 330 *Units: 6.*

*Also listed as Anthropology 430*

*Prerequisite: Junior standing, and ANTH 210 or ANTH 330*

### **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*

### **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. PREREQUISITES: LING 150 or consent of instructor *Units: 6.*

*Prerequisite: LING 150 or consent of instructor*

### **LING 531: SEMIOTICS**

Semiotics is the study of signs, symbols, and signification in social life. This course will cover semiotic theory, including theorists such as Saussure, Peirce, Jakobson, Lévi-Strauss, Barthes, and Bakhtin, and the application of semiotics to the study of language and social life, conducted through lectures and seminar-style discussions. PREREQUISITES: ANTH 330/LING 330 *Units: 6.*

*Also listed as Anthropology 531*

*Prerequisite: ANTH 330/LING 330*

### **LING 532: TOPICS IN LINGUISTIC ANTHROPOLOGY**

An examination of a particular topic in linguistic anthropology. The specific topic being investigated will change from year to year. Students are expected to do advance reading and independent research. Course may be repeated when topic is different.

*Units: 6.*

*Also listed as Anthropology 530*

*Prerequisite: ANTH 330 or LING 325 and junior standing, or consent of instructor*

### **LING 537: HISPANIC LINGUISTICS**

Topics for special study in Hispanic Linguistics. 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. Readings in English and Spanish, assignments in Spanish/English. *Units: 6.*

*Also listed as Spanish 537*

*Prerequisite: One 400-level Spanish class or SPAN 350/345 or LING 150 and advanced Spanish ability*

### **LING 542: BILINGUALISM IN THE SPANISH-SPEAKING WORLD**

This course serves as an overview of bilingualism and the acquisition of Spanish in contact with other languages. It covers early and late acquisition of bilingual speech, Spanish in contact with other languages, and the sociopolitical dynamics of diglossia across the Spanish-speaking world. The course combines lectures with critical readings of empirical articles, research projects, and class discussions. Readings in English, assignments in Spanish/English. PREREQUISITES: One 300- or 400-level Spanish class, or LING 150 and advanced Spanish ability. *Units: 6.*

*Also listed as Spanish 542*

*Prerequisite: One 300- or 400-level Spanish class, or LING 150 and advanced Spanish ability.*

### **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. PREREQUISITES: One 200-level course in linguistics or psychology, or consent of the instructor *Units: 6.*

*Also listed as Cognitive Science 545, Psychology 545*

*Prerequisite: One 200-level course in linguistics or psychology, or consent of the instructor*

### **LING 590: TUTORIAL STUDIES IN LINGUISTICS**

Available to advanced students of linguistics. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **LING 591: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **LING 599: INDEPENDENT STUDY IN LINGUISTICS**

Available to advanced students of linguistics. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **LING 650: SENIOR SEMINAR**

In this course students do substantial preparatory work for their senior experience project in linguistics. They identify and develop a research question, do preliminary research, and write a well-conceived research proposal. Topics include linguistic data collection, linguistic argumentation and analysis, and standards of academic writing in linguistics. PREREQUISITES: Senior standing *Units: 6.*

*Prerequisite: Senior standing*

### **LING 690: TUTORIAL STUDIES IN LINGUISTICS**

Available to advanced students of linguistics. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **LING 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

**LING 699: INDEPENDENT STUDY IN LINGUISTICS**

Available to advanced students of linguistics. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

# MATHEMATICS

<b>Professors:</b>	S. Corry ( <i>chair</i> ), K. Krebsbach
<b>Associate professor:</b>	J. Gregg
<b>Assistant professors:</b>	A. Chakraborty, A. Heaton, J. Rana, A. Sage, E. Sattler ( <i>on leave term(s) II</i> )
<b>Instructor:</b>	A. Ackles

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 provides the language for science. In the past 100 years, many disciplines have been virtually transformed by the infusion of mathematics, so that alongside the traditional field of mathematical physics, one now finds new disciplines such as mathematical biology, mathematical ecology, mathematical economics, mathematical linguistics and mathematical psychology.

But mathematics is so much more than its applications. As the study of formal structures, mathematics offers a supreme beauty, an abstract forest of pattern and form, at once deep, intricate, logical, and surprising, a forest holding wonders both known and unknown. The search for these wonders is no game, for mathematics bears on eternal truth: Primes—such as 2, 3, 5, 7, 11, 13, ...—cannot be written as the product of two smaller integers. How many primes are there? Infinitely many. This is a well-known wonder proved by Euclid. Twin primes—such as 3 and 5, 5 and 7, 11 and 13, 17 and 19, ...—are “consecutive” primes. How many twin primes are there? No one knows. Mathematicians have unleashed their most sophisticated tools on this problem, but the question remains unanswered. It is an unknown wonder. Will you be the first to find the answer? Whatever the answer, it is an eternal and universal truth: true for all time, in all places, to every intellect.

To reflect the diversity of modern mathematics and its applications, the department offers a mathematics major, a statistics track through the major, and in conjunction with the economics department, an interdisciplinary major in mathematics-economics. The department's computer science major is described separately under [Computer Science](#). In addition to a minor in mathematics, the department supports an interdisciplinary minor in [Statistics and Data Science](#).

The first two years of our program provides an introduction to the areas of calculus, analysis, discrete mathematics, and linear algebra. These courses pave the way for exploration of diverse elective offerings at the junior and senior level. We offer courses in many areas of pure and applied mathematics, elementary and advanced statistics, and computer science. Majors engage in a one-term independent study during their senior year, working on a topic of their choice under the guidance of a faculty member. This transforming experience demonstrates a student's ability to learn mathematics independently and to clearly and cogently express this knowledge both verbally and in writing.

The department offers a number of elementary- and intermediate-level courses designed to support other majors and meet the needs of students wishing to continue their study of mathematics, statistics, or computer science.

Lawrentians majoring in mathematics or mathematics-economics prepare themselves for a wide variety of interesting careers, but wherever life takes them, they have one thing in common—the logical and precise, yet intuitive and creative, habit of mind instilled by the serious study of mathematics and statistics together with

their powerful applications.

## Required for the major in mathematics

Students who major in mathematics will develop the ability to learn mathematics and statistics independently, to express their knowledge clearly and cogently, and to understand, critique, and construct mathematical and statistical arguments. They will apply the principles of careful argumentation—agree on meaning before debating truth, expose all (especially hidden) assumptions, abstract from examples, seek the underlying structure, apply logic pristinely—to critique arguments in other fields.

In addition to the general mathematics track, we also have a statistics track for students wishing to focus their upper-level work in statistics. The requirements for both tracks refer to the following categories of elective courses:

A) **Algebra & Combinatorics:** MATH 505, 525, 545, 555, 565, 570

B) **Analysis & Topology:** MATH 510, 530, 535, 550, 560

C) **Applied Mathematics:** MATH 340, 350, 400, 420, 435

D) **Statistics:** STAT 255, 445, 450, 455

The major in mathematics (general track) requires the following:

1. MATH 140: *Calculus*, MATH 155: *Multivariable Calculus*
2. MATH 200: *Complex Sequences & Series*, MATH 230: *Discrete Mathematics*, Math 250: *Linear Algebra*.
3. Five 6-unit courses chosen from categories A-D; at most one of these courses may come from category D, and at least 3 of the categories A-D must be represented.
4. One six-unit computer science (CMSC) course numbered 140 or above; one of 140, 150, 205, or 210 is recommended.
5. Senior Experience: completion of a 6-unit independent study project in at least one term of the senior year.

The statistics track for the mathematics major requires the following:

1. MATH 140: *Calculus*, MATH 155: *Multivariable Calculus*.
2. MATH 200: *Complex Sequences & Series*, MATH 230: *Discrete Mathematics*, Math 250: *Linear Algebra*.
3. MATH 340: *Probability*.
4. One additional MATH course from categories A-C.
5. STAT 255: *Statistics for Data Science*.
6. Two of the following courses: STAT 445: *Mathematical Statistics*, STAT 450: *Bayesian Statistics*, STAT 455: *Advanced Statistical Modeling*.
7. Either CMSC/STAT 205: *Data Scientific Programming* or CMSC/STAT 208: *Machine Learning*.
8. Senior Experience: completion of a 6-unit independent study project in at least one term of the senior year.

## Required for the interdisciplinary major in mathematics-economics

Students who complete the major in mathematics-economics will pursue the outcomes described for the economics and mathematics majors with an explicit focus on economics in constructing and critiquing mathematical arguments. Students pursuing the major must have an advisor in each department.

The major in mathematics-economics requires the following:

1. MATH 140: *Calculus*, MATH 155: *Multivariable Calculus*.
2. MATH 200: *Complex Sequences & Series*, MATH 230: *Discrete Mathematics*, Math 250: *Linear Algebra*.
3. STAT 255: *Statistics for Data Science*, MATH 340: *Probability*.
4. One of the following courses: STAT 445: *Mathematical Statistics*, STAT 450: *Bayesian Statistics*, MATH 510: *Real Analysis*.
5. ECON 100: *Introductory Economics*.
6. ECON 300: *Microeconomics*, ECON 320: *Macroeconomics*, ECON 380: *Econometrics*.
7. One 6-unit ECON course numbered between 400 and 580.
8. Senior Experience: a 6-unit independent study project that has been approved by both departments.

## Senior Experience in mathematics or mathematics-economics

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.

For mathematics 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*.

## Required for the minor in mathematics

1. MATH 140: *Calculus*, MATH 155: *Multivariable Calculus*.
2. MATH 200: *Complex Sequences & Series*, MATH 230: *Discrete Mathematics*, Math 250: *Linear Algebra*.
3. Two additional 6-unit courses chosen from categories A-D.

## Required for the minor in data science

1. Two core courses:
  - a. CMSC/STAT 205: *Data-Scientific Programming*
  - b. STAT 255: *Statistics for Data Science*
2. Two statistics and data science electives from the list of:
  - CMSC/STAT 208: *Machine Learning*
  - CMSC/STAT 405: *Advanced Data Computing*
  - STAT 450: *Bayesian Statistics*
  - STAT 455: *Advanced Statistical Modeling*
3. Two courses from the following list. (Students may substitute other classes involving data analysis with approval from the department of mathematics, statistics, and computer science).
  - ANTH 207: *Quantitative Analysis in Anthropology*
  - BIOL 170: *Integrative Biology: Experimental Design and Statistics*
  - BIOL 280: *Integrative Biology: Experimental Design and Statistics*
  - BIOL 360: *Introduction to Bioinformatics*
  - BIOL 375: *Biostatistics*
  - BIOL 380: *Ecological Modeling*
  - CHEM 210 / CHEM 211 *Analytical Chemistry and Statistical Methods in Analytical Chemistry*
  - CMSC 140: *Introduction to Programming with Python*
  - CMSC 210: *Introduction to Scientific Programming*
  - CMSC 470: *Artificial Intelligence*
  - ECON 223: *Quantitative Decision Making*
  - ECON 380: *Econometrics*
  - ECON 481: *Advanced Econometrics & Modeling*
  - ENST 235 / GEOS 214: *Climate and Climate Change*
  - ETST 302: *Research Methods in Ethnic Studies*
  - GOVT 271: *Research Methods in Political Science*
  - GOVT 538: *Outside the Margin of Error: Polling and Quantitative Prediction in Modern Politics*
  - MATH 340: *Probability*
  - PSYCH 280: *Research Methods I*
  - PSYCH 281: *Research Methods II*
  - PSYC 284: *Research Methods in Psychology*
  - PSYC 340: *Cognitive Psychology (with Laboratory)*
  - PSYC 342: *Cognitive Psychology*
  - PSYC 343: *Cognitive Neuroscience with Laboratory*
  - STAT 445: *Mathematical Statistics*
  - STAT 450: *Bayesian Statistics*

### Additional Stipulations:

1. No more than one of ANTH 207 and BIOL 170 may count toward the minor.
2. The minor requires a total of six distinct courses. Thus, courses that are listed twice above (such as STAT 450) may count toward one, but not both requirements.
3. No more than three courses, counting toward any one major or other minor, may be counted toward the

minor.

## Teacher certification in mathematics

Mathematics majors can seek certification to teach math at the secondary level. Students can add an endorsement in a second area by completing an appropriate minor. Students who plan to seek teacher certification should review the requirements in the Education section of the catalog and meet with the director of teacher education, preferably before the end of the sophomore year.

## First-year courses

The calculus sequence at Lawrence consists of three courses: MATH 140, 155, 200 (*Calculus, Multivariable Calculus, Complex Sequences & Series*). Students intending to major in computer science or chemistry must complete *Calculus* and *Multivariable Calculus*. Students intending to major in mathematics or physics must take all three courses: *Calculus*, *Multivariable Calculus*, and *Complex Sequences & Series*. Sufficiently prepared students should enter the calculus sequence during their first year. Sufficient preparation means strong high school mathematics, including a pre-calculus or elementary functions course. Students who lack this preparation yet need the calculus sequence should consider enrolling in MATH 103: *Preparation for Calculus*. In every case, all students intending to enroll in MATH 140, 155, or 200 must take the [ALEKS](#) online diagnostic exam covering topics in pre-calculus, and a score of at least 75% is required for enrollment.

For students interested in statistics:

- Students *without* prior study of statistics or calculus should enroll in STAT 107: *Principles of Statistics*;
- Students *with* prior study of statistics (e.g. AP statistics or BIOL 170) or credit for MATH 140 (or equivalent) should enroll in STAT 255: *Statistics for Data Science*.

## Advanced placement

Advanced placement in the calculus sequence and 6 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. Students with these scores should generally enroll in MATH 155: *Multivariable Calculus* after passing the [ALEKS](#) online diagnostic exam.

Six Lawrence units (for STAT 107: *Principles of Statistics*) may be obtained by scoring 4 or 5 on the College Board statistics exam. Students with these scores wishing to study statistics should enroll in STAT 255: *Statistics for Data Science*.

## 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 or directed studies are given for courses routinely offered, and the department does not normally permit a tutorial to be used to satisfy any major or minor requirement.

## 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 receive a stipend and 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.

## Courses - Mathematics

### **MATH 103: PREPARATION FOR CALCULUS**

An exploration of functions, including polynomial, rational, exponential, logarithmic, and trigonometric functions. This course is designed to prepare students for the study of calculus at Lawrence. PREREQUISITES: Minimum score on ALEKS diagnostic exam, as set by the department. *Units: 6.*

*Prerequisite: Minimum score on ALEKS diagnostic exam, as set by the department.*

### **STAT 107: PRINCIPLES OF 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. Topics include basic data analysis, one-variable regression, experimental and sampling design, random variables, sampling distributions, and inference (confidence intervals and significance testing). This course may not be taken on a Satisfactory/Unsatisfactory basis. Students with credit for MATH 140 or equivalent, or BIOL 170, or AP Statistics should not take this course and should instead consider STAT 255. *Units: 6.*

### **MATH 140: CALCULUS**

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. PREREQUISITES: Minimum score on ALEKS online diagnostic exam, as set by the department. *Units: 6.*

*Prerequisite: Minimum score on ALEKS online diagnostic exam, as set by the department.*

### **MATH 155: MULTIVARIABLE CALCULUS**

Techniques of integration, vector algebra in the plane and space, matrix algebra, functions of several variables, partial derivatives, double and triple integration, optimization. PREREQUISITES: MATH 140 or suitable AP or

IB score and minimum score on ALEKS online diagnostic exam as set by department *Units: 6.*

*Prerequisite: MATH 140 or suitable AP or IB score and minimum score on ALEKS online diagnostic exam as set by department*

### **MATH 191: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **MATH 200: COMPLEX SEQUENCES AND SERIES**

Complex numbers, sequences, convergence, series, power series, additional topics chosen from analysis, geometry, differential equations, and applied mathematics PREREQUISITES: MATH 155 *Units: 6.*

*Prerequisite: MATH 155*

### **STAT 205: DATA-SCIENTIFIC PROGRAMMING**

An introduction to programming with emphasis on learning from data in order to gain useful insights. Topics focus on elementary programming concepts in the R language and the necessary tools to handle, analyze and interpret data. This course will be taught in a workshop format, and students will complete regular assignments and a final project that provide hands-on programming/analysis experiences. PREREQUISITES: One prior course MATH, STAT, or CMSC course, or BIOL 170, or consent of instructor *Units: 6.*

*Also listed as Computer Science 205*

*Prerequisite: One prior course MATH, STAT, or CMSC course, or BIOL 170, or consent of instructor*

### **STAT 208: MACHINE LEARNING**

An overview of techniques used to discover structural patterns and make predictions using complex datasets that are prevalent in today's world. The central machine learning tasks of classification, clustering, and regression will be explored, along with methods for training models and evaluating predictions. This course will be taught in a workshop format. Assignments will involve the use of statistical software. PREREQUISITES: CMSC 150, or CMSC 205, or CMSC 210, or consent of instructor *Units: 6.*

*Also listed as Linguistics 208, Computer Science 208*

*Prerequisite: CMSC 150, or CMSC 205, or CMSC 210, or consent of instructor*

### **MATH 223: QUANTITATIVE DECISION-MAKING**

The students will learn how to develop formal, quantitative approaches to structuring difficult problems, particularly those problems involving probabilistic factors. We will develop and practice the steps of defining a problem, gathering data, formulating a model, performing numerical calculations, evaluating numerical information, refining the model, analyzing the model's alternatives, and communicating the results. PREREQUISITES: Sophomore standing *Units: 6.*

*Also listed as Economics 223*

*Prerequisite: Sophomore standing*

### **MATH 230: DISCRETE MATHEMATICS**

An introduction to mathematical reasoning and proof in the context of discrete structures relevant to the study of computer science. Topics include induction, sets, relations and functions, graph theory, combinatorics, and probability. PREREQUISITES: MATH 155 *Units: 6.*

*Prerequisite: MATH 155*

### **MATH 250: LINEAR ALGEBRA**

The study of vector spaces, linear transformations, matrices, and applications. Topics include linear independence, dimension, rank-nullity, change of basis, eigenvectors and eigenvalues, determinants, and inner products. PREREQUISITES: MATH 200 *Units: 6.*

*Prerequisite: MATH 200*

### **STAT 255: STATISTICS FOR DATA SCIENCE**

This course introduces modern statistical techniques in the context of predictive inference and modeling. Topics will include data analysis techniques such as linear and logistic regression, ANOVA, nonparametric methods, and computational approaches such as cross-validation and bootstrapping. Statistical software will be used frequently. This class will involve regular in-class and out-of-class assignments as well as exams and quizzes. PREREQUISITES: STAT 107, BIOL 170, or MATH 140, or instructor permission *Units: 6.*

*Prerequisite: STAT 107, BIOL 170, or MATH 140, or instructor permission*

### **MATH 340: PROBABILITY**

An introduction to probability and its applications. Topics will include combinatorial and axiomatic probability, conditional probability and Bayes' Theorem, random variables, expectation and variance, discrete and continuous probability distributions, joint and conditional distributions, and limit laws. PREREQUISITES: MATH 200, and either MATH 220 or MATH 230 *Units: 6.*

*Also listed as Statistics 340*

*Prerequisite: MATH 200, and either MATH 220 or MATH 230*

### **STAT 340: PROBABILITY**

An introduction to probability and its applications. Topics will include combinatorial and axiomatic probability, conditional probability and Bayes' Theorem, random variables, expectation and variance, discrete and continuous probability distributions, joint and conditional distributions, and limit laws. PREREQUISITES: MATH 200, and either MATH 220 or MATH 230 *Units: 6.*

*Also listed as Mathematics 340*

*Prerequisite: MATH 200, and either MATH 220 or MATH 230*

### **MATH 350: ORDINARY DIFFERENTIAL EQUATIONS**

A study of ordinary differential equations and applications. Topics include standard techniques for special types of equations, linear and non-linear systems, existence and uniqueness, and qualitative behavior. PREREQUISITES: MATH 250 *Units: 6.*

*Prerequisite: MATH 250*

### **MATH 390: TUTORIAL STUDIES IN MATHEMATICS**

Advanced work in mathematics on topics not covered in regular offerings. PREREQUISITES: Counter

Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **STAT 390: TUTORIAL STUDIES IN STATISTICS**

Advanced work in statistics on topics not covered in regular offerings. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **MATH 391: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **STAT 391: DIRECTED STUDY IN STATISTICS**

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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **MATH 395: INTERNSHIP IN MATHEMATICS**

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. *Units: 1 TO 98.*

### **MATH 399: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **STAT 399: INDEPENDENT STUDY IN STATISTICS**

Guided independent study of an advanced topic in undergraduate statistics or supervised work on an undergraduate research project, generally culminating in a final presentation and/or paper. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **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. PREREQUISITES: MATH 350 *Units: 6.*

*Prerequisite: MATH 350*

### **STAT 405: ADVANCED DATA COMPUTING**

This course builds on CMSC/STAT 205, providing a deeper exploration of statistical computing in R. Topics might include efficient programming techniques, parallelization, statistical algorithms, advanced data visualization, and creation of R packages. Statistical software will be used extensively in this course. The class will be taught in an interactive lab-based format. There will be regular assignments and a project.

PREREQUISITES: CMSC 205 *Units: 6.*

*Also listed as Computer Science 405*

*Prerequisite: CMSC 205*

### **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. PREREQUISITES: MATH 250, one CMSC (computer science) course recommended *Units: 6.*

*Prerequisite: MATH 250, one CMSC (computer science) course recommended*

### **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. PREREQUISITES: MATH 230 and 250, or MATH 310 *Units: 6.*

*Prerequisite: MATH 230 and 250, or MATH 310*

### **MATH 445: MATHEMATICAL STATISTICS**

Development of the mathematical theory of statistics and its application to the real world. The course will focus on the principles of estimation and testing from both the frequentist and Bayesian perspectives. Resampling methods (permutation tests and bootstrap intervals) will also be explored. PREREQUISITES: MATH/STAT 340 *Units: 6.*

*Prerequisite: MATH/STAT 340*

### **STAT 445: MATHEMATICAL STATISTICS**

Development of the mathematical theory of statistics and its application to the real world. The course will focus on the principles of estimation and testing from both the frequentist and Bayesian perspectives. Resampling methods (permutation tests and bootstrap intervals) will also be explored. PREREQUISITES: MATH/STAT 340 *Units: 6.*

*Prerequisite: MATH/STAT 340*

### **STAT 450: BAYESIAN STATISTICS**

A study of the Bayesian statistical philosophy, contrasting it with the traditional frequentist approach taught in other statistics courses. Topics include Bayes' Theorem, prior and posterior probability distributions, hierarchical models, and Markov Chain Monte Carlo methods. The course will involve a mixture of lecture, discussion, and use of statistical software. Requirements include exams, a project, and assignments involving

the use of statistical software. PREREQUISITES: MATH/STAT 340 *Units: 6.*

*Prerequisite: MATH/STAT 340*

### **STAT 455: ADVANCED STATISTICAL MODELING**

This course expands on STAT 255, and introduces more sophisticated models, meant to capture complicated correlation structure in data. Topics might include generalized linear models, mixed-effects models, hierarchical models, spatial models, and time series. The course will involve the use of statistical software. There will be regular assignments, exams, and possibly projects. PREREQUISITES: STAT 255 or instructor permission *Units: 6.*

*Prerequisite: STAT 255 or instructor permission*

### **MATH 505: GROUP THEORY**

The study of groups, group actions, and important examples of finite and matrix groups. Specific topics will include group homomorphisms, quotient groups, isomorphism theorems, Lagrange's Theorem, the Orbit-Stabilizer Theorem, and the Sylow Theorems. PREREQUISITES: MATH 230 and MATH 250; or MATH 300 and consent of instructor *Units: 6.*

*Prerequisite: MATH 230 and MATH 250; or MATH 300 and consent of instructor*

### **MATH 510: REAL ANALYSIS**

A study of concepts in mathematical analysis, including convergence of sequences and series, continuity, differentiation, integration, and metric spaces. PREREQUISITES: MATH 230 and MATH 250 *Units: 6.*

*Prerequisite: MATH 230 and MATH 250*

### **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. PREREQUISITES: MATH 230 and 250, or MATH 300 *Units: 6.*

*Prerequisite: MATH 230 and 250, or 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 230 and MATH 250, or 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. PREREQUISITES: MATH 230 and 250 *Units: 6.*

*Prerequisite: MATH 230 and 250*

### **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. PREREQUISITES: MATH 230 and 250 *Units: 6.*

*Prerequisite: MATH 230 and 250*

### **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 555: TOPICS IN ALGEBRA AND COMBINATORICS**

A study of interconnections between abstract algebra (especially finite group theory) and combinatorics (especially graph theory). Topics will include classical results (such as the matrix-tree theorem), as well as recent subjects and advances (such as the abelian sandpile model and the Riemann-Roch theorem for graphs). *Units: 6.*

*Prerequisite: MATH 230 and MATH 250*

### **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. PREREQUISITES: MATH 230 and 250 *Units: 6.*

*Prerequisite: MATH 230 and 250*

### **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. PREREQUISITES: MATH 230 and 250 *Units: 6.*

*Prerequisite: MATH 230 and 250*

### **MATH 570: MODERN MATHEMATICIANS**

We study ideas developed by mathematicians whose work has historically been undervalued in mathematics, including Black and Indigenous mathematicians, and mathematicians of color. The first half of the course will focus on understanding the mathematics underlying current research of a prominent modern mathematician. For the other half of the course, students will explore and present research of mathematicians of interest to them. PREREQUISITES: Math 230, Math 250 *Units: 6.*

*Prerequisite: Math 230, Math 250*

### **MATH 590: TUTORIAL STUDIES IN MATHEMATICS**

Advanced work in mathematics on topics not covered in regular offerings. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **STAT 590: TUTORIAL STUDIES IN STATISTICS**

*Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

**MATH 591: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

**STAT 591: DIRECTED STUDY IN STATISTICS**

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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

**MATH 599: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

**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. PREREQUISITES: MATH 310 *Units: 6.*

*Prerequisite: MATH 310*

**MATH 690: TUTORIAL STUDIES IN MATHEMATICS**

Advanced work in mathematics on topics not covered in regular offerings. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

**MATH 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

**MATH 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

**STAT 699: INDEPENDENT STUDY IN STATISTICS**

Guided independent study of an advanced topic in undergraduate statistics or supervised work on an undergraduate research project, generally culminating in a final presentation and/or paper. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

# MUSEUM STUDIES

As centers of research and education, and as repositories for cultural heritage, museums play an important role in our society. The museum studies interdisciplinary area provides students with a structure through which to learn about museums as a complement to both their major and the liberal arts as a whole. In addition, museums and related institutions provide career opportunities that take full advantage of a liberal arts degree. Museum professionals must be able to gain expertise in diverse areas, they must enjoy both independent research and interaction with the public, they must be both creative and analytical, and they must be able to operate within complex and diverse organizations.

The museum studies interdisciplinary area is designed to introduce students to the historical and theoretical foundations of museums and other preservation and research institutions, as well as to provide them with the practical skills and knowledge needed to work in such institutions. It is intended to be a supplement to a major in any area. This IA will have a clear use for students in such fields as anthropology, art, art history, natural sciences, and history, but students across the divisions will find the interdisciplinary area useful if they have an interest in pursuing a career in the museum field.

## Required for the interdisciplinary area in museum studies

1. One core course: ARHI 315: *Introduction to the Art Museum* (offered every other year)
2. Four additional six-unit courses with significant museum studies content, selected in consultation with museum studies faculty. See the list of courses on the [Course Descriptions page](#) for suggestions that could fulfill this requirement.
3. At least one of the following:
  - Six units of ANTH 422: *Archaeological Collections Management*
  - Six units of independent study in the Wriston Art Gallery or the University Archives
  - A six-unit academic internship at a museum, historic site, or similar institution, from an appropriate academic department

## Courses - Museum Studies

### **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.*

### **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.*

### **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.*

### **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. Students cannot receive credit for this course if they have previously received credit for CHEM 112/ENST 112 *Units: 6.*

*Also listed as Environmental Studies 115*

### **DECM 126: DIGITAL CURATORIAL PRACTICE**

This course will introduce students to the intellectual and practical elements of curatorial work and incorporate tools drawn from the digital liberal arts. Participants will research and curate their own online exhibition drawn from the university's interdisciplinary digital collections on the Omeka open-access platform. Course work will include readings on contemporary curatorial practice, research into digital collections, and the production of metadata for their exhibition. *Units: 3.*

### **DECM 135: ARCHIVAL DISCOVERY**

An in-depth exploration of archives and archival research. The course will address the theory and practice of locating, contextualizing, interpreting, and using archival primary sources. Students will work directly with collections in the University Archives and produce a digital project based on their research. *Units: 3.*

### **EDST 180: PSYCHOLOGY OF LEARNING**

An introduction to brain structure and development in childhood and adolescence, memory systems and types of learning, and approaches to building knowledge, improving skills, and deepening understanding. Culminating topics include motivation, the nature and development of expertise, and instructional design. *Units: 6.*

*Also listed as Psychology 180*

### **HIST 202: HISTORY IN PUBLIC: COMMUNITIES, STORIES, AND MEMORY**

Introduction to the broad variety of activities and locations developed by historians to reach the general public, such as museums, libraries, and archives, historic preservation, documentary filmmaking, oral history, podcasting, historical editing, and community activism. This course examines public historians' theoretical and ethical concerns in addition to developing relevant skills. Emphasis on experiential learning via field trips, interviews with practitioners, and individual and group projects. *Units: 6.*

### **CHEM 210: ANALYTICAL CHEMISTRY**

A course in the quantitative description of chemical equilibria in solution (acid-base, complexation, redox, solubility) using classical, separation, electrochemical, and spectrochemical methods of analysis. This course covers methods of quantification, statistics, and data analysis as applied to modern chemistry. Students will have the opportunity to individually design projects. Three lectures and two laboratory periods per week. **PREREQUISITES:** CHEM 116, placement exam, or consent of instructor; concurrent enrollment in CHEM 211 required *Units: 6.*

*Also listed as Environmental Studies 250*

*Prerequisite: CHEM 116, placement exam, or consent of instructor; concurrent enrollment in CHEM 211*

*required*

### **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 will take part in field research. When this course is scheduled at 8-noon TR, class will dismiss early for scheduled convocations. PREREQUISITES: ANTH 120 *Units: 6.*

*Also listed as Environmental Studies 260*

*Prerequisite: ANTH 120*

### **ANTH 222: HISTORIC PRESERVATION THEORY AND PRACTICE**

Historic preservation endeavors to identify and conserve historic objects, properties, and landscapes. It has become a focal task for many anthropologists today. This course introduces students to the basic theory of historic preservation, the laws guiding practice, and the techniques used by historic preservation professionals. *Units: 6.*

### **ART 222: ARTIST BOOKS**

Artist books are explored in a variety of forms including accordions, exposed and non-adhesive bindings, pop-ups, box making and alternative structures. Letterpress along with other forms of printmaking and surface treatments will be used. Techniques of cutting, folding, sewing, gluing, printing and working in dimension are examined in detail. Unique content is expected for each project. PREREQUISITES: Any 100-level Studio Art course *Units: 6.*

*Prerequisite: Any 100-level Studio Art course*

### **DECM 223: ADOBE CREATIVE SUITE**

This workshop is an introduction to the Adobe Creative Suite programs including Photoshop, InDesign, and Illustrator. The class is project centered, allowing each student to explore the multi-faceted and contemporary nature of each program. Methods in image construction, graphic design, typography, application, and output will be explored in detail. *Units: 3.*

### **BIOL 230: GENERAL ECOLOGY**

An introduction to the interactions between organisms and the environment. Explores the role of physical, chemical and biotic processes--including human activities--in determining the structure and function of populations, communities, and ecosystems. Topics 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*

### **ARHI 240: FROM ROMANTICISM TO POST-IMPRESSIONISM: ART OF THE 19TH CENTURY**

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 how political instability, industrialization, imperialism, and the growth of popular culture influenced production, style, and presentation of painting and sculpture. PREREQUISITES: ARHI 101 or sophomore standing *Units: 6.*

*Prerequisite: ARHI 101 or sophomore standing*

### **ART 240: NEW MEDIA IN ART**

An introduction to new media within a fine art context. Digital photography, experimental video, sound, photo book design, and blogging are covered as students use the Internet as a venue for presenting projects. The evolution of technology, new media theory, contemporary art discourse, and visual culture are examined through projects, readings, lectures, demonstrations, discussions, critiques, and visiting artist presentations. Mac-based. PREREQUISITES: Any 100-level Studio Art course *Units: 6.*

*Also listed as Film Studies 240*

*Prerequisite: Any 100-level Studio Art course*

### **ARHI 244: REPRESENTING IDENTITY IN 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. PREREQUISITES: ARHI 102 or sophomore standing *Units: 6.*

*Prerequisite: ARHI 102 or sophomore standing*

### **ART 245: INTERARTS: INSTALLATIONS**

In this course students make projects that engage with space. Lectures, discussions, readings, and critiques will investigate contemporary interdisciplinary practices that involve site-specific installation of works of art, everyday objects, performances, projections, etc. Interactive works and immersive virtual reality will also be considered. Students will create a self-designed installation project that will be planned and executed over the duration of the term. PREREQUISITES: FIST 100, ART 100, ART 105, or ART 110, or consent of instructor *Units: 1 TO 98.*

*Also listed as Film Studies 245*

*Prerequisite: FIST 100, ART 100, ART 105, or ART 110, or consent of instructor*

### **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.* PREREQUISITES: Must be attending the Lawrence London Centre. *Units: 6.*

*Prerequisite: Must be attending the Lawrence London Centre.*

### **ARHI 275: 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. PREREQUISITES: One 300-level course in Spanish or consent of instructor *Units: 6.*

*Also listed as Spanish 425*

*Prerequisite: One 300-level course in Spanish or consent of instructor*

### **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*

### **ARHI 315: INTRODUCTION TO THE ART MUSEUM: HISTORY, ISSUES, AND PRACTICES**

Introduction to art museums and exhibitions as objects of critical inquiry, and to issues and practices in the art museum field. Topics will include: history and evolution of collecting and display; museum exhibitions and knowledge formation; collection practices and ethics; exhibition theory and design; controversies, institutional critique, and the artist-as-curator. PREREQUISITES: Sophomore standing *Units: 6.*

*Also listed as Ethnic Studies 315*

*Prerequisite: Sophomore standing*

### **ARHI 320: CONTEMPORARY ART: CRITICAL QUESTIONS IN ART TODAY**

A study of art since 1960. Students will examine a diverse range of art works and the theories and strategies that have informed their production and exhibition. Students will learn about how artists today respond to such issues as gender, racial and ethnic identity, globalization, market capitalism, and new media and technology. PREREQUISITES: ARHI 101 or sophomore standing *Units: 6.*

*Prerequisite: ARHI 101 or sophomore standing*

### **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. PREREQUISITES: ANTH 120 *Units: 6.*

*Prerequisite: ANTH 120*

### **ART 322: INTERMEDIATE ARTIST BOOKS**

A continuation of ART 222, exploring historical and contemporary bindings, and letterpress printing with an emphasis on conceptual ties between structure, process, and function. Additional surface treatments and printing techniques are used in conjunction with altered, collaborative, dimensional, movable books, and historical binding. More advanced techniques of binding, printing, and working in dimension are examined in detail to enhance the conceptual and visual narrative inherent to this sequential medium. PREREQUISITES: ART 222 *Units: 6.*

*Prerequisite: ART 222*

### **ANTH 326: BIZARRCHAEOLGY**

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. PREREQUISITES: ANTH 120 *Units: 6.*

*Prerequisite: ANTH 120*

### **ANTH 328: PUBLIC ARCHAEOLOGY**

An exploration of ethical and legal concerns surrounding archaeology: the ownership and treatment of archaeological remains and relations between archaeologists and descendent communities. Topics include the ethics and legality of collecting looting, and the antiquities market; archaeology and nationalism; repatriation of skeletons and artifacts; and professional responsibilities of archaeologists. PREREQUISITES: Sophomore standing and ANTH 120, an ARHI course (preferably ancient to Renaissance), or consent of instructor *Units: 6.*

*Prerequisite: Sophomore standing and ANTH 120, an ARHI course (preferably ancient to Renaissance), or consent of instructor*

### **HIST 385: 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. PREREQUISITES: Junior standing or consent of the instructor. *Units: 6.*

*Also listed as English 527*

*Prerequisite: Junior standing or consent of the instructor.*

### **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 when the topic is different. Not open to students who have previously received or need to receive credit for ARHI 301 with the same topic. *Units: 6.*

*Also listed as Classics 540*

*Prerequisite: One 200- or 300-level course in art history, 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 when the topic is different. Not open to students who have previously received or need to receive credit for ARHI 420 with the same topic. *Units: 6.*

*Prerequisite: One 200- or 300-level course in 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, culminating in a research paper. The topic will change periodically. Course may be repeated when topic is different. Not open to students who have previous received credit for ARHI 341. *Units: 6.*

*Prerequisite: One 200-level course in art history or consent of instructor*

### **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 there 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.

**PREREQUISITES:** ECON 300 or GOVT 271 *Units:* 6.

*Prerequisite:* ECON 300 or GOVT 271

### **EDST 450: TOPICS IN EDUCATION STUDIES**

This seminar explores issues in contemporary education. Topics vary by term and focus on controversies or innovations in educational systems, practices, and policy or in the relations between school and society. May be repeated when topic is different.

*Topic for Spring 2021: The Philosophy of the Play*

Maria Montessori wrote that “the work of the child is play.” But is play also the work of all humans, child or adult? In this seminar students will examine the concept of play by reading philosophers on play, observing children and adults at play, and considering the role of play in human flourishing. Students will engage in discussion, reflective writing, and collaborative projects. *Units:* 6.

*Prerequisite:* Sophomore standing and one course in education studies or instructor approval

### **ARHI 480: TOPICS IN ART HISTORY**

An examination of a particular topic in art history that does not fit the chronological format of the other 400-level topics seminars in art history. Course may be repeated when topic is different. Not open to students who have previously received credit or need to receive credit for ARHI 381. *Units:* 6.

*Prerequisite:* One 200- or 300-level course in art history 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*

*Topic for Fall 2022: Food Justice Movements*

**Prerequisites:** Junior standing and at least two courses in anthropology or consent of instructor

Carole Counihan and Penny Van Esterik write that “Food is a powerful lens on capital, labor, health, and the environment” (Food and Culture: A Reader, 2013:9). This course draws upon the theories, methodologies and cultural knowledge of anthropology to explore food activism and various food justice movements. *Units:* 6.

*Prerequisite:* Junior standing and at least two courses in anthropology or consent of instructor

### **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. *Topic for*

This course *Units:* 6.

*Prerequisite:* ANTH 120 and junior standing or consent of instructor

### **ART 522: ADVANCED ARTIST BOOKS**

A continuation of ART 322, exploring advanced research into combining book making techniques, with exploration of formal, theoretical and technical issues related to artist books 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. PREREQUISITES: ART 322 *Units: 6.*

*Prerequisite: ART 322*

### **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. PREREQUISITES: Senior standing and declared major in Studio Art or consent of the instructor *Units: 6.*

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

### **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 projects and papers. Successful completion of BIOL 650 includes participation in BioFest, a symposium of biology senior experience projects during spring term. PREREQUISITES: Major in biology or biochemistry, or in neuroscience with departmental approval; and senior class standing or departmental approval *Units: 1 OR 5.*

*Prerequisite: Major in biology or biochemistry, or in neuroscience with departmental approval; and senior class standing or departmental approval*

### **ARHI 660: CRITICAL THEORIES IN VISUAL AND MATERIAL CULTURE**

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. PREREQUISITES: Junior standing *Units: 6.*

*Prerequisite: Junior standing*

# Music

<b>Professors:</b>	S. Devine ( <i>Lawrence Community Music School, Teacher Early Childhd-Spec Ed</i> ), J. Hittner ( <i>Lawrence Community Music School, Arioso Girl Choir Conductor</i> ), S. Jordheim, C. Kautsky ( <i>George and Marjorie Olsen Chandler Professor of Music</i> ), K. Leigh-Post, A. Mast ( <i>Kimberly-Clark Professor of Music</i> ), M. Mizrahi, D. Richeson
<b>Associate professors:</b>	M. Arau, I. Bates, D. Bell, G. Biringer, S. Ceballos, J. Daniel, S. Downing, M. Dupere, J. Encarnacion, S. George, W. Gu, J. Holiday ( <i>on leave term(s) I</i> ), E. Lesser, N. Lewis, J. McQuinn, J. Metcalf, M. Michellic ( <i>on leave term(s) III</i> ), B. Miller, A. Padilla, B. Pertl, S. Sieck ( <i>on leave term(s) II, III</i> ), S. Spears, A. Srinivasan, P. Swan, M. Urness, C. Woodruff ( <i>Director of Opera Studies</i> )
<b>Assistant professors:</b>	T. Albright ( <i>on leave term(s) II</i> ), A. Ellsworth, E. Gomez, R. Perry, K. Roach
<b>Visiting assistant professors:</b>	M. Ambrosio, M. Clayville, J. Gates, M. Paek, T. Prieto, E. Scheinberg, J. Sommer ( <i>Visiting Assistant Professor of Music</i> )
<b>Instructors:</b>	A. Boeckman, R. Cannizzo ( <i>Director of Conservatory Oper.</i> ), P. Darling, D. DiBella, M. Erickson, C. Evans, J. Johnson ( <i>Dir Con Prog &amp; Comm Outreach</i> ), C. Rath, M. Turner
<b>Lecturers:</b>	I. Adnyana, N. Agbeli ( <i>Lecturer in Music</i> ), A. Boncher, N. Buchman ( <i>Lawrence Community Music School</i> ), B. Carrothers, C. Chisel, L. Dempster, L. Donatelle ( <i>Student Music Assistant</i> ), E. Dupere ( <i>Lecturer in Music</i> ), F. Fernandez Morales, S. Gravelle ( <i>Lecturer in Music</i> ), E. Grover, B. Hauer ( <i>Audio Rec Tech Engr &amp; Lect Rec</i> ), J. Jensen, S. Jordheim, R. Korb, S. Peplin, O. Pimentel, J. Planet, L. Ramagopal Pertl, A. Reiser ( <i>Lawrence Community Music School, Lecturer of Music</i> ), G. Riss, D. Schwandt ( <i>Lecturer of Music &amp; Organist</i> ), C. Walby ( <i>Lawrence Community Music School</i> ), N. Wysock

Situated within the liberal arts foundation of the Bachelor of Arts degree, the BA music major welcomes students with diverse backgrounds, abilities, values, passions, and curiosities. The flexibility built into this major creates a space in which students can explore their unique voices and interests, and develop their own transformative creativities.

All students will gain experience with basic elements of music—such as time, rhythm, structure, pitch, tuning, and timbre—in specific contexts across different cultures and traditions. Students will experience and participate in different ways of making music. They will also explore musical styles, practices, notations, functions, meanings, and values in cross-cultural and transhistorical contexts. Students will engage critically and creatively with questions, ideas, and sources related to music. And they will explore music’s world-making power, including its connections to issues of social justice.

Students will work closely with their advisors to build a curriculum in alignment with their creative, intellectual, and vocational goals and aspirations. Students are encouraged to consider possible synergies between their music major work and other elements of their degree work. Students will reflect on their full experience in their major as part of the Senior Seminar.

## Required for the major in music

The major requires a minimum of 66 units in music, to include:

1. MUSI 100 *Experiencing Music* (6 units)
2. MUCO 211 *Introduction to Musicologies I* (6 units)
3. 6 units selected from any courses in MUEN (Music Ensemble Performance Studies) and/or MUIN (Applied Music Individual Instruction)
4. 27 units from at least two of the following groups:
  - a. MUCA (Music Composition and Arranging)
  - b. MUCO (Musicology)
  - c. MUDA (Dance)
  - d. MUEP (Music Education and Pedagogy)
  - e. MUJI (Jazz and Improvisational Music)
  - f. MURP (Music Repertoire Study), **except** MURP 361 *Acting for Singers*
  - g. MUSI (Music)
  - h. MUTH (Music Theory)
5. 18 units of elective courses in music (any MU\*\* course)
6. MUSI 400: *BAM Senior Seminar* (3 units)

## Senior Experience in music

The senior experience for the major is a cumulative project that reflects each student's specific passions and the wide range of activities in the Conservatory. Students must complete MUSI 400 *BAM Senior Seminar* as part of this requirement. They will submit a proposal for their senior experience to the BA Music Committee. Those interested in pursuing an interdisciplinary project that integrates their interests in music with another major are strongly encouraged to consult with their advisors and relevant faculty to plan and negotiate their overall Senior Experience as early as possible.

## Required for the minor in music

The minor requires a minimum of 36 units in music, to include:

1. MUSI 100 *Experiencing Music* (6 units)
2. MUCO 211 *Introduction to Musicologies I* (6 units)
3. 3 units selected from any courses in MUEN (Music Ensemble Performance Studies) and/or MUIN (Applied Music Individual Instruction)
4. 12 units from at least two of the following groups:
  - a. MUCA (Music Composition and Arranging)
  - b. MUCO (Musicology)
  - c. MUDA (Dance)
  - d. MUEP (Music Education and Pedagogy)
  - e. MUJI (Jazz and Improvisational Music)

- f. MURP (Music Repertoire Study), **except** MURP 361 *Acting for Singers*
  - g. MUSI (Music)
  - h. MUTH (Music Theory)
5. 9 units of elective courses in music (any MU\*\* course)

## 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 per-term fee for private lessons and the use of practice facilities is charged to non-music majors (see Tuition, Fees, and Financial Assistance). For students who drop private instruction prior to the end of the second week of the term, a refund will be given 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.

## NATURAL SCIENCES (INTERDISCIPLINARY MAJOR)

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, geosciences, or physics and a secondary concentration in another of these sciences. Students interested in this major should seek advice from the department of primary interest in order to design a major consistent with both their interests and the requirements of the major. Interdisciplinary combinations of biology and chemistry have been replaced by the biochemistry major.

### Required for the interdisciplinary major in natural sciences in a primary discipline and secondary discipline

1. Introductory requirement: An introductory sequence in physics and two additional introductory sequences chosen from those in biology, chemistry, and geosciences so that sequences in both the primary and the secondary disciplines are included. The introductory sequences are:

#### Biology:

- BIOL 130: *Integrative Biology: Cells to Organisms*
- BIOL 150: *Integrative Biology: Organisms to Ecosystems*
- BIOL 170: *Integrative Biology: Experimental Design and Statistics*

#### Chemistry:

- CHEM 115: *Principles of Chemistry: Structure and Reactivity*
- CHEM 116: *Principles of Chemistry: Energetics and Dynamics*

#### Geosciences:

- GEOS 110: *Introductory Geology*
- GEOS 210: *History of the Earth and Life*

#### Physics:

- PHYS 151: *Introduction to Physics II*
- PHYS 260: *Modern Physics*

or, with the permission of both the primary and the secondary departments:

- PHYS 141: *Introduction to Physics I*
- PHYS 151: *Introduction to Physics II*

1. Intermediate/advanced requirement: At least ten six-unit courses in the sciences (biology, chemistry, geosciences, 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.
2. Participation in a *Senior Experience* as defined by the department of the primary discipline.

# NEUROSCIENCE

**Professor:** L. Hilt (*Psychology*)

**Associate professors:** E. Becker (*Psychology, Lecturer of Psychology*), J. Humphries (*Biology*), B. Piasecki (*Biology, chair*), N. Wall (*Biology*) (*on leave term(s) III*)

## Neuroscience

The field of neuroscience uses an interdisciplinary approach to study the brain and nervous system. Humans and other animals rely on the nervous system in order to process environmental stimuli, integrate this information and produce an adaptive response (motor, hormonal, behavioral). A response may be as straightforward as a knee reflex or as complicated as understanding Plato.

The fields of biology, chemistry, and psychology provide much of the core knowledge needed to pursue study in neuroscience, and the major will prepare students for graduate study in neuroscience or allied health areas. However, knowledge from neuroscience may inform creative and scholarly endeavors in many areas including literature, music, and art. Therefore, it is an advantage for a neuroscience major to be in a liberal arts setting that can provide exposure to a wide spectrum of interests.

## Required for the major in neuroscience

Students who complete the major in neuroscience will be able to explain the connection between nervous system structure/organization and sensory and motor pathway functions. They will relate molecular/cellular processes to electrophysiological activity and describe how behavior is a result of combined activity of neural networks. By the culmination of the major, they will integrate research literature on a specific topic into a meaningful analysis.

The major in neuroscience requires the following:

1. The following core courses:
  - a. BIOL 130: *Integrative Biology: Cells to Organisms*
  - b. BIOL 150: *Integrative Biology: Organisms to Ecosystems*
  - c. BIOL 242: *Comparative Physiology*\*
  - d. BIOL 340/PSYC 580: *Topics in Neuroscience*\*\*
  - e. CHEM 116: *Principles of Chemistry: Energetics and Dynamics*
  - f. NESC 200: *Foundations of Neuroscience*
  - g. PSYC 247: *Hormones, Brain, and Behavior*
  - h. PSYC 420: *Clinical and Affective Neuroscience*
2. Two courses from the cellular/molecular course group:
  - BIOL 325: *Cell Biology*
  - BIOL 354: *Molecular Biology*
  - BIOL 444 or CHEM 340: *Biochemistry I*

BIOL 453: *Developmental Biology*

3. Two courses from the behavioral/organismal course group:
  - BIOL 200: *Animal Behavior*
  - BIOL 240: *Morphogenesis of the Vertebrates*
  - PSYC 290: *Developmental Psychopathology*
  - PSYC 322: *Learning and Memory*
  - PSYC 343: *Cognitive Neuroscience*
  - PSYC 347: *Hormones, Brain and Behavior*
  - PSYC 370: *Perception*
  - PSYC 365: *Brain and Behavior*
4. A statistics-based class from one of the following:
  - BIOL 170: *Integrative Biology: Experimental Design and Statistics*
  - STAT 107: *Principles of Statistics*
  - PSYC 170: *Statistics in Psychology*
5. *Senior Experience* as described below

## Senior Experience in neuroscience

Students majoring in neuroscience will work closely with neuroscience program faculty to develop a *Senior Experience*. Students may develop a *Senior Experience* from the psychology senior capstone or the biology senior capstone. Departmental and instructor approval are required to take a senior capstone. Alternatively, a student may elect to conduct a neuroscience independent study as their *Senior Experience*. This option requires a student to complete the following:

- 12 units of independent study *or* 6 units of independent study and a summer research experience on the same project.
- A 15-20 page research paper\*\*\* on the project submitted by the Wednesday before midterm reading period in Spring Term of senior year.
- An oral presentation\*\*\* and exam with neuroscience faculty, to be scheduled by the first day of Spring Term, senior year.
- Presentation of the project at an appropriate research conference approved by the research advisor.

**Students must formally declare which option they will chose for their *Senior Experience* to the Neuroscience program director before the first day of the Spring Term the year before they plan on completing their *Senior Experience* course work, which is typically a student's junior year. For students wanting to complete a Psychology senior capstone, they will also need to declare this to the chair of the Psychology Department no later than the end of the second week of Winter Term.** If choosing the biology or psychology *Senior Experience* option, a [contract](#) will be signed with the academic advisor. If choosing the neuroscience independent study option, a [contract](#) will be signed with the academic advisor and research advisor.

\*\*\*If the independent study option becomes an honors project, the honors thesis and oral exam will satisfy these requirements. Scheduling for the independent study option will follow the honors scheduling guidelines.

## Required for the minor in neuroscience

1. The following core courses:
  - a. BIOL 130: *Integrative Biology: Cells to Organisms*
  - b. BIOL 150: *Integrative Biology: Organisms to Ecosystems*
  - c. BIOL 242: *Comparative Physiology*\*
  - d. BIOL 340/PSYC 580: *Topics in Neuroscience*\*\*
  - e. CHEM 116: *Principles of Chemistry*
  - f. NESC 200: *Foundations of Neuroscience*
  - g. PSYC 420: *Clinical and Affective Neuroscience*
2. A statistics-based class from one of the following:
  - BIOL 170: *Integrative Biology: Experimental Design and Statistics*
  - STAT 107: *Principles of Statistics*
  - PSYC 170: *Statistics in Psychology*

\* Students taking BIOL 370: *Human Physiology* as a prerequisite for an allied health program e.g., nursing, can replace the BIOL 242: *Comparative Physiology* requirement with BIOL 370.

\*\* Prerequisite for BIOL 340/PSYC 580 is one of the following:

- BIOL 242 and one PSYC course, or
- NESC 200 or
- PSYC 348 or
- consent of the instructor

## Courses - Neuroscience

### **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. See the chemistry department's web page for placement examination information. PREREQUISITES: Placement examination  
*Units: 6.*

*Prerequisite: Placement examination*

### **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 for students who have not completed CHEM 115. See the chemistry department's web page for placement examination information. PREREQUISITES: CHEM 115 or placement examination  
*Units: 6.*

*Prerequisite: CHEM 115 or placement examination*

### **BIOL 130: CELLULAR FORM AND FUNCTION CELLULAR FORM AND FUNCTION CELLULAR FORM AND FUNCTION**

An exploration of fundamental cellular processes in an evolutionary context including homeostasis, cell cycle, gene expression, energy transformation, inheritance, and multi-cellular development. Experimental approaches will be emphasized. Lecture and laboratory. PREREQUISITES: First-year or second-year standing: consent of instructor required for juniors and seniors. Simultaneous enrollment in BIOL 130 and BIOL 131 required for first- and second-year students. *Units: 6.*

*Prerequisite: First-year or second-year standing: consent of instructor required for juniors and seniors. Simultaneous enrollment in BIOL 130 and BIOL 131 required for first- and second-year students.*

### **BIOL 150: ORGANISMAL FORM AND FUNCTION**

Development, morphology, physiology, and ecology of plants, animals, fungi and unicellular organisms will be compared in evolutionary context. Phylogenetic relationships, ecological interactions, and ecosystem processes will be explored. Lecture and laboratory. PREREQUISITES: BIOL 130 or departmental examination *Units: 6.*

*Prerequisite: BIOL 130 or departmental examination*

### **BIOL 170: INTEGRATIVE BIOLOGY: EXPERIMENTAL DESIGN AND STATISTICS**

An introduction to experimental and sampling design in the fields of biology and biochemistry, as well as methods of data analysis and interpretation. The connection between statistical analysis and experimental design will be emphasized. Topics include descriptive, exploratory, and confirmatory statistical analyses. Lecture and computer laboratory. PREREQUISITES: BIOL 150 or consent of instructor *Units: 6.*

*Prerequisite: BIOL 150 or consent of instructor*

### **PSYC 170: STATISTICS IN PSYCHOLOGY**

This course introduces statistical methods applied in psychological research. It will cover topics such as hypothesis testing, analysis of variance, and sampling distributions, and provide basic training in the computer package SPSS. The course aims to enable students to design and test research questions in psychology and to improve students' understanding of published research. Quizzes, exams, and a group report. Intended for psychology majors. PREREQUISITES: PSYC 100 or equivalent *Units: 6.*

*Prerequisite: PSYC 100 or equivalent*

### **NESC 191: DIRECTED STUDY IN NEUROSCIENCE**

Directed Study in Neuroscience *Units: 1 TO 98.*

### **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. PREREQUISITES: BIOL 150 *Units: 6.*

*Also listed as Environmental Studies 210*

*Prerequisite: BIOL 150*

### **NESC 200: FOUNDATIONS OF NEUROSCIENCE**

This lecture- and discussion-based course provides an introduction to the structure and function of the nervous system. Basic principles of neurobiology from the anatomical to cellular level are discussed to develop an understanding of how these biological factors are associated with human behaviors. Includes group projects and exams. Not open to students who took PSYC 360. PREREQUISITES: BIOL 130 *Units: 6.*

*Prerequisite: BIOL 130*

### **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. PREREQUISITES: BIOL 150 *Units: 6.*

*Prerequisite: BIOL 150*

### **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. PREREQUISITES: BIOL 150 *Units: 6.*

*Prerequisite: BIOL 150*

### **CHEM 250: ORGANIC CHEMISTRY I**

A study of the relationship between structure and function in organic compounds. Basic topics such as molecular orbital theory, conformational equilibria, stereochemistry, and nucleophilic substitution are covered. Students also learn to use instrumental analysis (NMR, IR, GC-MS) to identify and characterize compounds. One four-hour laboratory per week. PREREQUISITES: CHEM 116 or 119 or consent of instructor *Units: 6.*

*Prerequisite: CHEM 116 or 119 or consent of instructor*

### **CHEM 252: ORGANIC CHEMISTRY II**

A study of organic reactions and their mechanisms. The focus of the class is synthesis, both in the concrete sense of building molecules and in the abstract sense of pulling together disparate concepts to solve problems. Case studies from the polymer and pharmaceutical industries underline the relevance of the discipline to everyday life. One four-hour laboratory per week. PREREQUISITES: CHEM 250 *Units: 6.*

*Prerequisite: CHEM 250*

### **PSYC 290: DEVELOPMENTAL PSYCHOPATHOLOGY**

Using developmental psychopathology theory, this course involves the examination of psychological disorders in children and adolescents. The course emphasizes the complex interplay of biological and psychological factors over the course of development that lead to different outcomes. Several topics are covered including ADHD, anxiety, autism, conduct disorder, eating disorders, depression, and self-harm. PREREQUISITES: PSYC 100 or sophomore standing *Units: 6.*

*Prerequisite: PSYC 100 or sophomore standing*

### **BIOL 325: CELL BIOLOGY**

Survey of the structure and function of eukaryotic cells, the basic functional unit of life. Correlation of cellular structures including organelles, proteins, and membranes with functions such as cellular communication, division, transport, movement, and secretory pathways will be analyzed. Lecture and laboratory.

PREREQUISITES: BIOL 130 and BIOL 150, BIOL 170 recommended *Units: 6.*

*Prerequisite: BIOL 130 and BIOL 150, BIOL 170 recommended*

### **BIOL 340: TOPICS IN NEUROSCIENCE**

A study of the nervous system from the perspectives of psychology and biology. 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 when topic is different.

*Topic for Fall 2022: Aging and the Brain*

Prerequisites: CHEM 116, BIOL 150 and one course in psychology; or PSYC 360 and one course in biology; or consent of instructor

With the advancement of medicine, our population continues to grow older, and the prevalence of age-related diseases is on the rise. In particular, the brain undergoes many molecular changes with aging that makes it susceptible to disease, such as dementias and Alzheimer's disease. In this course, we will explore the mechanisms of aging and their impact on the brain, disease manifestations related to aging in the brain, and the current medical treatments for age-related brain disorders. *Units: 6.*

*Also listed as Psychology 580*

*Prerequisite: CHEM 116, BIOL 150 and either NESC 200 or PSYC 384, or consent of instructor*

### **CHEM 340: BIOCHEMISTRY I**

An introduction to the study of biological processes at the molecular level with emphases on protein structure and function, enzyme mechanism and kinetics, fundamentals of physical biochemistry, and the chemistry of biological molecules, including carbohydrates, lipids, and nucleic acids. PREREQUISITES: CHEM 250 or concurrent enrollment, or consent of instructor *Units: 6.*

*Also listed as Biology 444*

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

### **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. PREREQUISITES: Sophomore standing; at least one prior biology course recommended *Units: 6.*

*Prerequisite: Sophomore standing; at least one prior biology course recommended*

### **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. PREREQUISITES: BIOL 130 and CHEM 115 *Units: 6.*

*Prerequisite: BIOL 130 and CHEM 115*

### **PSYC 365: BRAIN AND BEHAVIOR (WITH LABORATORY)**

A lecture course with a laboratory that explores the neurobiological mechanisms associated with complex behaviors. Topics range from hormonal regulation of behavior to learning and memory, motivation, and

emotion, sleep, appetitive behaviors, and various psychological disorders. Assessments include exams, presentations, laboratory reports, and participation. Not open to students who took PSYC 360 or PSYC 525. PREREQUISITES: NESC 200 or PSYC 348 AND PSYC 284 OR BIOL 280 or instructor approval *Units: 6.*

*Prerequisite: NESC 200 or PSYC 348 AND PSYC 284 OR BIOL 280 or instructor approval*

### **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. PREREQUISITES: PSYC 100 or sophomore standing *Units: 6.*

*Prerequisite: PSYC 100 or sophomore standing*

### **NESC 390: TUTORIAL STUDIES IN NEUROSCIENCE**

Advanced work, arranged and carried out in consultation with an instructor. PREREQUISITES: Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

### **NESC 391: DIRECTED STUDY IN NEUROSCIENCE**

Directed study, arranged and carried out under the direction of an instructor. *Units: 1 TO 98.*

*Prerequisite: SIC form required*

### **NESC 399: INDEPENDENT STUDY IN NEUROSCIENCE**

*Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **PSYC 420: CLINICAL AND AFFECTIVE NEUROSCIENCE**

This course focuses on advanced topics in neuroscience involving emotion. We will explore emerging knowledge of the brain's involvement in emotional behaviors, including physiological and psychological states. Course topics include: neural plasticity, human neuroscience methods, emotions, and pathophysiology of affective disorders. PREREQUISITES: NESC 200, PSYC 348, or PSYC 365 *Units: 6.*

*Prerequisite: NESC 200, PSYC 348, or PSYC 365*

### **BIOL 444: BIOCHEMISTRY I**

An introduction to the study of biological processes at the molecular level with emphases on protein structure and function, enzyme mechanism and kinetics, fundamentals of physical biochemistry, and the chemistry of biological molecules, including carbohydrates, lipids, and nucleic acids. PREREQUISITES: CHEM 250 or concurrent enrollment, or consent of instructor *Units: 6.*

*Also listed as Chemistry 340*

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

### **BIOL 453: DEVELOPMENTAL BIOLOGY**

An experimental approach to animal development with laboratory and lecture emphasis on molecular and cellular processes of embryogenesis. Includes discussions of pattern formation, differentiation, cell interactions,

gametogenesis and fertilization. Lecture and laboratory. PREREQUISITES: BIOL 150; and one of the following (or concurrent enrollment): BIOL 354, BIOL 444/CHEM 340, BIOL 260, or BIOL 325 *Units: 6.*

*Prerequisite: BIOL 150; and one of the following (or concurrent enrollment): BIOL 354, BIOL 444/CHEM 340, BIOL 260, or BIOL 325*

### **PSYC 580: TOPICS IN NEUROSCIENCE**

A study of the nervous system from the perspectives of psychology and biology. 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 when topic is different.

*Topic for Fall 2022: Aging and the Brain*

Prerequisites: CHEM 116, BIOL 150 and either NESC 200 or PSYC 348, or consent of instructor

With the advancement of medicine, our population continues to grow older, and the prevalence of age-related diseases is on the rise. In particular, the brain undergoes many molecular changes with aging that makes it susceptible to disease, such as dementias and Alzheimer's disease. In this course, we will explore the mechanisms of aging and their impact on the brain, disease manifestations related to aging in the brain, and the current medical treatments for age-related brain disorders. *Units: 6.*

*Also listed as Biology 340*

*Prerequisite: CHEM 116, BIOL 150 and either NESC 200 or PSYC 348, or consent of instructor*

### **NESC 599: INDEPENDENT STUDY IN NEUROSCIENCE**

*Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **NESC 699: INDEPENDENT STUDY IN NEUROSCIENCE**

Advanced research, arranged in consultation with a faculty member in the program. Students considering an honors project should register for this course. PREREQUISITES: Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

# PHILOSOPHY

<b>Associate professors:</b>	I. Albrecht ( <i>on leave term(s) I</i> ), C. Armstrong ( <i>on leave term(s) III</i> ), M. Phelan ( <i>chair terms II and III</i> )
<b>Assistant professor:</b>	S. Dixon
<b>Instructor:</b>	A. Elliott ( <i>Uihlein Fellow of Ethics</i> )

Courses in philosophy develop skills in reading analytically, thinking critically, and arguing cogently. In addition, they provide students with valuable insights into many of the major issues confronting us in a rapidly changing world.

Students tend to find that taking two or three philosophy courses significantly enhances the quality of their work in their own fields. We urge students to discuss the relationship between philosophy and other disciplines 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 or advanced course in philosophy without having taken an introductory course (numbered 100-199). Intermediate courses are numbered 200 through 440. Courses numbered above 440 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 important philosophers. Students may continue their study through a variety of courses in the history of philosophy, in the systematic study of 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.

## Required for the major in philosophy

Students who major in philosophy will learn to appreciate the formal features of arguments. They will acquire a clear sense of the development of philosophy and critically engage issues in metaphysics and epistemology and in ethics and value theory, and they will learn to relate philosophy to other areas of study.

The major in philosophy requires the following:

1. PHIL 150 *Symbolic Logic* or 420 *Topics in Logic*; majors are strongly encouraged to satisfy this requirement early
2. At least two core courses in the history of philosophy:
  - a. PHIL 200: *History of Philosophy: Plato and Aristotle*
  - b. PHIL 210: *History of Philosophy: Descartes, Locke, and Leibniz*
  - c. PHIL 220: *History of Philosophy: Berkeley, Hume, Kant, and Mill*
  - d. PHIL 227: *History of Philosophy: New Narratives from 17th and 18th Century Women Philosophers*
  - e. PHIL 230: *History of Philosophy: Early Analytic Philosophy*
  - f. PHIL 240: *History of Philosophy: The American Pragmatists*
  - g. PHIL 275: *Existentialism*
  - h. PHIL 283: *Chinese Philosophy*
3. One course in epistemology:
  - a. PHIL 300: *Epistemology*
  - b. PHIL 305: *Experimental Philosophy*
  - c. PHIL 330: *Philosophy of Science*
  - d. PHIL 405: *How to Do Things With Words*
4. One course in metaphysics:
  - a. PHIL 310: *Metaphysics*
  - b. PHIL 340: *Philosophy of Art*
  - c. PHIL 400: *Philosophy of Language*
  - d. PHIL 410: *Philosophy of Mind*
5. One course in ethics:
  - a. PHIL 280: *Women and Friendship*
  - b. PHIL 320: *Ethics*
  - c. PHIL 325: *Metaethics*
  - d. PHIL 347: *Valuing Art: The Philosophy and Psychology of Aesthetic Appreciation*
  - e. PHIL 350: *Political Philosophy*
  - f. PHIL 360: *Environmental Ethics*
  - g. PHIL 365: *Compassion and Other Virtues*
  - h. PHIL 370: *Advanced Studies in Bioethics*
  - i. PHIL 375: *Philosophy of Sex and Love*
  - j. PHIL 380: *Ethics of Technology*
  - k. PHIL 385: *Value Theory*
  - l. PHIL 430: *Philosophy of Law*
  - m. PHIL 440: *Morality, Rationality, and Self-Interest*
6. Four additional six-unit courses in philosophy or a second major and two additional six-unit courses in philosophy:
  - a. Two of these additional courses may be numbered 149 or below.
  - b. Philosophy majors who do not prefer a second major may, in consultation with their advisor and subject to the approval of the department of philosophy, substitute selected courses not offered by the department for no more than two of the four additional courses.
7. One dimensions of diversity (D) course offered in the philosophy department, which may also satisfy one of the above requirements.
8. PHIL 600 *Studies in Philosophy as a Senior Experience*

## Senior Experience in philosophy

The department of philosophy's *Senior Experience* is PHIL 600: *Studies in Philosophy*. This is an advanced seminar in which students critically analyze each other's original research. It occurs during the Winter Term.

## Required for the minor in philosophy

1. Six 6-unit courses in philosophy, including:
  - a. At least two courses in the history of philosophy, from among:
    - i. PHIL 200: *History of Philosophy: Plato and Aristotle*
    - ii. PHIL 210: *History of Philosophy: Descartes, Locke, and Leibniz*
    - iii. PHIL 220: *History of Philosophy: Berkeley, Hume, Kant, and Mill*
    - iv. PHIL 227: *History of Philosophy: New Narratives from 17th and 18th Century Women Philosophers*
    - v. PHIL 230: *History of Philosophy: Early Analytic Philosophy*
    - vi. PHIL 240: *History of Philosophy: The American Pragmatists*
    - vii. PHIL 275: *Existentialism*
    - viii. PHIL 283: *Chinese Philosophy*
  - b. At least three courses outside the history of philosophy numbered 250 or above.
2. C average in the minor.

Students pursuing a minor in philosophy are encouraged to choose a member of the philosophy department as an informal advisor.

## Courses - Philosophy

### 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. PREREQUISITES: Recommended for freshmen and sophomores *Units: 6*.

*Prerequisite: Recommended for freshmen and sophomores*

### PHIL 102: INTRODUCTION TO *ETHICS*

What makes actions right or wrong? This course explores the ways in which prominent ethical theories answer that question. The course also provides opportunity to apply the basic principles of different ethical theories to a variety of historical and contemporary issues. This is a lecture- and discussion-based course. Requirements may include homework assignments, projects, papers, and exams. *Units: 6*.

### PHIL 103: *PHILOSOPHY IN THE 21ST CENTURY*

A three-credit introduction to some contemporary topics in philosophy related to life in the 21st Century. Topics may include threats to knowledge and belief posed by social media and the internet, cultural-linguistic issues related to politics and power, and questions related to technology and the use of forces in policing and warfare. Learning is assessed using short written work and exams. *Units: 3.*

### **PHIL 105: INTRODUCTION TO COGNITIVE SCIENCE**

An introduction to the interdisciplinary study of how the mind works. Topics include: the nature of perception; what human language reveals about the mind; the basis of morality and altruism; how sexual selection has shaped human psychology; and the cognitive science of religious and spiritual belief. We will discuss tools, theories, and assumptions from philosophy, psychology, computer science, linguistics, anthropology, behavioral economics, and neuroscience. *Units: 6.*

*Also listed as Cognitive Science 105*

### **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. PREREQUISITES: Recommended for freshmen and sophomores *Units: 6.*

*Prerequisite: Recommended for freshmen and sophomores*

### **PHIL 115: FOOD ETHICS**

Eating has become a complicated activity. We will examine some of the hard ethical questions facing policymakers and individuals: How should government regulate our food choices? When, if ever, is it ethical to eat animals? Are there any moral reasons to favor local food producers? Is gluttony a moral fault? Not open to students who have previously received credit for Philosophy 316. *Units: 6.*

### **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. PREREQUISITES: Recommended for freshmen and sophomores *Units: 6.*

*Also listed as Biomedical Ethics 120*

*Prerequisite: Recommended for freshmen and sophomores*

### **PHIL 125: CRITICAL THINKING**

This introduction to argumentation focuses on how to identify arguments, their structure, and their strengths and weaknesses. We examine historical texts, newspapers, legal cases, political debates and blogs to explore what distinguishes good reasoning from bad inference. *Units: 6.*

### **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. PREREQUISITES: Recommended for freshmen and sophomores *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. PREREQUISITES: Recommended for freshmen and sophomores *Units: 6.*

*Also listed as Linguistics 160*

*Prerequisite: Recommended for freshmen and sophomores*

**PHIL 191: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

**PHIL 200: HISTORY OF PHILOSOPHY: PLATO AND ARISTOTLE**

A survey of ancient Greek philosophical theories of the cosmos, justice, and the principles and purpose of human inquiry through the works of Plato and Aristotle. PREREQUISITES: One course in philosophy, sophomore standing, or consent of instructor *Units: 6.*

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

**PHIL 210: HISTORY OF PHILOSOPHY: DESCARTES, LOCKE, AND LEIBNIZ**

We will explore some exciting developments of the 16th and 17th centuries. Specifically, we will look at how the study of metaphysics, epistemology, and the mind, were transformed by the scientific revolution. The works of three thinkers will serve as our primary window in to this era: French philosopher and mathematician, Rene Descartes(1596-1650); English philosopher and physician, John Locke (1632-1704); and German philosopher and mathematician, Gottfried Leibniz (1646-1716). But we will also read excerpts from some other prominent figures of this era, including Thomas Hobbes, Princess Elisabeth of Bohemia, Nicolas Malebranche, and David Hume. PREREQUISITES: One course in philosophy, sophomore standing, or consent of instructor *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. PREREQUISITES: One course in philosophy, sophomore standing, or consent of the instructor. *Units: 6.*

*Prerequisite: One course in philosophy, sophomore standing, or consent of the instructor.*

**PHIL 227: HISTORY OF PHILOSOPHY: NEW NARRATIVES FROM 17TH AND 18TH CENTURY WOMEN PHILOSOPHERS**

An introduction to philosophical texts by women authors in Early Modern Europe, including Émilie Du Chatelet, Princess Elisabeth of Bohemia, Christine de Pizan, Margaret Cavendish, Mary Astell and Anne Conway. We will consider the import of these texts on controversial topics of the time: new scientific methods, gender equality, political rule, the nature of mind and body, religious authority and morality. Lecture/discussion with written assignments. PREREQUISITES: One course in philosophy or sophomore standing *Units: 6.*

*Prerequisite: One course in philosophy or sophomore standing*

**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. PREREQUISITES: One course in philosophy, sophomore standing, or consent of instructor *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. PREREQUISITES: One course in philosophy, sophomore standing, or consent of instructor *Units: 6.*

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

**PHIL 260: FEMINISM AND PHILOSOPHY**

A consideration of the contribution of feminism to a range of subjects of philosophical inquiry, including: the philosophy of mind, ethics and the history of philosophy. PREREQUISITES: One course in philosophy, sophomore standing, or consent of instructor *Units: 6.*

*Also listed as Gender Studies 261*

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

**PHIL 275: EXISTENTIALISM**

An introduction to existentialist philosophy, with emphasis on its development throughout the 19th and 20th centuries in the Continental tradition of philosophy. This course pays special attention to such existentialist themes as the possibility of meaninglessness, the necessity of first-personal experience, and authenticity. PREREQUISITES: Sophomore standing, one previous course in philosophy, or consent of instructor *Units: 6.*

*Prerequisite: Sophomore standing, one previous course in philosophy, or consent of instructor*

**PHIL 280: WOMEN AND FRIENDSHIP**

An introduction to philosophical theories of friendship, with emphasis on feminist responses. This course examines historical and contemporary accounts of the value of friends and the role they play in our self-development, as well as moral accounts of the special obligations friendships involve. This course can be counted as the equivalent of GEST 280. PREREQUISITES: Sophomore standing, one previous course in philosophy, or consent of instructor *Units: 6.*

*Prerequisite: Sophomore standing, one previous course in philosophy, or consent of instructor*

**PHIL 283: CHINESE PHILOSOPHY**

A survey of topics in Chinese philosophy, which may include Classical Chinese philosophy, Buddhism and religion and comparative philosophy. We will discuss how the quickly changing historical and political climates affect the major schools of thought and influence pertinent philosophical questions for the region or topic. Assignments include papers and in-class assignments/presentations. PREREQUISITES: Sophomore standing or consent of instructor *Units: 6.*

*Also listed as East Asian Studies 283*

*Prerequisite: Sophomore standing 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. PREREQUISITES: One course in philosophy, junior standing, or consent of instructor *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? PREREQUISITES: One course in philosophy, junior standing, or consent of instructor *Units: 6.*

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

### **PHIL 315: SCIENCE FICTION AND PHILOSOPHY**

What can alternative science fiction worlds and speculative futures reveal about the nature of reality and our own condition? In answering this question we will engage philosophical puzzles inspired by science fiction in various forms: short stories, novels, television series and movies. Topics may include time travel, robot intelligence and consciousness, scientific knowledge, morality, political power, free will and personal identity. Lecture/discussion. PREREQUISITES: One course in philosophy or junior standing, or consent of instructor *Units: 6.*

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

### **PHIL 316: FOOD ETHICS**

We will examine some of the hard ethical questions facing policymakers and individuals with respect to food production and distribution: How should government regulate our food choices? When, if ever, is it ethical to eat animals? Are there any moral reasons to favor local food producers? Is gluttony a moral fault? This course is designed for Philosophy and Environmental Studies majors to pursue research projects. Not open to students who have previously received credit for Philosophy 115. *Units: 6.*

### **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. PREREQUISITES: One course in philosophy, junior standing, or consent of instructor *Units: 6.*

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

### **PHIL 325: METAETHICS**

An examination of the nature of ethical properties and ethical judgments. Are facts and values completely independent? Are goodness and badness objective properties? What does the persistence of moral disagreement tell us about the nature of ethics? PREREQUISITES: One course in philosophy, junior standing, or consent of instructor *Units: 6.*

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

### **PHIL 330: SCIENCE VS. PSEUDOSCIENCE**

We will examine some important philosophical questions surrounding science. They will include (1) What is a science; and what is the relation between different sciences? (2) What is it to explain a phenomenon or confirm a hypothesis? (3) Do the explanatory posits of a science—such as quarks and strings—actually exist? (4) Are there scientific laws? We will explore some of the more plausible answers to such questions. Readings will include selections from a variety of contemporary and 20th century philosophical texts. PREREQUISITES: One course in philosophy, junior standing, or consent of instructor *Units: 6.*

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

### **PHIL 332: 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? PREREQUISITES: Sophomore standing *Units: 6.*

*Also listed as Religious Studies 330*

*Prerequisite: Sophomore standing*

### **PHIL 333: GOD AND THE AFTERLIFE**

This course will focus on the nature of God and the afterlife from the perspective of the Abrahamic and Indian Hindu and Buddhist traditions, including arguments for and against the existence of God and the afterlife. Does God or the afterlife exist? Does either provide us with reason to be good? Students will be evaluated on the basis of expository and critical essays and presentations. *Units: 6.*

*Also listed as Religious Studies 333*

### **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. PREREQUISITES: One course in philosophy, junior standing, or consent of instructor *Units: 6.*

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

### **PHIL 345: TOPICS IN PHILOSOPHY**

The specific topic investigated changes with each term. Student responsibilities may include evaluation of primary and secondary sources, short assignments, class activities, research, and essay writing.

*Topic for Fall 2022: Advanced Metaphysics: Parts, Holes, and Places*

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

This course will focus on the study of parthood and location. Concerning parthood, what is it for something to be a part of something? Can some things compose more than one thing at the same time? Could, for example, a statue be distinct from the lump of clay it is made of, even though the statue and the lump are composed of the same particles? Is everything necessarily composed of simples, or could "gunk", exist, i.e. objects which can be decomposed ad infinitum? Concerning location, what is it for something to be located somewhere? And concerning issues that arise at the intersection of these two topics, what is a hole, in, say, a piece of Swiss cheese? Is it the space within only? Or does it include some of the cheese as well? Either way, is the hole a part of the cheese? These questions will be among those we will consider in this course. *Units: 6.*

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

### **PHIL 347: VALUING ART: THE PHILOSOPHY AND PSYCHOLOGY OF AESTHETIC APPRECIATION**

How and why do we value art? Is there an objective standard of taste or is taste relative? How does and aesthetic property--such as beauty--differ from other properties of art--such as being made of stone? What are the roles of emotion and evolution in aesthetic response? These and other questions will be considered in this discussion-oriented class. Appropriate for those interested in philosophy, art history or cognitive science. PREREQUISITES: One course in philosophy or sophomore standing, or consent of instructor *Units: 6.*

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

### **PHIL 350: POLITICAL PHILOSOPHY**

Philosophers from classical to contemporary times have offered responses to the question of what makes a society just. This course examines a selection of those responses, with attention to general issues such as what a just distribution of resources requires and what makes a state's authority legitimate. Specific topics under discussion might include poverty relief, access to education and other social goods, health care, punishment, freedom of speech, gun control, war, immigration, and international relations. PREREQUISITES: One course in philosophy, junior standing, or consent of instructor *Units: 6.*

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

### **PHIL 355: RACE AND SOCIAL JUSTICE**

This seminar focuses on race-based social injustices and considers what institutional changes are necessary to overcome racial inequity. How do current social and legal practices perpetuate racism? Possible topics include the concept of race, the value of race-based solidarity, affirmative action, racial segregation and racial profiling. Students will write papers in which they present their own philosophical arguments. *Units: 6.*

### **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. PREREQUISITES: One course in economics or environmental studies or government or philosophy; or junior standing *Units: 6.*

*Also listed as Environmental Studies 360*

*Prerequisite: One course in economics or environmental studies or government or philosophy; or junior standing*

### **PHIL 365: COMPASSION AND OTHER VIRTUES**

We will explore philosophical writings that analyze the nature and significance of compassion, forgiveness, gratitude, and other virtues. This course has a meditation component, as we will also explore meditations designed to cultivate the virtues that we cover in our readings. By approaching the topics with both philosophical analysis and contemplative methods, we will aim at a more thorough understanding than we could accomplish by only using one method. PREREQUISITES: One course in philosophy, junior standing, or consent of instructor *Units: 6.*

*Prerequisite: One course in 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. PREREQUISITES: PHIL 120 or two courses in philosophy *Units: 6.*

*Also listed as Biomedical Ethics 370*

*Prerequisite: PHIL 120 or two courses in philosophy*

**PHIL 375: PHILOSOPHY OF SEX AND LOVE**

This course uses feminist theories to explore philosophical questions concerning sex and love. How do gender norms affect our sexual desires and the power dynamics in loving relationships? How responsible are we for our sexual preferences and loving attitudes? How do we relate ethically to lovers and those we love?

PREREQUISITES: One course in philosophy, sophomore standing, or consent of instructor *Units: 6.*

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

**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. PREREQUISITES: One course in philosophy, junior standing, or consent of the instructor *Units: 6.*

*Also listed as Biomedical Ethics 380*

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

**PHIL 385: VALUE THEORY**

This course focuses on theories of the good and related philosophical issues. Questions that we will explore include: What is happiness? How are happiness and satisfaction related? Can we measure happiness or well-being? Is virtue valuable in itself? PREREQUISITES: One course in philosophy, junior standing, or consent of instructor *Units: 6.*

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

**PHIL 390: TUTORIAL STUDIES IN PHILOSOPHY**

Senior majors undertaking honors projects should elect one or more terms. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

**PHIL 391: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

**PHIL 399: INDEPENDENT STUDY IN PHILOSOPHY**

Advanced students of philosophy may elect one or more terms. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

**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. PREREQUISITES: One course in philosophy, junior standing, or consent of instructor; PHIL 150 recommended *Units: 6.*

*Also listed as Linguistics 400*

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

### **PHIL 405: *HOW TO DO THINGS WITH WORDS***

An examination of major and cutting edge topics in the philosophy of language and linguistics. Where do word meanings come from? How can one word mean different things in different contexts? How do we promise or make commitments? Why do slurs hurt and jokes amuse? What is the nature of metaphor? Where does the border between what words mean and what speakers mean with words lie? These and other questions will be considered. Appropriate for students with an interest in philosophy, linguistics, or cognitive science.

PREREQUISITES: One course in philosophy, junior standing, or consent of the instructor *Units: 6.*

*Also listed as Linguistics 405*

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

### **PHIL 410: *PHILOSOPHY OF MIND***

What is the relationship between the mind and the body? What is the nature of conscious experience? How do mental states represent states of the world? Is our common sense conception of mental states and processes compatible with the methods and assumptions of cognitive science? These and other questions in the philosophy of mind will be considered. PREREQUISITES: One course in philosophy, PSYC 340, junior standing, or consent of instructor *Units: 6.*

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

### **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 425: *PHILOSOPHY OF MATHEMATICS***

This course will focus on issues relating to the nature of and our knowledge of mathematical truths, such as  $2 + 2 = 4$ , and to the existence of mathematical entities like numbers and sets. How do we know that mathematical truths are true? Do numbers exist? If so, what are they like? Students will be evaluated on the basis of expository and critical essays and presentations. *Units: 6.*

### **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? PREREQUISITES: One course in philosophy, junior standing, or consent of instructor *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?

PREREQUISITES: One course in philosophy, junior standing, or consent of instructor *Units: 6.*

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

**PHIL 448: ENLIGHTENMENT SELVES**

An interdisciplinary investigation of key concepts of identity and the emotions as understood during the Enlightenment. Students examine philosophical and literary texts to uncover how seventeenth and eighteenth century people conceived of their mental and emotional existence, and how these historical conceptions still influence contemporary theories of mind and self. PREREQUISITES: One course in either English or philosophy, or junior standing, or consent of instructor *Units: 6.*

*Also listed as English 448*

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

**PHIL 590: TUTORIAL STUDIES IN PHILOSOPHY**

Senior majors undertaking honors projects should elect one or more terms. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

**PHIL 591: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

**PHIL 599: INDEPENDENT STUDY IN PHILOSOPHY**

Advanced students of philosophy may elect one or more terms. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

**PHIL 600: STUDIES IN PHILOSOPHY**

Specific topics for the year will be published as classes are scheduled. PREREQUISITES: Three courses in philosophy or consent of instructor *Units: 6.*

*Prerequisite: Three courses in philosophy or consent of instructor*

**PHIL 690: TUTORIAL STUDIES IN PHILOSOPHY**

Senior majors undertaking honors projects should elect one or more terms. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

**PHIL 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

**PHIL 699: INDEPENDENT STUDY IN PHILOSOPHY**

Advanced students of philosophy may elect one or more terms. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

# PHYSICS

Professor:	M. Stoneking ( <i>chair</i> )
Associate professors:	D. Martin, M. Pickett
Assistant professor:	M. Koker

Physics is the study of what makes up the universe and how things work at a fundamental level. What gives stars their color? How do we weigh the earth? How can lunar eclipses and meteor showers be predicted? What is a quantum computer and how can we build one? What is the difference between fluorescent and LED light bulbs? How is an MRI created? What *is* light? Or maybe you are a practical thinker, looking for solutions to problems around you. How can we better implement clean energy solutions? How do we make better batteries? If you question the way things are, or wonder about how we know something, **you are asking questions about physics!** *Physics represents an inquiry, both theoretical and experimental, into the nature of the physical universe.*

A physics degree from Lawrence University, with the solid foundation of a liberal arts education, opens paths to careers in physics as well as a wide variety other STEM fields. Our students earn graduate degrees in physics and related fields, become engineers, get certified to teach, work at national labs, and on and on. Prospective engineers will find that a major in physics automatically fulfills nearly all of the requirements for [Lawrence's 3-2 engineering program](#)!

Our department is home to advanced laboratories for teaching and research in both experimental and computational physics. Additionally, the machine shop and on-campus [Makerspace](#) support the project-orientated coursework throughout the curriculum. On the theoretical side, the major moves from a general survey to advanced electives, including mathematical training for subjects like general relativity. The culminating *Senior Experience* is a student-designed theoretical, computational, or experimental research project.

Several tracks through the physics major exist. Students interested in education may pursue a Physics Teaching Track. Engineering-focused students will benefit from a dual degree in physics and the engineering area of their choosing by jointly enrolling in a 3-2 engineering partner 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 natural sciences](#), such as biophysics or physical chemistry. A minor in physics offers an opportunity for those who wish to supplement a major in another discipline with a significant exposure to physics.

## Required for the major in physics

Students who major in physics will master the concepts in the fundamental subject areas of classical mechanics, electromagnetism, quantum mechanics, and statistical mechanics. They will apply analytical, computational, and experimental methods to solve physics problems and will complete a scientific investigation and effectively communicate findings in oral and written form.

The major in physics requires the following:

1. The following courses:
  - a. PHYS 141: *Introduction to Physics I*
  - b. PHYS 151: *Introduction to Physics II*
  - c. PHYS 220: *Intermediate Laboratory: Electronics*
  - d. PHYS 225: *Computational Mechanics*
  - e. PHYS 230: *Electricity and Magnetism*
  - f. PHYS 260: *Modern Physics*
  - g. PHYS 310: *Quantum Mechanics*
  - h. PHYS 320: *Thermal Physics*
  - i. PHYS 330: *Advanced Laboratory*
2. One additional six-unit courses chosen from PHYS 340 and above, excluding directed study, tutorial, and independent study courses taken as part of the *Senior Experience* or for other reasons
3. *Senior Experience* in physics
4. The following math courses: MATH 140, 155, 200, and 250

Physics majors without advanced placement or a strong background in high school physics should start with PHYS 141. 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:

- First Year: PHYS 141 & 151, PHYS 220; MATH 140, 155, 200
- Second Year: PHYS 225, 230, 260; MATH 250
- Third Year: PHYS 310, 320, 330; physics electives
- Fourth Year: PHYS 699: *Independent Study in Physics*, PHYS 650: *Senior Seminar in Physics*; physics electives

The **Second Year Entry Track** allows a physics outreach class for non-majors to count in place of an introductory class or upper-level elective.

- First Year: PHYS 110 or PHYS 115; MATH 140, 155; UNIC 175
- Second Year: PHYS 141, 151, 220; MATH 200
- Third Year: PHYS 225, 230, 260; MATH 250
- Fourth Year: PHYS 310, 320, 330, *Senior Experience*

Additional courses in mathematics, chemistry, computer science, biology, and geosciences are often elected. The prospective major should consult early and regularly with the faculty in the department.

The **3/2 Engineering Track** adds chemistry and computer science, as required by our partner schools, in place of some third-pass classes, and allows students to transfer back upper-level engineering courses for the upper-level physics electives.

- First Year: PHYS 141, 151, 220; MATH 140, 155, 200
- Second Year: PHYS 225, 230, 260; CHEM 115, 166; MATH 250

- Third Year: PHYS 320, Senior Experience; CSMC 150
- Fourth Year: *Transfer Classes*

## Required for the interdisciplinary major in natural sciences in physics and a secondary discipline

Physics students who have strong secondary interests in biology, chemistry, or geosciences may construct a major involving physics and one of these sciences using the interdisciplinary major in the natural sciences.

The requirements for the interdisciplinary major with physics as the primary discipline are:

1. PHYS 151: *Introduction to Physics II* and PHYS 220: *Intermediate Laboratory: Electronics*
2. Any two of the following, chosen to include the secondary discipline:
  - BIOL 130: *Integrative Biology: Cells to Organisms*, BIOL 150: *Integrative Biology: Organisms to Ecosystems*, and BIOL 170: *Integrative Biology: Experimental Design and Statistics*
  - CHEM 115: *Principles of Chemistry: Structure and Reactivity* and CHEM 116: *Principles of Chemistry: Energetics and Dynamics*, or equivalent
  - GEOS 110: *Introduction to the Geosciences* and GEOS 210: *History of the Earth and Life*
3. At least 10 six-unit courses in the sciences (biology, chemistry, geosciences, 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 the following:
  - a. PHYS 225: *Computational Mechanics*,
  - b. PHYS 230: *Electricity and Magnetism*,
  - c. PHYS 260: *Modern Physics*
  - d. PHYS 310: *Quantum Mechanics*, and
  - e. PHYS 330: *Advanced Laboratory*.
4. *Senior Experience* in physics

## 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 fourth year students (and 3-2 engineering students in their third year) will participate in a two-unit senior seminar, PHYS 650, 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.

## Required for the minor in physics

1. PHYS 141: *Introduction to Physics I* and PHYS 151: *Introduction to Physics II*
2. PHYS 220: *Intermediate Laboratory: Electronics*
3. PHYS 225: *Computational Mechanics*
4. PHYS 260: *Modern Physics*
5. Two additional six-unit courses in physics, at least one 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 PHYS 107–115 and PHYS 215
6. MATH 140, 155, and 200

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.

## Teacher certification in physics or broad-field science

Students can seek teacher certification to teach physics at the secondary level. Certification requires a major in physics with courses in other science subjects, and students may petition to substitute physics courses numbered below 199 for the two required physics electives. Students also have the option of seeking broad-field science certification by completing a minimum of two courses in each of two other science disciplines and at least one course in each of the remaining sciences. Students who plan to seek teacher certification should review the requirements in the Education section of the catalog and meet with the director of teacher education, preferably before the end of the second year.

The **Physics Teaching Track** emphasizes core areas at the second pass level, with more requirements from other sciences to enable students to receive the broad-science certification and highlight connections between sciences at the high school level. The five education classes for the teaching certification are in addition to the physics requirement; this path can be completed in 12 terms if started in the first year, or in 13 terms if started later. The courses for this track include:

PHYS 110, 141, 151, 220, 225, 230, 260, 330, and Senior Experience

CHEM 115, 116

GEOS 110

MATH 140, 155, 200, 250

EDST 180, 350, 440

EDUC 430, 560

## Course numbering

Courses of general interest requiring minimal or no prerequisite are numbered 107-115. The introductory courses, 141, 151, and 220, develop applied calculus and algebra skills across the sequence. PHYS 141 introduces elementary ideas in calculus together with concepts in physics. The calculus introduced in PHYS 141 will not replace any mathematics prerequisites in courses numbered 220 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 third and fourth year students and are numbered above 300. Tutorial studies in physics and independent study in physics also are offered.

## Recommended courses outside the department

Courses in mathematics, chemistry, and computer science are frequently elected to support a major in physics, but courses in geosciences, 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.

## 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, PHYS 107, 110, 112, 115, 141, 151, 220, and 260 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: PHYS 107, 110, 141, 151, 220, 260, 330, 340.

## Advanced placement

Students with strong backgrounds should seek advanced placement and credit, normally by submitting scores on the Physics Advanced Placement Examination. Advanced placement without credit is awarded to students who submit satisfactory evidence that they both understand most of PHYS 141 or 151 and are able to remedy weaknesses on their own initiative.

## Graduate school

Majors preparing for graduate school in physics will probably take more courses in physics than the required minimum. PHYS 425, 430, 440, and 460 are recommended for all such students. Other departmental offerings (PHYS 340, 500-570) are appropriate for students with particular interests in the topics of those courses. All students contemplating graduate studies in physics should seek opportunities at Lawrence or elsewhere for full-time research during the summer after the junior year (or earlier). Students contemplating graduate studies in physics should discuss their plans early and often with members of the department.

## 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 third year or the Fall Term of the fourth 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.

## Courses - Physics

### **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: *INTRODUCTION TO 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. Weekly laboratory. *Units: 6.*

### **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. Students cannot receive credit for this course if they have previously received credit for CHEM 112/ENST 112 *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 the nature of time and relativity. Physics 115 is not intended to serve as a general introduction to physics, as are Physics 141 and 151, and does not supply an adequate background for

intermediate or advanced courses. *Units: 6.*

### **PHYS 132: INTRODUCTION TO ENGINEERING AND DESIGN**

An introduction to the application of science and engineering in everyday life by thinking about problems and their solutions and incorporating modern engineering design practices. Students will work on strengthening their creative problem-solving techniques, developing teamwork strategies, evaluating ethical decisions, and analyzing fundamental engineering problems applicable across various disciplines such as mechanical, electrical, and environmental. The course is targeted for students interested in 3-2 Engineering.

PREREQUISITES: Instructor Approval *Units: 3.*

*Prerequisite: Instructor Approval*

### **PHYS 141: INTRODUCTION TO PHYSICS I**

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.

PREREQUISITES: None, but calculus is recommended. *Units: 6.*

*Prerequisite: None, but calculus is recommended.*

### **PHYS 151: INTRODUCTION TO PHYSICS II**

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. PREREQUISITES: PHYS 141, or one year of high school physics and MATH 140. *Units: 6.*

*Prerequisite: PHYS 141, or one year of high school physics and MATH 140.*

### **PHYS 191: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **PHYS 215: NEWTONIAN LIT: CHRONICLES OF A CLOCKWORK UNIVERSE**

Newtonian Lit is a course that investigates the connections between the literature and science of the Enlightenment, particularly with respect to contemporary notions of space and time. Students will analyze important texts from the fields of English and Physics, notably Laurence Sterne's *The Life and Opinions of Tristram Shandy, Gentleman* and Isaac Newton's *Principia*. PREREQUISITES: ENG 150 or its equivalent, plus any introductory course in the natural sciences (e.g., PHYS 141), plus sophomore standing or consent of instructor *Units: 6.*

*Also listed as English 410*

*Prerequisite: ENG 150 or its equivalent, plus any introductory course in the natural sciences (e.g., PHYS 141), plus sophomore standing or consent of instructor*

### **PHYS 220: INTERMEDIATE LAB: ELECTRONICS**

A laboratory course focusing on construction and behavior analysis (including prediction) of analog and digital

circuits used in present-day experimental research while maintaining research-style laboratory notebooks and preparing a scientific report. Students explore linear (resistors, capacitors, inductors) and nonlinear elements (diodes, transistors) and integrated circuit chips (operation amplifiers, logic gates). Culminating group project requires the construction of a multi-component circuit of their own design. PREREQUISITES: PHYS 151 and MATH 140 *Units: 6.*

*Prerequisite: PHYS 151 and MATH 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. PREREQUISITES: PHYS 151 and MATH 155 *Units: 6.*

*Prerequisite: PHYS 151 and MATH 155*

### **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. PREREQUISITES: PHYS 225 *Units: 6.*

*Prerequisite: PHYS 225*

### **PHYS 260: MODERN PHYSICS**

Treats foundational ideas of quantum physics: quantized aspects of nature, wave-particle duality, elementary wave mechanics, atomic and nuclear structure, fundamental particles, cosmology. Weekly laboratory. PREREQUISITES: PHYS 230 and MATH 200 as pre- or co-requisite or CHEM 470 *Units: 6.*

*Prerequisite: PHYS 230 and MATH 200 as pre- or co-requisite or CHEM 470*

### **PHYS 275: INTRODUCTION TO BIOPHYSICS**

Biophysics explores processes at the interface between biology and physics. This course uses physical principles to build mathematical and computational models of living systems. Students will learn to create models, compare models with experimental data, and refine their understanding of the living systems using these physics-based models. PREREQUISITES: Physics 151 or Biology 170 *Units: 6.*

*Also listed as Biology 275*

*Prerequisite: Physics 151 or Biology 170*

### **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. PREREQUISITES: PHYS 260 or CHEM 470 and MATH 250 *Units: 6.*

*Prerequisite: PHYS 260 or CHEM 470 and MATH 250*

### **PHYS 320: THERMAL PHYSICS**

Treats elementary statistical mechanics, Bose-Einstein and Fermi-Dirac statistics, kinetic theory, and classical thermodynamics. PREREQUISITES: PHYS 260 *Units: 6.*

*Prerequisite: PHYS 260*

### **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. PREREQUISITES: PHYS 220 and 260; PHYS 310 recommended *Units: 6*.

*Prerequisite: PHYS 220 and 260; PHYS 310 recommended*

### **PHYS 340: OPTICS**

A laboratory course which treats geometrical optics, interference, diffraction, polarization, and various other topics in classical and contemporary optics. Students will be exposed to the techniques of a modern atomic molecular optics (AMO) laboratory. PREREQUISITES: PHYS 260 *Units: 6*.

*Prerequisite: PHYS 260*

### **PHYS 390: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98*.

*Prerequisite: Counter Registration Required.*

### **PHYS 391: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98*.

*Prerequisite: Counter Registration Required.*

### **PHYS 399: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98*.

*Prerequisite: Counter Registration Required.*

### **PHYS 425: ADVANCED MECHANICS & COMPUTATIONAL PHYSICS**

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. In addition to analytic approaches, computational methods to solving problems are emphasized, such as finite difference and finite element methods for solving partial differential equations as well as graphical visualization techniques. PREREQUISITES: PHYS 225 *Units: 6*.

*Prerequisite: PHYS 225*

### **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. PREREQUISITES: PHYS 230 and MATH 250 *Units: 6.*

*Prerequisite: PHYS 230 and MATH 250*

#### **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. PREREQUISITES: PHYS 260 and MATH 250 or permission of instructor *Units: 6.*

*Prerequisite: PHYS 260 and MATH 250 or permission of instructor*

#### **PHYS 460: ADVANCED MODERN PHYSICS**

Treats various topics from atomic, nuclear, and particle physics. The content in this course varies, but may include advanced quantum mechanical treatments of atomic and nuclear structure, relativistic quantum mechanics (quantum electrodynamics), quantum information and quantum computing, weak and strong interactions, among others PREREQUISITES: PHYS 310 *Units: 6.*

*Prerequisite: PHYS 310*

#### **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.*

*Prerequisite: PHYS 260, MATH 250*

#### **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 230*

#### **PHYS 590: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

#### **PHYS 591: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

#### **PHYS 599: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **PHYS 650: SENIOR SEMINAR IN PHYSICS**

This course is a weekly seminar during which physics majors in their final year work on and deliver oral presentations based on their senior experience study projects. PREREQUISITES: Limited to physics majors in their final year who have completed (or are currently conducting) a senior experience independent study project  
*Units: 2.*

*Prerequisite: Limited to physics majors in their final year who have completed (or are currently conducting) a senior experience independent study project*

### **PHYS 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **PHYS 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **PHYS 695: INTERNSHIP IN PHYSICS**

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. *Units: 1 TO 98.*

### **PHYS 699: INDEPENDENT STUDY IN PHYSICS**

Theoretical, experimental and/or computational independent study. Projects undertaken in satisfaction of the senior experience requirement in physics use this designation. A written proposal must be submitted to the department at least one term before enrolling. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

# PSYCHOLOGY

<b>Professors:</b>	P. Glick ( <i>Henry Merritt Wriston Professor of the Social Sciences</i> ) (on leave term(s) II), T. Gottfried, B. Haines (on leave term(s) I, II), L. Hilt ( <i>chair</i> )
<b>Associate professors:</b>	M. Ansfield, E. Becker ( <i>Lecturer of Psychology</i> )
<b>Assistant professor:</b>	A. Draheim
<b>Instructor:</b>	L. Ng ( <i>J. Thomas Hurvis Instructor of Organizational Psychology &amp; Collaboration</i> )
<b>Lecturer:</b>	C. Draheim

Psychology is the science of mind and behavior. The psychology curriculum is well balanced to represent the breadth of the core areas of psychology (clinical, cognitive, developmental, health, neuroscience, industrial/organizational, and social psychology) and provide opportunity for the in-depth study of specific topics (e.g., behavioral neuroendocrinology, cognitive processes, group processes, psychopathology, adolescent development, prejudice, emotion). Research, through which psychological theories are developed and tested, is emphasized throughout the curriculum.

## Required for the major in psychology

Students who major in psychology will learn to effectively communicate, orally and in writing, the content and explanatory power of current theoretically- and empirically-based knowledge in the psychological literature. They will demonstrate appropriate conceptual and methodological skills to test novel hypotheses and solve practical problems in psychology. And they will critically review the research literature on a topic of interest to draw valid and meaningful conclusions about the main findings.

The major in psychology requires the following:

1. PSYC 100: *Principles of Psychology*
2. STAT 107: *Principles of Statistics* or MATH 107: *Elementary Statistics*†
3. PSYC 284: *Research Methods in Psychology (with laboratory)* **or** PSYC 280/281: *Research Methods I and II*
4. **Two** courses from each of the following groups:
  - a. **Group I:** PSYC 245: *Health Psychology*, 250: *Psychopathology* **or** 290: *Developmental Psychopathology*, 260: *Developmental Psychology* **or** 265: *Developmental Psychology (with laboratory)*, 270: *Social Psychology* **or** 272: *Social Psychology of Prejudice*, 273: *Industrial-Organizational Psychology*
  - b. **Group II:** PSYC 320: *Addiction*, 322: *Memory and Learning*, 340: *Cognitive Psychology (with laboratory)* **or** 342: *Cognitive Psychology* **or** 343: *Cognitive Neuroscience (with laboratory)*, 347: *Hormones and Behavior*, 348: *Biological Psychology*, 350: *Psychopharmacology and Behavior*, 370: *Perception*, 365: *Brain*

and Behavior (with laboratory), 420: *Clinical and Affective Neuroscience*

5. **One** course requiring an APA-style literature review, **taken before the senior capstone**: PSYC 335: *Clinical Psychology (with laboratory)*, 347: *Hormones and Behavior*, 355: *Child Clinical Psychology (with laboratory)*, 365: *Brain and Behavior (with laboratory)*, 460: *Adolescent Psychology*, 480: *Historical Origins and Contemporary Viewpoints of Psychology*, 540: *Topics in the Psychology of Language*, 560: *Topics in Gender and Social Development*, 570: *Topics in Prejudice*, or 580: *Topics in Neuroscience*††

6. In addition to Research Methods (with laboratory) (PSYC 284), **one** of the above courses must have a lab (viz., PSYC 265, 335, 340, 343, 355, 365).

7. **One** of the above courses must have a D or G diversity designation (i.e., PSYC 205: *Intro to Human Sexuality*, 220: *The Holocaust*, 272: *Social Psychology of Prejudice*, 285: *Cross-Cultural Psychology*, 300: *Diverse Groups and Teams*, 310: *Psychology of Gender*, 356: *Meditation: Psychological and Buddhist Perspectives*, 560: *Topics in Gender and Social Development*, or 570: *Topics in Prejudice*).

8. An **additional 6-units** of elective coursework in psychology (may include any class in psychology as well as independent studies, tutorials, or internships).

9. PSYC 610: *Senior Capstone*

†Enrollment in Stats/Math 107 *prior to* Research Methods (284). For students also majoring in anthropology, ANTH 207 can fulfill the statistics requirement. For students also majoring in biology or neuroscience, BIOL 170 can fulfill the statistics requirement.

††If the course is cross-listed with another department and being taught by an instructor outside the psychology department, then check with the instructor prior to taking the course as to whether it would be acceptable to write the literature review using APA style. The literature review must be written in APA style to fulfill this requirement.

## Senior Experience in psychology

In the psychology department's senior capstone (PSYC 610), small groups of students meet in independent seminar sections supervised by a faculty mentor. Sections meet to discuss common readings, provide constructive criticism of each other's work, and to allow students to present work in progress. Discussions, papers, and presentations enhance students' abilities to conceptualize important questions within the context of the discipline, formulate ways to answer those questions, and present ideas clearly and cogently in both written and oral form. Students pursue their project over the academic term, culminating in a senior thesis and a public senior oral presentation.

The centerpiece of the capstone experience is an original senior project, allowing students to pursue their own interests in depth, encouraging autonomy and creativity. In consultation with the faculty mentor, students will choose one of the following types of papers: a critical review of past theory and research, an original empirical study report, a theory development paper, or a paper that integrates a student's applied work (e.g., in an

internship) with its wider scholarly context. Students pursuing double degrees, double majors, or teacher 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. Additionally, students interested in pursuing an original empirical study project will need to meet with a faculty mentor well in advance of enrollment in PSYC 610.

## Structure and goals of the major curriculum

Requirements for the psychology major are structured so that students gain a broad knowledge of psychology while also completing a core course sequence that systematically develops skills relevant to understanding and producing psychological advances.

The core courses begin with *Principles of Psychology* (PSYC 100), typically taken in the first year, a broad introduction to psychological science that provides a framework (of key theories, terminology, methods, and findings in the core areas of psychology) on which all later courses build. Majors are encouraged to take *Principles of Statistics* (STAT 107) and *Research Methods in Psychology* (PSYC 284) in the sophomore year and certainly no later than the junior year. The methods course teaches students to think like research psychologists, from “What constitutes a worthwhile and testable hypothesis?” to designing, running, analyzing, and reporting an original empirical project. In the junior year, students select an advanced course in which they not only explore a topic in greater depth but also learn how to write a synthetic, integrative, and critical review of a research area. The skills developed throughout the core courses are brought together in *Senior Capstone* (PSYC 610), in which each student chooses their own topic to explore, culminating in a project that is presented both in a senior thesis and a public oral presentation. The project may involve a critical review of past theory and research, a proposal for an original empirical study, an original empirical study report, a theory development paper, or a paper that integrates a student’s applied work with its wider scholarly context.

Together, the core courses are aimed at systematically developing key skills related to general learning outcomes, including the abilities to think critically (e.g., construct a thesis, supported by appropriate arguments and evidence), write and communicate effectively, synthesize current knowledge, and test novel hypotheses.

To ensure that majors are exposed to the breadth of psychological science, they must also complete two courses in the cognitive/experimental/biological areas of psychology as well as two courses in the developmental/health/social/clinical areas of psychology.

Majors should complete *Research Methods* before taking laboratory courses numbered 335 or above or courses numbered 380 or above. STAT 107 (*Principles of Statistics*) should be taken prior to *Research Methods* (PSYC 284).

## Research opportunities

Majors complete empirical research projects in *Research Methods*, but are also encouraged to do so 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 (neuroendocrinology, cognitive, and affective), child development, social, health, industrial/organizational, and clinical psychology. We highly recommend that students who wish to pursue honors projects or empirical projects for PSYC 610 begin them in their junior year.

## 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 PSYC 451: *Field Experience in Clinical Psychology* and internships in psychology. 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 Center for Career, Life and Community Engagement (920-832-6561) or any psychology faculty member.

## Required for the minor in psychology

Required for the Minor in Psychology

1. PSYC 100: *Principles of Psychology*
2. STAT 107: *Principles of Statistics* or MATH 107: *Elementary Statistics*†
3. **One** course from each of the following groups:
  - a. **Group I:** PSYC 245: *Health Psychology*, 250: *Psychopathology* **or** 290: *Developmental Psychopathology*, 260: *Developmental Psychology* **or** 265: *Developmental Psychology (with laboratory)*, 270: *Social Psychology* **or** 272: *Social Psychology of Prejudice*, 273: *Industrial-Organizational Psychology*
  - b. **Group II:** PSYC 320: *Addiction*, 322: *Memory and Learning*, 340: *Cognitive Psychology (with laboratory)* **or** 342: *Cognitive Psychology* **or** 343: *Cognitive Neuroscience (with laboratory)*, 347: *Hormones and Behavior*, 348: *Biological Psychology*, 350: *Psychopharmacology and Behavior* **or** 365: *Brain and Behavior (with laboratory)*, 370: *Perception*, 420: *Clinical and Affective Neuroscience*
3. **Two** additional courses in psychology (12 units), one of which (6 units) must be numbered 300 or higher (not including 610).
4. **One** course must have a lab (viz., PSYC 265, 280/281††, 284, 335, 340, 343, 355, 365).

† For students also majoring in anthropology, ANTH 207 can fulfill the PSYC 170 or MATH 107 requirement; for students also majoring in biology or neuroscience, BIOL 170 can fulfill the PSYC 170 or MATH 107 requirement.

††Must complete both terms of PSYC 280/281 to meet this lab requirement.

## Teacher certification in psychology or broad-field social studies

Psychology majors can seek certification to teach psychology or broad-field social studies at the secondary level. For certification in broad-field social studies, students must complete the psychology major and a minimum of two courses each in two other social studies (anthropology/sociology, economics, government/political science, or history) and at least one course in each of the remaining social studies. Students are strongly encouraged to take a course in U.S. history and a course in global history. A course in environmental studies is also required. Students who plan to seek teacher certification should review the requirements in the Education section of the catalog and meet with the director of teacher education, preferably before the end of the sophomore year.

## Preparation for graduate school

The major program prepares students well for graduate study in psychology or related fields. Students interested in graduate study should consider experiential learning (e.g., conducting research, internships, etc.) 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 and constituency engagement office. For those who pursue other careers, the 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 Center for Career, Life and Community Engagement for more information. Students interested in mental health careers should pay particular attention to the department's clinical psychology sequence: PSYC 250 or 290, PSYC 335 or 355, and PSYC 451 or Internship in Psychology. Students are encouraged, but not required, to take PSYC 335 or 355 and PSYC 451: *Field Experience in Clinical Psychology* in consecutive terms. PSYC 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

The London Centre, Netherlands, and Vienna programs have provided excellent opportunities for psychology majors (see Off-Campus Programs).

## Advanced placement

Students who score 4 or better on the Psychology Advanced Placement Examination of the College Entrance Examination Board are given credit for PSYC 100, which fulfills one of the major requirements. Students who plan to major in psychology and place out of PSYC 100 are advised to take one or two courses in Group I during their first year. A score of 4 or better in AP Statistics can substitute for the Statistics (PSYC 170 or MATH 107 or STAT 107) requirement.

## Courses - Psychology

### **PSYC 100: *PRINCIPLES OF PSYCHOLOGY***

An introduction to the science of mind and psychological processes 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 with careful consideration of how these topical areas contribute to an overall understanding of psychological processes. *Units: 6.*

### **PSYC 170: *STATISTICS IN PSYCHOLOGY***

This course introduces statistical methods applied in psychological research. It will cover topics such as hypothesis testing, analysis of variance, and sampling distributions, and provide basic training in the computer package SPSS. The course aims to enable students to design and test research questions in psychology and to improve students' understanding of published research. Quizzes, exams, and a group report. Intended for psychology majors. PREREQUISITES: PSYC 100 or equivalent *Units: 6.*

*Prerequisite: PSYC 100 or equivalent*

### **PSYC 180: *PSYCHOLOGY OF LEARNING***

An introduction to brain structure and development in childhood and adolescence, memory systems and types of learning, and approaches to building knowledge, improving skills, and deepening understanding. Culminating topics include motivation, the nature and development of expertise, and instructional design. *Units: 6.*

*Also listed as Education Studies 180*

### **PSYC 191: *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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **PSYC 195: *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. 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **PSYC 205: *DIVERSITY IN HUMAN SEXUALITY***

The general goal of this course is to examine the diversity of human sexuality in contemporary American society. Students will explore various social, cultural, clinical, and health perspectives of human sexuality. Topics may include gender and gender roles, love and intimacy, communication, sexual expression, contraception, pregnancy, childbirth, sexual coercion, challenges to sexual functioning, sexual transmitted infections and HIV/AIDS, and commercial sex. *Units: 6.*

*Also listed as Gender Studies 205*

### **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. PREREQUISITES: Sophomore standing *Units: 6.*

*Prerequisite: Sophomore standing*

### **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. PREREQUISITES: PSYC 100 or sophomore standing; 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 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. PREREQUISITES: PSYC 100 or sophomore standing *Units: 6.*

*Also listed as Biomedical Ethics 245*

*Prerequisite: PSYC 100 or sophomore standing*

### **PSYC 250: *PSYCHOPATHOLOGY***

A study of the major mental disorders. Theory and research into the origins of each disorder are examined from a variety of perspectives (psychoanalytic, biological, cognitive, behavioral, and humanistic). PREREQUISITES: PSYC 100 or sophomore standing *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: 1 TO 98.*

*Prerequisite: PSYC 100 or sophomore standing.*

### **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, social and cognitive development. A variety of theoretical perspectives are covered. PREREQUISITES: PSYC 100 or sophomore standing *Units: 6.*

*Prerequisite: PSYC 100 or sophomore standing*

### **PSYC 265: DEVELOPMENTAL PSYCHOLOGY (WITH LABORATORY)**

Identical in content to Psychology 260, but requiring a weekly three-hour laboratory that involves systematic work with infants and children to learn assessment techniques and experimental methodologies for the study of development. PREREQUISITES: PSYC 100 or sophomore standing *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. PREREQUISITES: PSYC 100 or sophomore standing *Units: 6.*

*Prerequisite: PSYC 100 or sophomore standing*

### **PSYC 272: SOCIAL PSYCHOLOGY OF PREJUDICE**

This course explores social psychology through the lens of research and theory on prejudice and discrimination. What are prejudice's causes, consequences, and cures? We will examine theories related to personality, emotion, cognition, and perception that help to explain generalized and specific prejudices (e.g., sexism/heterosexism, racism, ethnocentrism, anti-Semitism). Students will be assessed through exams and papers. Intended as an alternative to PSYC 270. PREREQUISITES: PSYC 100 or sophomore standing *Units: 6.*

*Also listed as Ethnic Studies 272*

*Prerequisite: PSYC 100 or sophomore standing*

### **PSYC 273: INDUSTRIAL ORGANIZATIONAL PSYCHOLOGY INDUSTRIAL ORGANIZATIONAL PSYCHOLOGY**

An introduction to the study of how people function in organizations. This course blends lecture and seminar-style discussion focusing on the following topics: (1) motivation, (2) emotions, and attitudes, (3) stress and wellbeing, including work-family balance, (4) communication, (5) teams, (6) leadership, influence and power (7) organizational culture and development, and (8) diversity and organizational justice. PREREQUISITES: PSYC 100 or sophomore standing *Units: 6.*

*Prerequisite: PSYC 100 or sophomore standing*

### **PSYC 280: RESEARCH METHODS I**

This course will introduce psychology majors to the principles of research methods, research design, and statistical analyses. Students will also learn about philosophy of science, ethical considerations in research, and the role of theory in generating sound, testable hypotheses. PSYC 280 is required of all psychology majors and ideally should be taken by the end of sophomore year. Simultaneous enrollment in PSYC 281 is required. PREREQUISITES: Sophomore standing and previous enrollment in one of MATH 107, ANTH 207, PSYC 170,

or BIOL 170. Simultaneous enrollment in PSYC 280 and PSYC 281 required. *Units: 6.*

*Prerequisite: Sophomore standing and previous or concurrent enrollment in one of MATH 107, ANTH 207, PSYC 170, or BIOL 170*

### **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. PREREQUISITES: PSYC 280 and Instructor Approval *Units: 6.*

*Prerequisite: PSYC 280*

### **PSYC 283: NEUROSCIENCE RESEARCH TECHNIQUES**

An interactive lecture course that explores basic neuroscience research techniques, experimental design, data analysis, scientific writing, laboratory safety, and ethical practices in animal research. During some lectures students perform mini-experiments in techniques ranging from behavioral assays to microscopy. Student work is assessed through exams, writing assignments, a short oral presentation, and participation.

PREREQUISITES: One course in psychology or biology. *Units: 6.*

*Prerequisite: One course in psychology or biology.*

### **PSYC 284: RESEARCH METHODS IN PSYCHOLOGY**

The course introduces psychology majors to the principles of research design, data collection, data analysis, and research report writing. This course focuses on philosophy of science, the span of methodologies available to psychological scientists, ethical considerations in research, correlational and inferential statistical analysis, and interpretation of results. This course should be taken sophomore year after having taken the introductory statistics course. PREREQUISITES: STAT 107 or STAT 255; For students also majoring in anthropology, ANTH 207 can fulfill the statistics requirement For students also majoring in biology or neuroscience, BIOL 170 can fulfill the statistics requirement. *Units: 6.*

*Prerequisite: STAT 107 or STAT 255; For students also majoring in anthropology, ANTH 207 can fulfill the statistics requirement For students also majoring in biology or neuroscience, BIOL 170 can fulfill the statistics requirement.*

### **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. PREREQUISITES: PSYC 100 or sophomore standing *Units: 6.*

*Prerequisite: PSYC 100 or sophomore standing*

### **PSYC 290: DEVELOPMENTAL PSYCHOPATHOLOGY**

Using developmental psychopathology theory, this course involves the examination of psychological disorders in children and adolescents. The course emphasizes the complex interplay of biological and psychological factors over the course of development that lead to different outcomes. Several topics are covered including ADHD, anxiety, autism, conduct disorder, eating disorders, depression, and self-harm. PREREQUISITES:

PSYC 100 or sophomore standing *Units: 6.*

*Prerequisite: PSYC 100 or sophomore standing*

### **PSYC 300: DIVERSE GROUPS & TEAMS**

This will be a lecture and discussion based course focused on 1) basic principles of groups and teams 2) considerations of diverse groups, and 3) organizational contexts. Students will demonstrate their knowledge through writing, exams, and experiential learning of how to work effectively in groups. PREREQUISITES: PSYC 100 or sophomore standing *Units: 6.*

*Prerequisite: PSYC 100 or sophomore standing*

### **PSYC 310: PSYCHOLOGY OF GENDER**

An examination of theory and research on gender identity, gender roles, discrimination, and gender similarities and differences. Topics include gender stereotypes, gender identity development, sexual orientation, sex education, as well as intersections of gender with other aspects of identity. PREREQUISITES: Sophomore standing *Units: 6.*

*Also listed as Gender Studies 270*

*Prerequisite: Sophomore standing*

### **PSYC 322: MEMORY AND LEARNING**

Lecture-based introduction to theories and research in the psychological study of human memory. Topics to be surveyed include the organization of memory, learning, forgetting, the neurological underpinnings of memory, memory failures, and methods to improve memory. Student learning will be assessed through quizzes, exams, an in-class group presentation of empirical papers on a topic of your choosing, and engagement with other students' presentations. PREREQUISITES: PSYC 284 or COSC 105 *Units: 6.*

*Prerequisite: PSYC 284 or COSC 105*

### **PSYC 335: CLINICAL PSYCHOLOGY**

This course focuses on the assessment and treatment of mental disorders. Each of the major approaches to conducting psychotherapy (e.g., psychodynamic, cognitive, behavioral, humanistic, etc.) is examined. Students also start developing their clinical assessment skills. PREREQUISITES: PSYC 281 and PSYC 250 or 290 *Units: 6.*

*Prerequisite: PSYC 281 and PSYC 250 or 290*

### **PSYC 340: COGNITIVE PSYCHOLOGY (WITH LABORATORY)**

Lecture-based investigation of the mental processes involved in the acquisition, organization, and use of knowledge. Topics surveyed include attention, memory, imagery, problem solving, and individual differences. One laboratory per week involving demonstrations and experiments. Class learning will be assessed through quizzes and exams; lab work will involve assignments and the option of a written paper or group presentation on a topic of the student's choosing. PREREQUISITES: PSYC 284 or COSC 105 *Units: 6.*

*Prerequisite: PSYC 284 or COSC 105*

### **PSYC 342: 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. Lecture, discussion and class demonstrations. Students will write short papers and take exams. PREREQUISITES: PSYC 100 or sophomore standing *Units: 6.*

*Prerequisite: PSYC 100 or sophomore standing*

### **PSYC 343: COGNITIVE NEUROSCIENCE WITH LABORATORY**

Cognitive neuroscience is an emerging field that studies the biological processes that underlie cognition. This course will focus on understanding how the human brain gives rise to perception, attention, memory, language, executive function, and social cognition. Particular emphasis will be placed on learning cognitive neuroscience methods through hands on activities and designing your own studies. PREREQUISITES: PSYC 280/281 or PSYC 284 or BIOL 170 or instructor approval *Units: 6.*

*Prerequisite: PSYC 280/281 or PSYC 284 or BIOL 170 or instructor approval*

### **PSYC 345: DISTRIBUTED COGNITION AND THE EXTENDED MIND**

The new science of the mind treats cognition as a distributed process involving the brain, body, and world. This seminar explores the role of material settings and tools, bodily engagement, social interaction, and cultural processes in human reasoning, problem solving, and learning. Students will write short papers examining aspects of cognitive activity in real-world settings. PREREQUISITES: PHIL 105 recommended *Units: 6.*

*Also listed as Cognitive Science 345, Anthropology 345, Education Studies 345*

*Prerequisite: PHIL 105 recommended*

### **PSYC 347: HORMONES, BRAIN & BEHAVIOR**

Behavior and their underlying neural substrates have evolved in response to specific environmental conditions, resulting in vast species diversity in behavior and neuroendocrine mechanisms. This course is designed as an introduction to the field of behavioral neuroendocrinology and an exploration of the primary literature on the neuroendocrine underpinning of animal behavior spanning from learning to sex differences in complex social behaviors. Students will engage in discussion, grant preparation, debates, quizzes and presentations. PREREQUISITES: PSYC 348, NESC 200, OR Instructor Approval *Units: 6.*

*Prerequisite: PSYC 348, NESC 200, OR Instructor Approval*

### **PSYC 348: BIOLOGICAL PSYCHOLOGY**

This is a lecture course designed to offer students an opportunity to explore the structure and function of the nervous system. In the first two-thirds of the course, we will examine what are considered to be the foundations of biological psychology; historical origins and methodologies, neuroanatomy and physiology, and cellular anatomy and physiology. In the final part of the course, we will take a systems level approach to understanding the way in which we know our world (sensation). Students learning will be assessed through written assignments, quizzes, exams, discussions, presentations and participation in in-class labs. PREREQUISITES: PSYC 100 or sophomore standing *Units: 6.*

*Prerequisite: PSYC 100 or 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. PREREQUISITES: Sophomore standing; at least one prior biology course recommended *Units: 6.*

*Prerequisite: Sophomore standing; at least one prior biology course recommended*

### **PSYC 355: CHILD CLINICAL PSYCHOLOGY**

This course focuses on major approaches to psychotherapy with children and adolescents. Students will learn techniques for assessment and diagnosis and learn about empirically supported treatments for children and adolescents with mental disorders. A weekly lab will focus on developing clinical skills to work with children and families. PREREQUISITES: PSYC 250 or PSYC 290 and sophomore standing, or consent of instructor *Units: 6.*

*Prerequisite: PSYC 250 or PSYC 290 and sophomore standing, or consent of instructor*

### **PSYC 356: MEDITATION: PSYCHOLOGICAL AND BUDDHIST PERSPECTIVES**

This seminar-style course investigates the theory and practice of meditation from psychological and Buddhist perspectives. Topics to be considered include the effects of meditation on the brain, mindfulness, compassion, and the secularization of religious practices. Course meetings will focus on discussion of readings and experiential learning. Assessment will involve quizzes, reflection on experiential practice, and papers. PREREQUISITES: Sophomore standing or instructor approval. *Units: 6.*

*Also listed as Religious Studies 356*

*Prerequisite: Sophomore standing or instructor approval.*

### **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. PREREQUISITES: Sophomore standing; at least one biology course recommended *Units: 6.*

*Prerequisite: Sophomore standing; at least one biology course recommended*

### **PSYC 365: BRAIN AND BEHAVIOR (WITH LABORATORY)**

A lecture course with a laboratory that explores the neurobiological mechanisms associated with complex behaviors. Topics range from hormonal regulation of behavior to learning and memory, motivation, and emotion, sleep, appetitive behaviors, and various psychological disorders. Assessments include exams, presentations, laboratory reports, and participation. Not open to students who took PSYC 360 or PSYC 525. PREREQUISITES: NESC 200 or PSYC 348 AND PSYC 284 OR BIOL 280 or instructor approval *Units: 6.*

*Prerequisite: NESC 200 or PSYC 348 AND PSYC 284 OR BIOL 280 or instructor approval*

### **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. PREREQUISITES: PSYC 100 or sophomore standing *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. PREREQUISITES: LING 150, PSYC 340, or consent of instructor *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. PREREQUISITES: PSYC 100 and sophomore standing, or consent of instructor; PSYC 280 and 281 recommended *Units: 6.*

*Prerequisite: PSYC 100 and sophomore standing, or consent of instructor; PSYC 280 and 281 recommended*

### **PSYC 381: LEARNING AND CONDITIONING**

This course is identical in content to PSYC 380, but it has no laboratory. An investigation of the basic principles of learning, including classical conditioning, operant conditioning, punishment, biological constraints on learning, and behavior modification. PREREQUISITES: PSYC 100 and sophomore standing, or consent of instructor *Units: 6.*

*Prerequisite: PSYC 100 and sophomore standing, or consent of instructor*

### **PSYC 390: TUTORIAL STUDIES IN PSYCHOLOGY**

Advanced study arranged and carried out under the direction of an instructor. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **PSYC 391: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **PSYC 395: 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. 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **PSYC 399: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **PSYC 420: CLINICAL AND AFFECTIVE NEUROSCIENCE**

This course focuses on advanced topics in neuroscience involving emotion. We will explore emerging knowledge of the brain's involvement in emotional behaviors, including physiological and psychological states. Course topics include: neural plasticity, human neuroscience methods, emotions, and pathophysiology of affective disorders. PREREQUISITES: NESC 200, PSYC 348, or PSYC 365 *Units: 6.*

*Prerequisite: NESC 200, PSYC 348, or PSYC 365*

### **PSYC 450: 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. PREREQUISITES: PSYC 250, 280, 281 or consent of instructor *Units: 6.*

*Prerequisite: PSYC 250, 280, 281 or consent of instructor*

### **PSYC 451: FIELD EXPERIENCE IN CLINICAL PSYCHOLOGY**

Practical experience working in clinical settings in the local community. Students spend 10 hours per week at assigned settings, attend regular class, and complete complementary readings. Applications must be submitted by the end of the fifth week the term that immediately precedes the term in which the course is taught. PREREQUISITES: Junior standing as a psychology major, PSYC 250 or PSYC 290, PSYC 335 or PSYC 355, and consent of instructor *Units: 6.*

*Prerequisite: Junior standing as a psychology major, PSYC 250 or PSYC 290, PSYC 335 or PSYC 355, and consent of instructor*

### **PSYC 460: ADOLESCENT PSYCHOLOGY**

An examination 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. PREREQUISITES: PSYC 260 or 265 *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. PREREQUISITES: Junior standing and at least one course in psychology, or consent of instructor *Units: 6.*

*Prerequisite: Junior standing and at least one course in psychology, or consent of instructor*

### **PSYC 525: BRAIN AND BEHAVIOR II (NO LAB)**

This course is identical in content to PSYC 530, but it has no laboratory. An examination of the interrelationships between the brain and behavior. Topics include sleep, language, motivation, emotions, learning, and mental disorders. PREREQUISITES: PSYC 360 *Units: 6.*

*Prerequisite: PSYC 360*

### **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*

### **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. **PREREQUISITES:** One 200-level course in linguistics or psychology, or consent of the instructor *Units: 6.*

*Also listed as Cognitive Science 545, Linguistics 545*

*Prerequisite: One 200-level course in linguistics or psychology, or consent of the instructor*

### **PSYC 560: TOPICS IN GENDER AND SOCIAL DEVELOPMENT**

This course examines social development with a particular focus on gender issues. Topics include gender identity in intersection with other types of identity development (e.g., ethnicity), sex education, gender role socialization, sexual orientation development, and parenting. *Units: 6.*

*Also listed as Gender Studies 560*

*Prerequisite: PSYC 260 or 265, or PSYC 310, 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.

*Topic for Fall 2022: Sex and Sexism*

*Prerequisites: PSYC 270 and 281, or consent of instructor*

Examines the social psychology of gender, focusing on binary gender stereotypes and roles that emerge from power differences and independence between the sexes. *Units: 6.*

*Prerequisite: PSYC 270 and 281, or consent of instructor*

### **PSYC 580: TOPICS IN NEUROSCIENCE**

A study of the nervous system from the perspectives of psychology and biology. 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 when topic is different.

*Topic for Fall 2022: Aging and the Brain*

*Prerequisites: CHEM 116, BIOL 150 and either NESC 200 or PSYC 348, or consent of instructor*

With the advancement of medicine, our population continues to grow older, and the prevalence of age-related diseases is on the rise. In particular, the brain undergoes many molecular changes with aging that makes it susceptible to disease, such as dementias and Alzheimer's disease. In this course, we will explore the mechanisms of aging and their impact on the brain, disease manifestations related to aging in the brain, and the current medical treatments for age-related brain disorders. *Units: 6.*

*Also listed as Biology 340*

*Prerequisite: CHEM 116, BIOL 150 and either NESC 200 or PSYC 348, or consent of instructor*

**PSYC 590: TUTORIAL STUDIES IN PSYCHOLOGY**

Advanced study arranged and carried out under the direction of an instructor. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

**PSYC 591: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

**PSYC 595: 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. 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

**PSYC 599: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

**PSYC 610: SENIOR CAPSTONE**

Required 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. PREREQUISITES: PSYC 284 *Units: 6.*

*Prerequisite: PSYC 284*

**PSYC 690: TUTORIAL STUDIES IN PSYCHOLOGY**

Advanced study arranged and carried out under the direction of an instructor. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

**PSYC 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

**PSYC 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. 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

**PSYC 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

# RELIGIOUS STUDIES

Professor:	K. Carr ( <i>McNaughton Rosebush Professor of Liberal Studies, chair</i> )
Associate professors:	C. Kassor, M. Smith

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, spiritual and legal 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 *Rationality and Religious Belief* and *Religion of Ancient Egypt*.

## Required for the major in religious studies

Students who complete the major in religious studies will understand and explain the basic historical development of at least one major religious tradition, as well as some of its complexities, given that religious traditions are dynamic evolving phenomena with multiple interpretive strands. They will understand and explain basic elements of at least two theories or approaches to the academic study of religion and use this knowledge to analyze religious traditions and draw their own conclusions, producing clear, thesis-driven papers reflecting these skills.

The major in religious studies requires the following:

1. RLST 100: *Introduction to Religious Studies*
2. Three 200-level courses on religious traditions
3. Two 300-level theory courses
4. One 400- or 500-level seminar
5. Two electives in religious studies
6. RLST 610: *Senior Projects*

Independent studies/tutorials may be used to fulfill only the elective requirement.

Majors must complete a senior capstone project, which includes taking the *Senior Projects* course and presenting at the religious studies symposium at the end of spring term of their senior year.

## Senior Experience in religious studies

The *Senior Experience* in religious studies consists of a one-term seminar (RLST 610, taught in the spring term) that gives students the opportunity to complete a project (usually a paper, but other formats are possible) that builds upon the previous course work and academic experiences of the student. The class also

offers students an introduction to several theoretical perspectives that will enable them to see their project from a broadly comparative perspective. Additionally, students are required to participate in a departmental symposium, in which student work is presented and discussed by majors, minors, and faculty. Students pursuing double majors, double degrees, or teacher certification are strongly encouraged to consult with their advisors and relevant departments to plan and negotiate their overall *Senior Experience* as early as possible.

## Required for the minor in religious studies

The minor in religious studies is intended to enable students to concentrate on a particular religious tradition or set of issues connected to the academic study of religion. It requires a minimum of five courses (30 units), which include:

1. Two 200-level courses (12 units) on religious traditions
2. One 300-level theory course
3. A 400- or 500-level seminar course
4. One additional six-unit course.

RLST 100 (*Introduction to Religious Studies*) is not required for the minor but may count as the elective.

## 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.

## Courses - Religious Studies

### RLST 100: *UNDERSTANDING RELIGION*

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 140: *INTERFAITH DIALOGUE*

As our experiences of religious and spiritual life become increasingly diverse, narrative process has become essential to understand the rich landscape of multiple faiths. Students will explore the scope of the interfaith movement, consider dialogue as one tool for interfaith encounter, and practice constructing and sharing their own spiritual narratives. Our shared goal is an interfaith dialogue where deep listening and honest speaking

lead to surprising discoveries. Discussion course with written assignments and a class project. *Units: 6.*

### **RLST 150: INTRODUCTION TO THE BIBLE**

The purpose of this course is to survey the various genres of the Bible, including narrative, law, poetry, historiography and prophecy. The main focus of the course will be a close reading of primary texts in order to familiarize students with major themes and scholarly debates. All readings are in English. *Units: 6.*

### **RLST 191: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **RLST 205: RELIGION AND THE BIOSPHERE**

A look at how humans have made sense of existing in the biosphere. We will examine views on the nature of life in religious traditions like ancient Egypt and Jainism as well as early philosophical accounts. The second half will involve a close reading of Charles Darwin and reflection on resources offered by religious traditions to respond to the "sixth extinction." Lecture/discussion with written assignments and journaling on the coming of spring. PREREQUISITES: Sophomore standing *Units: 6.*

*Also listed as Environmental Studies 370*

*Prerequisite: Sophomore standing*

### **RLST 206: MARTYRS, MYSTICS, SINNERS AND SAINTS: AN INTRODUCTION TO CHRISTIANITY**

An introductory survey of primarily western Christianity. Our focus will be on selected "classic" works written by Christians over the last two thousand years. Discussion with occasional lectures. Assignments include short papers (3-5 pages) and in-class tests. *Units: 6.*

### **RLST 210: HINDUISM**

A survey of the religious elements that constitute the broad system of beliefs known as Hinduism. Emphasis is placed on lived religious experience, but intellectual history and dominant patterns of ritual are also covered. Readings include primary texts, comic books, videos and other multimedia content. *Units: 6.*

### **RLST 211: RELIGION AND COMICS**

This discussion-based course examines the role of comics and sequential art in religious traditions and explores religious themes in contemporary comics and graphic novels. By analyzing comics and related scholarship in the emerging field of comics studies, students will investigate the complex relationships between religion, images and culture. In addition to writing formal essays, students will also create their own digital comics. *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 EAST ASIA**

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*

### **RLST 217: HUMANITARIANISM & VIOLENCE**

This course will examine the religious motivations that have led religious groups to embrace global norms like human rights or reject them and turn to violence. We will examine liberation theology in Latin America and the writings of extremist thinker Sayyid Qutb. Much of the class will be centered on case studies such as Myanmar's Rohingya crisis where religion, immigration, and questions of human rights are at play. Offered in conjunction with Ripon College, with online interactions and travel to local places of worship.

PREREQUISITES: Sophomore standing *Units: 6.*

*Also listed as Global Studies 217*

*Prerequisite: Sophomore standing*

### **RLST 221: DANCE, YOGA, AND BODY KNOWLEDGE IN RELIGION**

This class introduces students to the concept of embodied knowledge, asking students 'what do our bodies know and how do they learn?' and 'what do the performances of our bodies create?' Students will explore embodied ways of knowing at the intersection of Indian classical dance, yoga, and Hindu traditions and then create and analyze their own movement practices as part of the class. *Units: 6.*

*Also listed as Dance 222*

### **RLST 222: THE THEOLOGY OF ST. AUGUSTINE: FROM HERETIC TO SAINT**

An introduction to the thought of Augustine of Hippo. This late 4th/early 5th century "father" of classical Christianity is one of the most important and influential Christian thinkers in the west. We will concentrate on two of his works: Confessions (his spiritual autobiography, describing his evolution from lusty adolescent, through the perils of heresy, to his conversion to Christianity) and City of God (his magnum opus that details the superiority of all things Christian over Roman life and culture, as well as providing a history of the world from Creation to Judgment Day). Course will be taught by discussion and will have both papers and a take-home exam. *Units: 6.*

### **RLST 225: INTRODUCTION TO JUDAISM: CANON, THOUGHT, PRACTICE**

The oldest monotheistic religion, studied through its classic texts (including the Bible, Talmud, Maimonides, the Zohar and much more). Readings of the modern era will highlight the shift from a religion to a national/ethnic identity. In addition, key terms of the Jewish cycle of life will be introduced. *Units: 6.*

*Also listed as Ethnic Studies 224*

### **RLST 226: RELIGION IN INDONESIA**

This course will study the religious traditions of Indonesia. We will concentrate on the island of Java and the history of the dominant Islamic faith, but we will also examine the Hindu, Buddhist, and Christian traditions in Indonesia and the form of civil religion known as Pancasila. Not open to students who have previously received, or need to receive credit for RLST 526. *Units: 6.*

### **RLST 227: RELIGION IN SOUTH ASIA**

What do religious texts instruct, and what do people do with those instructions? This lecture/discussion course examines the relationships between religious traditions in India, Nepal, and Bhutan as understood through texts and as enacted in everyday life. Through texts, film, comic books and art, we will explore the origins and development of Hinduism, Jainism and Buddhism in light of political change, modernization and globalization. *Units: 6.*

### **RLST 228: *YOGA: THEORY AND PRACTICE***

This course examines the history of yogic traditions in South Asia and explores contemporary developments of yoga practices around the world. In addition to studying primary texts and secondary literature students will also be instructed in basic pranayama (breathing) and asana (posture) practices by a qualified instructor. Students will write essays analyzing course materials through the lens of their own experiences with yoga practice. **PREREQUISITES:** Sophomore Standing *Units: 6.*

*Prerequisite: Sophomore Standing*

### **RLST 235: *THE ISRAELI-PALESTINIAN CONFLICT: FOUNDING MYTHS AND CONTEMPORARY REALITIES***

This course will examine key events in the Israeli-Palestinian conflict with special attention to the religious context, including themes such as sacred space, holy war, martyrdom, and messianism. These will be discussed in the context of 1948 and 1967 wars, Jewish settlers, the rise of Hamas, and Christian evangelism. *Units: 6.*

### **RLST 236: *THE ARABIC NOVEL AND THE TABOO***

An introduction to contemporary novels from the Middle East and North Africa that explores how Arab writers deal with religious, social, political and sexual taboos in their artistic works as well as issues of censorship and confiscation of literary productions. Lecture with group presentations, class discussions and a final analytical paper. *Units: 6.*

### **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 245: *APPLE, GOOGLE, FACEBOOK***

The rhetoric surrounding technology invokes revolution and newness, but the products and services fit with the individualism of American (and global) views of self and society. We will examine both the positive visions offered by tech thinkers like Steward Brand and Ray Kurzweil, as well as the destructive results that occur as corporations “move fast and break things.” Students will complete a video critique of a digital platform. **PREREQUISITES:** Sophomore standing *Units: 6.*

*Also listed as Global Studies 245*

*Prerequisite: Sophomore standing*

### **RLST 265: *ARABIAN NIGHTS***

The Arabian Nights, or 1,001 Nights, offers a unique glimpse into medieval Islam. Our readings from these tales will be supplemented with travel narratives and Sufi texts building on this storytelling tradition. The course provides an expansive view of the Islamic tradition and a chance to think critically about later perceptions of the Middle East. Students will complete an interpretive paper or digital mapping project. *Units: 6.*

### **RLST 276: NONVIOLENCE: RELIGIOUS ROOTS**

What are the religious roots and impulses that have created nonviolent movements? This course investigates components of several religious traditions that shaped the leaders and followers of nonviolent movements and communities, including Mahatma Gandhi in Hinduism, Badsha Kahn in Islam, the Anabaptist movement in Christianity, and movements in the indigenous community. Discussion with written assignments and a group project. *Units: 6.*

### **RLST 281: TOPICS IN RELIGIOUS STUDIES**

This course represents an exploration of a topic in religious studies. Topics will emphasize contemporary questions and experiential learning. Assignments will emphasize experiential learning and discussion. May be repeated when topic is different. *Units: 6.*

### **RLST 291: FIELD EXPERIENCE IN RELIGIOUS STUDIES**

This course provides the opportunity to experience a major religious tradition through a one- or two-week field experience accompanied by a professor. Class members will visit significant historical and contemporary sites and meet with practitioners during a break between terms. Students must register for the course in the term prior to travel and in the subsequent term, when they will complete a project. Travel program fee plus airfare. *Units: 3.*

### **RLST 304: SENSING RELIGION: RELIGIONS AND THE 5 SENSES**

A survey of religious studies theories and methods that focuses on the role of the five (or more) senses in religious life across traditions. Students will engage various senses through activities such as in-class dance demonstrations, field trips to nearby places of worship, reading case studies, and foundational texts, and viewing ethnographic films. Assignments include a sensory journal (student-led) and a final sensory ethnographic project. PREREQUISITES: Sophomore standing *Units: 6.*

*Prerequisite: Sophomore standing*

### **RLST 305: ATHEISM, AGNOSTICISM, AND NIHILISM**

This course is an examination of three contemporary positions which typically claim to be anti- or non-religious in orientation. We will explore the historical origins of each view (or, more precisely, each cluster of views) as well as analyzing its coherence and intelligibility. PREREQUISITES: Sophomore standing *Units: 6.*

*Prerequisite: Sophomore standing*

### **RLST 307: RELIGION AND ETHNOGRAPHY**

This class will introduce students to theories and methods at the intersection of the performance and practice of religious life. Students will engage with a variety of traditional, collaborative, and experimental ethnographic theories methods in the study of religious practices and apply these methods to a mini-ethnographic project of their choosing. PREREQUISITES: Sophomore standing *Units: 6.*

*Prerequisite: Sophomore standing*

### **RLST 326: NIETZSCHE AND 19TH-CENTURY CRITIQUES OF RELIGION**

An examination of the thought of Friedrich Nietzsche, focusing on his critique of Christianity and his general theory of religion, as well as what Paul Ricoeur calls his "hermeneutics of suspicion." Some discussion of other 19th-century critiques of religion (e.g., Feuerbach, Marx) will be included to provide historical context and contrast. Seminar with short papers and in-class presentations. PREREQUISITES: Sophomore standing or

consent of instructor *Units: 6.*

*Prerequisite: Sophomore standing or consent of instructor*

### **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? PREREQUISITES: Sophomore standing *Units: 6.*

*Also listed as Philosophy 332*

*Prerequisite: Sophomore standing*

### **RLST 333: GOD AND THE AFTERLIFE**

This course will focus on the nature of God and the afterlife from the perspective of the Abrahamic and Indian Hindu and Buddhist traditions, including arguments for and against the existence of God and the afterlife. Does God or the afterlife exist? Does either provide us with reason to be good? Students will be evaluated on the basis of expository and critical essays and presentations. *Units: 6.*

*Also listed as Philosophy 333*

### **RLST 336: RELIGION AND GLOBAL SYSTEMS**

This course will investigate how religious traditions shape the values and culture of nations and other large-scale groups. We will read theorists such as Karl Marx, Max Weber, Emile Durkheim, Robert Bellah, Mary Douglas, and Olivier Roy with an eye toward works that emphasize the global impact of religion. *Units: 6.*

### **RLST 343: NEW ENGLAND PURITAN POETRY**

A study of New England Puritan poetry in the context of new world spiritual aspirations and anxieties. Readings will include sections of Martin Luther's writings and Perry Miller's and others' criticism, as well as the poems of Anne Bradstreet, Edward Taylor, Michael Wiggelsworth, and other minor and post-Puritan poets.

PREREQUISITES: Sophomore standing *Units: 6.*

*Also listed as English 443*

*Prerequisite: Sophomore standing*

### **RLST 352: COLONIALISM AND GLOBAL STRUCTURES**

An overview of European colonialism in Africa and Asia, this course focuses on colonial ideologies in the 19th and 20th centuries. It will investigate the myths and realities of colonialism and compare the colonial practices of the Belgians, Dutch, English and French. Our analysis will be informed by essays written by leading colonial theorists, novels and films. Lecture/discussion with response essays and a final project. PREREQUISITES: Sophomore standing *Units: 6.*

*Also listed as Global Studies 352*

*Prerequisite: Sophomore standing*

### **RLST 353: BUDDHISM AND GENDER**

This discussion-based course investigates the ways in which women and gender minorities participate in Buddhist culture around the world. By reading texts by and about Buddhist women, this course will explore the

extent to which gender affects social status, leadership roles, and access to education in Buddhist communities in South Asia, East Asia, and the United States. *Units: 6.*

*Also listed as Gender Studies 353*

### **RLST 355: QURAN**

An examination of the Quran in its historical context, which will include reading of pre-Islamic poetry and the earliest biographical traditions about Muhammad. We will read the work of recent historians like Fred Donner and Patricia Crone who have offered revisionist views of the earliest Islamic community. PREREQUISITES: RLST 240 *Units: 6.*

*Prerequisite: RLST 240*

### **RLST 356: MEDITATION: PSYCHOLOGICAL AND BUDDHIST PERSPECTIVES**

This seminar-style course investigates the theory and practice of meditation from psychological and Buddhist perspectives. Topics to be considered include the effects of meditation on the brain, mindfulness, compassion, and the secularization of religious practices. Course meetings will focus on discussion of readings and experiential learning. Assessment will involve quizzes, reflection on experiential practice, and papers. PREREQUISITES: Sophomore standing or instructor approval. *Units: 6.*

*Also listed as Psychology 356*

*Prerequisite: Sophomore standing or instructor approval.*

### **RLST 365: FAITH AND POWER IN MEDITERRANEAN CITIES**

This course examines the complex histories of buildings and urban landscapes around the Mediterranean, emphasizing how religious and political structures transformed them from the Classical world, through Christian and Islamic empires, and down to modern nation states. The city of Istanbul will be a central focus, though case studies from other cities will be introduced. PREREQUISITES: Sophomore standing *Units: 6.*

*Prerequisite: Sophomore standing*

### **RLST 381: RACE AND RELIGION**

This course examines how religious cultures and discourses contributed to the emergence of the concept of race, racial classification, and processes of 'racialization'; how biblical interpretation both justified and contested the transatlantic slave trade; and how anti-Black racism relates to anti-Semitism. The course examines the history of doctrines on indigenous peoples, race science, and exploitation, and the dynamics of race and ethnicity in Israel and Palestine. Lecture/discussion with final paper. PREREQUISITES: Sophomore standing *Units: 6.*

*Also listed as Ethnic Studies 318*

*Prerequisite: Sophomore standing*

### **RLST 390: TUTORIAL STUDIES IN RELIGIOUS STUDIES**

Advanced research, arranged and carried out under the direction of an instructor. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **RLST 391: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **RLST 399: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **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. PREREQUISITES: Sophomore standing *Units: 6.*

*Prerequisite: Sophomore standing*

### **RLST 450: CLASSIC TEXTS IN RELIGIOUS STUDIES**

*Topic for Fall 2022: Marco Polo and Ibn Battuta*

Prerequisites: Sophomore Standing

This course will focus on two texts by famous travelers of the late medieval period, one from Europe and the other from the Middle East. Marco Polo was a traveler from Venice who wrote a “best-seller” about his trip to China. Ibn Battuta was a Moroccan traveler who began a journey to complete the Hajj in Mecca, but then kept traveling to sites all around the Mediterranean and as far away as Timbuktu (Mali) and China. This class will focus on select passages from both of these medieval accounts. This half-credit course will meet twice a week for the first six weeks of the term. By Week 7, students will devise a question that will be the basis for a longer written analysis due at the end of the term. *Units: 3 OR 6.*

*Also listed as Art History 290*

*Prerequisite: 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. PREREQUISITES: Junior standing or consent of the instructor. *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. PREREQUISITES: RLST 220 or RLST 216 *Units: 6.*

*Also listed as East Asian Studies 510*

*Prerequisite: RLST 220 or RLST 216*

### **RLST 525: CONVERSION NARRATIVES**

This course will explore literary, philosophical and autobiographical texts dealing with conversion. While we will be focusing primarily on conversions to and from Judaism--primarily in the modern era--we will cover excerpts from Augustine's *Confessions* and St. Paul's *Letters*. PREREQUISITES: Sophomore standing *Units: 6*.

*Prerequisite: Sophomore standing*

### **RLST 526: RELIGION IN INDONESIA**

This course will study the religious traditions of Indonesia. We will concentrate on the island of Java and the history of the dominant Islamic faith, but we will also examine the Hindu, Buddhist, and Christian traditions in Indonesia and the form of civil religion known as Pancasila. Students will also meet once a week to read sections of Clifford Geertz's classic *The Religion of Java* and also complete a seminar paper. Not open to students who have previously received credit for RLST 226. *Units: 6*.

### **RLST 535: BUDDHIST PHILOSOPHY: WHAT IS REAL AND HOW DO WE KNOW?**

An examination of the relationship between two principal schools of later (Mahāyāna) Buddhism and their concepts of emptiness. The Madhyamaka school views all things as devoid of independent, inherently existing essences, while the Yogācāra school believes that nothing is truly separate from the mind. We will consider fundamental texts in both traditions as they relate to metaphysics epistemology and the self. Seminar with papers. PREREQUISITES: One course in religious studies *Units: 6*.

*Prerequisite: One course in religious studies*

### **RLST 545: ADVANCED TOPICS IN RELIGIOUS STUDIES**

This topics course offers advanced students a seminar in a topic related to a foundations/gateway course offered in the same term. Students engage with more challenging readings and pursue their own scholarship, presenting their research in the companion gateway course as the opportunity arises. Students may have previously taken the companion gateway course but may not enroll concurrently in that course. May be repeated when topic is different.

*Topic for*

*Units: 6.*

*Prerequisite: Instructor approval required*

### **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. PREREQUISITES: RLST 330 or consent of instructor *Units: 6*.

*Prerequisite: RLST 330 or consent of instructor*

### **RLST 565: RELIGION & LIBERATION AFRICA**

An intensive examination of the continuation of local traditions and the creative re-use of world religions around

the continent of Africa. We will look at the coming of Islam to Africa and its interaction with traditional religion, uniquely African forms of Christianity (Ethiopia) and Islam (Senegal), and the more recent arrival of evangelizing religious sects. We will learn about Mandela's struggle against apartheid in South Africa and the challenge of megacities like Lagos. *Units: 6.*

#### **RLST 580: SEMINAR: ISLAM AND GLOBALIZATION**

This course will examine the transformations of Islam that have accompanied globalization. Our focus will be roughly split between the theoretical perspective on globalization offered by Olivier Roy and the work of Laila Ahmed on gender in contemporary Islam. Students will develop and write a major research paper.

PREREQUISITES: RLST 240 *Units: 6.*

*Prerequisite: RLST 240*

#### **RLST 590: TUTORIAL STUDIES IN RELIGIOUS STUDIES**

Advanced research, arranged and carried out under the direction of an instructor. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

#### **RLST 591: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

#### **RLST 599: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

#### **RLST 610: SENIOR PROJECTS**

The goal of this class is to give advanced RLST students (juniors or seniors) space to write a paper or finish a senior capstone. We will discuss the challenges of research and the use of sources. Reading will consist of contemporary academic articles designed to highlight styles of argument. PREREQUISITES: Junior standing *Units: 6.*

*Prerequisite: Junior standing*

#### **RLST 690: TUTORIAL STUDIES IN RELIGIOUS STUDIES**

Advanced research, arranged and carried out under the direction of an instructor. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

#### **RLST 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

**RLST 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

# RUSSIAN

**Associate professors:** V. Kononova (*on leave term(s) II, III*), P. Thomas (*chair*)

**Instructor:** E. Krizenesky

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, or with the NGO "Poruch," based in Kyiv, Ukraine.

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 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 variety of general education requirements.

## Required for the major in Russian studies

Students who complete the major in Russian studies will demonstrate competence in the four language skills (listening, speaking, reading, and writing) at the intermediate-high to advanced-low level according to the American Council of Teachers of Foreign Languages (ACTFL) guidelines. They will situate major figures, events, and institutions from Russian culture within their cultural and historical contexts. They will marshal and interpret historical facts about Russia and deal independently and critically with complex fictional, nonfictional, and filmic texts in Russian.

1. First-year language courses: RUSS 101, 102, 201 (or the equivalent)
2. Second-year language courses: RUSS 211, 212, 250 (or the equivalent)
3. Two courses in Russian literature and culture, 300-level or above
4. Two courses in Russian history
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. Consult faculty for approval of specific courses.
6. A senior-level independent study that results in the completion of a substantial research paper. In most cases, this project will be completed in RUSS 650, the senior seminar. Students are expected 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: RUSS 300, 305, 330, 335; HIST 315, 320, 325. Other topics may 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 taking RUSS 280, 281 and 287; studying in Russia; attending an intensive summer language program offered in the U.S.; and attending weekly meetings of Russian Table and RUSS 340, a conversation-based current-events tutorial.

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 major in Russian language and literature**

Students who complete the major in Russian language and literature will demonstrate similar language competence as the Russian studies major, with a greater emphasis on literary versus cultural-historical study.

The major in Russian language and literature requires the following:

1. First-year language courses: RUSS 101, 102, 201 (or the equivalent)
2. Second-year language courses: RUSS 211, 212, 250
3. Two courses in Russian literature taught in translation, level 300 or above
4. Two courses in Russian literature taught in the original, level 300 or above
5. A senior-level independent study that results in the completion of a substantial research paper. Students are 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.

Students with prior background in Russian who place out of the first-year sequence are required to complete additional language study for the major.

## **Senior Experience in Russian**

The Russian department's *Senior Experience* consists of a senior-level research project that further develops work done in another course. Students complete their projects in RUSS 650, the senior seminar.

The research project allows students to explore a problem or question deeply and over an extended period of time. In completing this project, students will have marshaled the linguistic skills, cultural and historical

knowledge, and analytical methods they have developed while pursuing the Russian major. Finally, students present their research to the larger community at the Harrison Symposium, lecture recitals, theatrical productions, poster presentations, and other venues.

As part of the process of reviewing their work as Russian majors, students are also asked to 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 teacher certification should work with all concerned departments to assess the feasibility of an interdisciplinary capstone.

### **Required for the minor in Russian**

1. First-year language courses: RUSS 101, 102, 201 (or the equivalent)
2. Second-year language courses: RUSS 211, 212, 250 (or the equivalent)
3. Two courses in Russian literature, culture, or history, 300-level or above

### **Teacher certification in Russian (K-12)**

Russian majors may seek certification to teach Russian at the elementary and secondary levels. To be certified, students must spend a term in a Russian-speaking country studying the language and culture and must pass an oral and writing proficiency test. Students can add an endorsement in a second area (such as another language or English as a second language) by completing the appropriate minor. Students who plan to seek teacher certification should review the requirements in the Education section of the catalog and meet with the director of teacher education, preferably before the end of the sophomore year.

### **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.

Most Russian majors and minors who choose to study abroad do so through the Lawrence affiliated Bardy-Smolny exchange. This 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.

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.

## Courses - Russian

### **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. PREREQUISITES: RUSS 101 or consent of instructor *Units: 6.*

*Prerequisite: RUSS 101 or consent of instructor*

### **RUSS 191: *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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **RUSS 195: *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. PREREQUISITES: Counter Registration Required. *Units: 3.*

*Prerequisite: Counter Registration Required.*

### **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. PREREQUISITES: RUSS 102 or consent of instructor *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. PREREQUISITES: RUSS 201 or consent of instructor *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. PREREQUISITES: RUSS 211 or consent of instructor *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. PREREQUISITES: RUSS 212 *Units: 6.*

*Prerequisite: RUSS 212*

### **RUSS 260: *THE LONG NOVEL (IN ENGLISH)***

A comparative study of nineteenth century European realism, with readings taken from a variety of national traditions. Authors studied may include Dickens, Flaubert, and Dostoevsky. Collaborative teaching of each text will expose participants to a wide range of critical and pedagogical methods. With instructor approval students may also register for an additional tutorial (3 units) in which we will read and discuss important theoretical works on the history of the novel form. PREREQUISITES: Sophomore standing *Units: 6.*

*Also listed as English 245*

*Prerequisite: Sophomore standing*

### **RUSS 280: *TOPICS IN RUSSIAN THROUGH FICTION AND POETRY***

This course advances skills in reading, understanding, writing, and speaking Russian, with materials from the rich traditions of Russian literary culture. Readings include fiction, plays, and poetry. Conducted in Russian, with frequent writing and grammar assignments, in-class presentations, and occasional translation exercises. May be repeated for credit when topic is different. PREREQUISITES: RUSS 250 or consent of instructor *Units: 6.*

*Prerequisite: RUSS 250 or consent of instructor*

### **RUSS 281: *TOPICS IN RUSSIAN THROUGH NONFICTION***

This seminar-style course will allow advanced students an opportunity to further develop their proficiency. Materials include memoirs, journalism, and historical texts. Conducted in Russian, with frequent writing and grammar assignments, in-class presentations, and occasional translation exercises. It will prepare students to do more advanced research in Russian, either here at Lawrence or abroad. May be repeated for credit when topic is different. *Units: 6.*

*Prerequisite: RUSS 250 or consent of instructor*

### **RUSS 287: *TOPICS IN RUSSIAN THROUGH FILM***

This course will examine topics in Russian film. Topics may include specific genres (e.g., the sad comedy), the work of a director or tradition, films important for a specific historical moment (e.g., *The Thaw* or *World War Two*), or films devoted to a specific theme. Students will expand their Russian vocabulary, improve fluency, increase speaking confidence and gain cultural knowledge by viewing Russian films and analyzing the psychology of the characters. 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. May be repeated when topic is different. *Units: 6.*

*Also listed as Film Studies 287*

*Prerequisite: RUSS 250 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 304: *SLAVIC SCIENCE FICTION***

This course examines science fiction works from the Slavic world, with concentration on Russia and the Soviet Union. We will explore how Slavic authors reflected on technological progress, humankind's place in the universe, social and political experiments, etc. Lecture/seminar. Taught in English translation. 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 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 306: *RUSSIA ON STAGE: THREE CENTURIES OF RUSSIAN THEATER***

This course introduces students to the rich theatrical tradition of Russia. The readings for the course span over two centuries, starting from the social comedies of the late eighteenth century to the contemporary "New Drama" and documentary theater. The plays are situated within the larger historical and political context of Imperial, Soviet and post-Soviet Russia. Lecture/discussion. Taught in English. *Units: 6.*

*Also listed as Theatre Arts 306*

### **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 mini series. In English. *Units: 6.*

### **RUSS 314: *CHEKHOV (IN ENGLISH)***

The course focusses 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 315: *TOPICS IN DOSTOEVSKY AND TOLSTOY (IN ENGLISH)***

This course explores the works, thought, and impact of Fyodor Dostevsky and Lev Tolstoy. Possible topics include: *Crimes and Punishments*, *Spirituality and Religion*, *History and Narrative*, *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. May be repeated when topic is different. *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.

*Topic for*

This course *Units: 6.*

*Also listed as Film Studies 320*

### **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. (G&C) *Units: 6.*

*Prerequisite: Sophomore standing and one course in Russian language, literature, or history*

### **RUSS 325: RUSSIAN FOLKTALE: MAIDENS, WITCHES, AND SPIRITS OF THE RUSSIAN FOLK TRADITION (IN ENGLISH)**

This course introduces students to the magical world of Russian folktales and mythology. A wide selection of folktales will be interpreted through a range of critical approaches (e.g., structuralism, psychoanalysis, and feminism). Folktale adaptations in literature, film, music, and the arts will provide students with an appreciation of the continuing cultural significance of folk belief and folktales in Russia. Lecture/seminar. Taught in English translation. *Units: 6.*

### **RUSS 335: THROUGH THE EYES OF WOMEN: WOMEN AND GENDER IN RUSSIAN CULTURE (IN ENGLISH)**

An interdisciplinary survey course that examines femininity, womanhood and identity in Imperial, Soviet and Post-Soviet Russia. Materials include works of fiction, non-fiction, and film. No knowledge of Russian required. *Units: 6.*

### **RUSS 340: RUSSIAN TV TALK**

Students watch, analyze, and discuss freshly archived Russian television news. Students will increase knowledge of journalistic vocabulary and reporting styles, and develop an understanding of Russian perspectives on national and international events. May be repeated for credit. PREREQUISITES: RUSS 250 or consent of instructor *Units: 2.*

*Prerequisite: RUSS 250 or consent of instructor*

### **RUSS 354: HISTORY OF RUSSIAN AND SOVIET FILM**

This course will introduce the student to the rich and varied tradition of Russian and Soviet cinema from the Pre-Revolutionary period to the present. Works by major filmmakers will be viewed and discussed in the context of the culture, economy, society, and politics of the time. Taught in English. PREREQUISITES: Sophomore standing *Units: 6.*

*Also listed as Film Studies 354, History 354*

*Prerequisite: Sophomore standing*

### **RUSS 390: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **RUSS 391: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **RUSS 395: 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. PREREQUISITES: Counter Registration Required. *Units: 3.*

*Prerequisite: Counter Registration Required.*

### **RUSS 399: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **RUSS 590: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **RUSS 591: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **RUSS 595: 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. PREREQUISITES: Counter Registration Required. *Units: 3.*

*Prerequisite: Counter Registration Required.*

### **RUSS 599: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **RUSS 650: SENIOR SEMINAR**

This seminar is for advanced students to finish a senior capstone. Seniors meet with the instructor early in Fall Term to discuss individual projects and plan a research agenda. In the Winter Term seminar, students read and discuss contemporary academic articles to highlight styles of argument. The rest of the seminar involves writing workshops, presentations of individual research and discussions of specific scholarly methods. PREREQUISITES: Declared majors with senior standing *Units: 6.*

*Prerequisite: Declared majors with senior standing*

### **RUSS 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **RUSS 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **RUSS 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. PREREQUISITES: Counter Registration Required. *Units: 3.*

*Prerequisite: Counter Registration Required.*

### **RUSS 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

# SPANISH

<b>Professors:</b>	G. Fares, R. Tapia
<b>Associate professor:</b>	M. Allan ( <i>chair</i> )
<b>Assistant professors:</b>	T. Jimenez-Anglada, M. Rodriguez Guerra
<b>Instructor:</b>	C. Herrera

## INTRODUCTION

More than 572 million people speak Spanish around the world and over 50 million in the United States, where it is the second language of business and communication. The Spanish program at Lawrence educates students to reach a high level of academic achievement, linguistic and cultural competence, and preparation for success. Spanish majors and minors graduate from Lawrence with an advanced level of proficiency in intercultural communication in Spanish. They benefit personally and intellectually from four years of interdisciplinary study and international experience, often in combination with another major or minor. Learning about different cultural perspectives and becoming expert communicators in Spanish prepares students to succeed in a diverse society and become versatile participants in the job market.

Spanish faculty from Spain, Argentina, Chile, Puerto Rico, and the United States offer a wide range of courses on the Spanish language and the cultures of Latin America, Spain, and the Latinx communities of the United States. All materials, discussions, and assignments are in Spanish unless specified otherwise. In courses numbered at the 300, 400, and 500 levels students examine significant topics on the cultural products, practices and perspectives of multiple Spanish-speaking countries and communities. Students take interdisciplinary courses on literature, film and television, art history, urban and national spaces, linguistics and translation. Along the way, they become independent thinkers, expert analysts, and bilingual communicators who are well prepared for lives of achievement after Lawrence.

## LEARNING GOALS

The Spanish program's goals focus on the national standards for 21st century skills and the 5 C's in World-Readiness Standards for Learning Languages: communication, cultures, connections, comparisons, and communities. Students who graduate with a major or minor in Spanish acquire the following skills and knowledge:

- Advanced communicative ability in Spanish.
- Deep knowledge of different countries and communities through their cultural products, practices and perspectives.
- The capability to establish advanced connections with additional bodies of knowledge, cultures and peoples.
- The ability to make sophisticated cross-cultural comparisons between Spanish and their native language, as well as between various Spanish-speaking cultures and their own.
- In short, the capacity to communicate expertly in both English and Spanish, and to participate critically in multilingual communities.

## PLACEMENT

Interested students should start taking Spanish in their first term (or year) at Lawrence. The SPAN 101, 102 and 201 sequence of courses is only offered once a year (fall, winter and spring). SPAN 201 is also offered in the fall. New students should take the [placement exam](#) immediately and check prerequisites for each course on Voyager before registering.

## MEETING THE LANGUAGE COMPETENCY GENERAL EDUCATION REQUIREMENT

As part of its general education requirements, Lawrence requires all students to attain competency in a language other than English at the minimum level equivalent to three college terms of study (i.e. equivalent to successful completion of SPAN 201 or 203). Students can satisfy this requirement with one of the following options:

- Passing a SPAN 200-level class. Beginners can take SPAN 101, 102 and 201 in sequence. Heritage speakers can take SPAN 203 and 204 in sequence. Students must follow the recommendation for their online placement scores.
- Taking a written and oral competency examination in Spanish. Contact the Spanish department for scheduling this exam.
- A score equivalent to the second-year level on the CLEP examination in Spanish (63 and above). A CLEP score at the one-year level of competency is sufficient for Bachelor of Music students (52-63).
- A score of 630 or higher on the SAT Subject Spanish or Spanish with Listening exam.
- A score of 4 or 5 on the Advanced Placement (AP) examination in Spanish Language and Culture exam. Credit equivalent to one 6-unit course at the SPAN 202 level.
- A score of 4 or 5 on the Advanced Placement (AP) examination in Spanish Literature. Credit equivalent to one 6-unit course at the SPAN 300 level and it fulfills one course requirement toward the Spanish major or minor.
- A score of 6 or higher on the Spanish International Baccalaureate Examination at the advanced level. Carries credit equivalent to one 6-unit course at the SPAN 202 level.
- Providing documented proof (e.g., high school diploma) that the student's high school program was conducted in Spanish. This option satisfies the language requirement but carries no academic credit.

Note: Lawrence University does not conduct the AP, IB, SAT II, or CLEP examinations. They can be taken at authorized test centers on a fee basis.

More information about meeting the language competency requirement can be found under Academic Procedures & Regulations.

## Required for the major in Spanish

Students who complete the major will develop the following abilities in Spanish:

- *Communication*: Use information from written and aural sources to present a synthesis and express opinions, in writing and orally. Participate in interpersonal and presentational communication, both in writing

and orally. Use language that is semantically and grammatically accurate according to a given context.

- **Culture:** Know and understand different cultures through their literatures, visual arts, films, and other cultural artifacts. Recognize cultural elements implicit in oral and written texts; demonstrate understanding of practices, perspectives, and products of the cultures studied.
- **Connections, comparisons, and communities:** Make comparisons between Spanish and the student's native language and between the cultures in Spanish-speaking countries and the student's own culture, and participate critically in multilingual communities.

The major in Spanish requires sixty units, distributed as follows:

1. Spanish 202, 204, or a higher level class, depending on [placement](#)
2. At most twelve units in Spanish courses numbered at the 300 level
3. At least twelve units in Spanish courses numbered at the 400 level
4. At least twelve units in Spanish courses numbered at the 500 level
5. At most six units in an approved elective from another department (see department list) or internship.

Also required:

1. Completion of at least forty-eight units in the major that have Spanish as the sole or primary language of instruction, communication, and coursework.
2. Completion of at least thirty units for the major on campus, including twelve units in Spanish at the 500-level. (See "Off-campus study" section for equivalence of off-campus courses.)
3. Approval of the completed *Senior Experience*: Spanish multimedia portfolio (see Canvas for detailed information).

## Senior Experience in Spanish

The Spanish department's *Senior Experience* consists of a multimedia portfolio that provides measurable evidence of the academic work, cultural competence, and communication skills required of Spanish majors. The portfolio is a requirement for completion of the major. It presents a collection of evidence that demonstrates a student's attainment of the learning goals established by the program.

Spanish majors are required to submit their multimedia portfolio in the required electronic format to the Spanish department by the end of the fifth week of their final term at Lawrence. Spanish faculty evaluators will assess the portfolio and communicate the outcome of their evaluation to the students before the end of the term. Unapproved portfolios must be revised and resubmitted before the last day of classes in order for students to graduate.

*Important: Students must register to take an Independent Study (SPAN 699) for one (1) unit (S/U) with their assigned faculty evaluator(s) during their final term at Lawrence.*

## Required for the minor in Spanish

The minor in Spanish requires thirty-six units, distributed as follows:

1. Spanish 202, 204 or a higher-level class, depending on placement.
2. At most twelve units in Spanish courses numbered at the 300 level.
3. At least six units in Spanish courses numbered at the 400 level.
4. At least six units in Spanish courses numbered at the 500 level.
5. At most six units in an approved elective from another department or an internship.

Also required:

1. Completion of at least thirty-six units, at least thirty of which have Spanish as the sole or primary language of instruction, communication, and coursework.
2. Completion of at least eighteen units for the minor on campus. (See "Off-campus study" section for equivalence of off-campus courses.)

## **Teacher certification in Spanish (K-12)**

Spanish majors can seek certification to teach Spanish at the elementary and secondary levels. To be certified, students must study in a Spanish-speaking country for one term, and they must also pass an oral and writing proficiency test. Students can add an endorsement for a second area (such as another language or English as a second language) by completing the appropriate minor. Students who plan to seek teacher certification should review the requirements in the Education section of the catalog and meet with the director of teacher education before the end of their second year.

## **Course numbering**

Courses numbered SPAN 101-204 are standards-based, proficiency-oriented Spanish language and culture classes. Their goal is to have students achieve an intermediate level of linguistic and cultural proficiency in accordance with the 5 Cs in national standards: Communication, Culture, Connections, Comparisons and Communities. Any SPAN 200-level class satisfies the general education requirement in language competency (SPAN 201, 202, 203, or 204). Courses numbered 202/ 204 and above can satisfy requirements for a minor or major in Spanish.

SPAN 202 is a high-intermediate proficiency course that provides continued development of language learners' written and oral expression in Spanish, as well as knowledge and analysis of pertinent cultural and linguistic topics. SPAN 204 does the same for heritage speakers of Spanish.

The content of 300/400/500 courses and seminars is connected to the research interests and areas of expertise of each faculty member. Courses numbered in the 300s provide communicative and intellectual

development through the introductory study of specific areas of knowledge (literature, film, news media, linguistics, etc.) 400-level courses allow a more advanced exploration of cultural, socio-political, artistic, filmic and literary areas. Courses at the 500 level are seminars for advanced majors and minors, and they delve into very specific academic topics. In all courses, students are expected to actively participate in academic discussions and produce scholarly work appropriate for each stage in their education.

Tutorial studies and independent projects can be pursued in courses numbered in the 390s and 590s, subject to faculty availability. Spanish does not offer tutorials or directed studies below the 300 level. Some internships are eligible to become a 595 course, subject to approval by the chair of the department and the availability of a faculty supervisor.

The *Senior Experience* requires registration for a one-unit independent study with the assigned evaluator(s) (SPAN 699 Spanish Multimedia Portfolio). This project allows students to connect, reflect on, and demonstrate different areas of knowledge and proficiency achieved in the major. SPAN 699 is graded S/U.

All learners of Spanish as a second language, as well as native and heritage speakers of Spanish, are required to take the online placement exam and enroll in Spanish courses at the recommended level.

## Off-campus study

The Spanish department strongly advises its majors and minors to participate in sponsored academic programs in Spain or Latin America, although off-campus study is *not* required for completion of a Spanish major or minor. Other students are also encouraged to participate.

## TRANSFERRING OFF-CAMPUS CREDITS TO COMPLETE MAJOR OR MINOR REQUIREMENTS IN SPANISH

*Conversion of semester credits to Lawrence units:*

- 3 credit hours = 5 units
- 4 credit hours = 7 units

*Lawrence course levels and types of equivalent classes off campus:*

A detailed chart of specific off-campus courses and their corresponding course level at Lawrence can be on the advising section of the Spanish website. Below are the general guidelines for these equivalencies:

Spanish 202 or 204

- A high-intermediate Spanish language and culture course (i.e. courses solely focused on improving communicative proficiency in Spanish and general knowledge of cultural products, practices and perspectives in Spanish-speaking communities). Similar in difficulty to Spanish 202 or 204.

Spanish 300-level

- A low-advanced Spanish course focused on introductory linguistic analysis (e.g. advanced grammar). It generally includes short writing assignments (1-2 pages) and brief oral presentations. Similar in difficulty to Spanish 300-level courses on campus.
- A low-advanced Spanish course focused on *basic* literary, artistic, filmic and/or cultural analysis, narrative writing or similar. It generally includes short writing assignments (1-2 pages) and/or brief oral presentations. Similar in difficulty to 300-level courses on campus.

#### Spanish 400-level

- An advanced Spanish class with a focus on the history, political system, music, art, environment or society of the host country or region. It generally includes medium-length writing assignments (3-5 pages) and/or more specialized oral presentations. Similar in difficulty to 400-level courses on campus.
- A course taught in Spanish in a discipline other than Hispanic Studies (e.g. GOVT, ECON, PSYC, ENST, BIOL, ARHI, HIST, EDUC, etc.) Important: Contact the appropriate department in advance if you want these credits to satisfy requirements in a program other than Spanish.
- An interdisciplinary course with an internship, volunteering, professional shadowing or field study component that requires a significant amount of oral and written communication in Spanish outside of class, as well as reporting and research work in Spanish, as appropriate.

#### Spanish 500-level

- A seminar-type Spanish class with an advanced focus on a specific topic or time period in the cultural production (e.g. literature, cinema television or similar cultural narratives) of Latin America, Spain or other Latinx communities. Readings and assignments have a strong theoretical component and must be equivalent in length and difficulty to those in Spanish 500-level classes on campus.
- A seminar-type Spanish class in advanced linguistics. Readings and assignments must be equivalent in difficulty to those in Spanish 500-level classes on campus.

IMPORTANT: If students take off-campus courses that do not fit any of the categories above (e.g. courses with a primary focus on pre-professional training or recreational activities), these credits may transfer as general Lawrence units, but they cannot fulfill major or minor requirements in Spanish. *Students must always obtain the approval of their Spanish advisor or the Spanish chair for applying off-campus credit to the completion of requirements for the major or minor.*

## Courses - Spanish

### SPAN 101: *BEGINNING SPANISH*

An introduction to the Spanish five language skills (understanding, speaking, reading, writing and culture) through task-based classroom instruction and individual lab practice. 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 Spanish five language skills (understanding, speaking, reading, writing and culture) through task-based classroom instruction and individual lab practice. This course may not be taken on a Satisfactory/Unsatisfactory basis. PREREQUISITES: SPAN 101, its

equivalent, or consent of instructor *Units: 6.*

*Prerequisite: SPAN 101, its equivalent, or consent of instructor*

### **SPAN 191: DIRECTED STUDY IN SPANISH**

An individual or small-group study directed towards the acquisition of knowledge or specific skills, not research or creative work. Directed studies are not a substitute for existing courses but opportunities to pursue pertinent introductory topics that clearly fall under the field of expertise of a faculty member in the department.

PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **SPAN 195: INTERNSHIP IN SPANISH**

An opportunity for students to apply their Spanish language and culture skills in business, government and the non-profit sector. National or international internships are coordinated between the Office of Career Services and the Spanish faculty who acts as supervisor. In order to earn academic credit, internships must meet the required guidelines and receive prior approval from the Spanish chairperson. Credit requirements may include readings, discussions, and a report and/or portfolio. The faculty supervisor determines the submission calendar for internship-related assignments. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **SPAN 200: INTENSIVE SPANISH 1, 2, AND 3**

A concentrated six-week Spanish class encompassing from the beginning to the intermediate level. The course provides intensive practice of the five language skills (understanding, speaking, reading, writing and culture) through task-based classroom instruction and guided lab practice. Selected readings, written assignments and discussions serve to further develop linguistic and analytical 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. PREREQUISITES: A \$500 non-refundable deposit is required for registration and will be deducted from tuition (\$9,435 for 2019). Students interested in living on campus should contact the Campus Life office. Session dates for Summer 2019: June 20-July 31 *Units: 18.*

*Prerequisite: A \$500 non-refundable deposit is required for registration and will be deducted from tuition (\$9,435 for 2019). Students interested in living on campus should contact the Campus Life office. Session dates for Summer 2019: June 20-July 31*

### **SPAN 201: INTERMEDIATE SPANISH**

A continuation of Spanish 102. This intermediate course provides intensive practice in the Spanish five language skills (understanding, speaking, reading, writing and culture) through task-based classroom instruction and individual lab practice. Selected readings, written assignments and discussions serve to further develop linguistic and analytic skills in Spanish at the intermediate level. This course may not be taken on a Satisfactory/Unsatisfactory basis. PREREQUISITES: SPAN 102, its equivalent, or consent of instructor *Units: 6.*

*Prerequisite: SPAN 102, its equivalent, or consent of instructor*

### **SPAN 202: INTERMEDIATE SPANISH**

A bridge between intermediate and advanced Spanish courses. The class provides comprehensive practice of all language skills with emphasis on achieving control of most structures, considerable breadth of vocabulary,

and appropriate communicative competence. Selected readings, written assignments and discussions serve to further develop the linguistic and analytic skills needed for advanced study in Spanish. PREREQUISITES: SPAN 201, its equivalent, or consent of instructor *Units: 6*.

*Prerequisite: SPAN 201, its equivalent, or consent of instructor*

### **SPAN 203: INTERMEDIATE SPANISH FOR HERITAGE LEARNERS**

This course builds on the linguistic competence students already have in order to expand their language skills. It develops language registers in all language skills, with emphasis on reading and writing, in a dynamic cultural context centered on Latinxs in the US. This course is designed for students who were exposed to Spanish-speaking environments at an early age. PREREQUISITES: Instructor Approval *Units: 6*.

*Prerequisite: Instructor Approval*

### **SPAN 204: INTERMEDIATE II - SPANISH FOR HERITAGE LEARNERS**

A continuation of Spanish 203. This course provides comprehensive practice of all language skills with emphasis on expanding the linguistic repertoire and academic skills. It develops academic language, with emphasis on reading and writing, in a dynamic cultural context centered on Latinxs in the US. This course is designed for students who were exposed to Spanish-speaking environments at an early age.

PREREQUISITES: SPAN 203 and/or Instructor approval *Units: 6*.

*Prerequisite: SPAN 203 and/or Instructor approval*

### **SPAN 302: CANTIGAS DE SANTA MARIA**

The Cantigas de Santa Maria, a thirteenth century songbook from Spain, contains hundreds of songs and dozens of miniatures. In this class, we analyze the poetry, music, and artwork of the Cantigas in regular class meetings for the first five weeks of the term. Students submit short analytic papers in tenth week, but no classes are held after week five. *Units: 3*.

*Also listed as Musicology 111, Art History 160*

### **SPAN 316: GENDER, POLITICS, AND CURRENT EVENTS IN SPAIN**

A critical analysis and discussion of recent and current events in Spain with a focus on issues of gender and sexuality, immigration, and nationalism. Students study and present on topics that affect Spanish society today by reading, watching and listening to a variety of media sources, articles and theoretical readings.

PREREQUISITES: SPAN 202 or its equivalent, official placement, or consent of instructor *Units: 6*.

*Also listed as Gender Studies 412*

*Prerequisite: SPAN 202 or its equivalent, official placement, or consent of instructor*

### **SPAN 320: INTRODUCTION TO LITERARY TEXTS**

An introduction to the critical analysis of texts that represent various periods, genres and authors in Latin American and Spanish literature. Readings of texts and theory, class discussions and composition tasks prepare students for other advanced courses in the Spanish program. PREREQUISITES: SPAN 202, its equivalent, or consent of instructor. *Units: 6*.

*Prerequisite: SPAN 202, its equivalent, or consent of instructor.*

### **SPAN 326: INTRODUCTION TO NON-FICTION**

A course on writing in Spanish focused on narrative non-fiction, especially journalism and memoir. The course

will be organized in a workshop-style, where students will share and critically engage with their peers' writing. Readings will include contemporary journalism from Latin American and Spain. The course will build toward a final project in which students will write their own work of narrative journalism or memoir. **PREREQUISITES:** SPAN 202 *Units: 6.*

*Prerequisite: SPAN 202*

### **SPAN 330: INTRODUCTION TO FILM**

An introduction to the critical analysis of Latin American and Spanish film. Students will study a series of films and pertinent readings through class discussions, different types of assignments, and presentations. The course is organized around the central topic of the relationship between audiovisual representation and power. Students will explore different ways in which Latin American and Spanish cinema has portrayed hegemonic and non-hegemonic identities along lines of race, ethnicity, gender, sexuality, and socioeconomic status. Class taught in Spanish. **Units: 6.** **PREREQUISITES:** SPAN 202, its equivalent, or official placement and consent of instructor. Students who successfully completed SPAN 430 cannot register for SPAN 330. *Units: 6.*

*Also listed as Global Studies 330*

*Prerequisite: SPAN 202, its equivalent, or official placement and consent of instructor. Students who successfully completed SPAN 430 cannot register for SPAN 330.*

### **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. **PREREQUISITES:** SPAN 202, its equivalent, or consent of the instructor *Units: 6.*

*Also listed as Linguistics 374*

*Prerequisite: SPAN 202, its equivalent, or consent of the instructor*

### **SPAN 350: INTRODUCTION TO SPANISH LINGUISTICS**

This course offers an introduction to linguistics based on data from Spanish. We study the sound system of Spanish, the structure of its words, and how its sentences are formed and interpreted. We also consider how Spanish has changed over time and how it differs depending on where it is spoken. Written assignments and exams. **PREREQUISITES:** SPAN 202, its equivalent, or consent of the instructor *Units: 6.*

*Also listed as Linguistics 377*

*Prerequisite: SPAN 202, its equivalent, or consent of the instructor*

### **SPAN 390: TUTORIAL STUDIES IN SPANISH**

Topic of study will be determined by the student's interest and the availability of a faculty member who has the necessary expertise. Tutorials are not substitutes for courses but opportunities to pursue topics suggested by courses. **PREREQUISITES:** Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **SPAN 391: DIRECTED STUDY IN SPANISH**

An individual or small-group study directed towards the acquisition of knowledge or specific skills, not research or creative work. Directed studies are not a substitute for existing courses but opportunities to pursue pertinent

topics that clearly fall under the field of expertise of a faculty member in the department. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **SPAN 395: INTERNSHIP IN SPANISH**

An opportunity for students to apply their Spanish language and culture skills in business, government and the non-profit sector. National or international internships are coordinated between the Office of Career Services and the Spanish faculty who acts as supervisor. In order to earn academic credit, internships must meet the required guidelines and receive prior approval from the Spanish chairperson. Credit requirements may include readings, discussions, and a report and/or portfolio. The faculty supervisor determines the submission calendar for internship-related assignments. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **SPAN 399: INDEPENDENT STUDY IN SPANISH**

An independent and thorough investigation of a topic of the student's choice, carried out in consultation with an instructor. The Spanish department chair must approve all independent studies in Spanish in advance. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **SPAN 406: CULTURES OF THE CARIBBEAN**

An introduction to the literature and art of the Hispanophone Caribbean. Reading works ranging from the nineteenth century to the present, we will study how the culture of the Caribbean has chronicled and been shaped by the forces of slavery, capitalism and imperialism. PREREQUISITES: One 300-level Spanish course or consent of the instructor *Units: 6.*

*Prerequisite: One 300-level Spanish course or consent of the instructor*

### **SPAN 407: SPANISH IN THE U.S.**

A first approach to the study of Spanish in the United States through different lenses, including (but not limited to) the history of Spanish and its speakers in the U.S., a demographic overview of its varieties, sociopolitical factors surrounding its use, linguistic phenomena resulting from contact with English, and educational approaches to learning Spanish as a heritage language. Written assignments and exams. PREREQUISITES: 300-level course in Spanish or consent of instructor *Units: 6.*

*Also listed as Linguistics 407, Ethnic Studies 407*

*Prerequisite: 300-level course in Spanish 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. PREREQUISITES: One 300-level Spanish course, its equivalent, or consent of instructor *Units: 6.*

*Also listed as Gender Studies 410*

*Prerequisite: One 300-level Spanish course, its equivalent, or consent of instructor*

### **SPAN 420: COMEDIA: THEORY AND PERFORMANCE**

An introduction to the major playwrights of early modern Spain and Latin America. Readings include plays, interludes, contemporary dramatic theory, and historical accounts of performance practices. Discussion topics include the ethics of theatrical performance, the construction of gender on stage, and the place of the *comedia* in the emergent empire. PREREQUISITES: One 300-level course in Spanish, its equivalent, or consent of instructor *Units: 6.*

*Also listed as Theatre Arts 442*

*Prerequisite: One 300-level course in Spanish, its equivalent, or consent of instructor*

### **SPAN 421: TRANSLATION WORKSHOP**

Over the course of five weeks, students collaborate on a single literary or theatrical translation. Students research relevant material and draft translations between meetings. In class, they work together to produce and refine a single, dynamic translation. Class meets regularly for five weeks; although the final translation is submitted in tenth week, no classes are held in the latter half of the term. May be repeated. PREREQUISITES: One 300-level Spanish course, its equivalent, or consent of *Units: 3.*

*Prerequisite: One 300-level Spanish course, its equivalent, or consent of*

### **SPAN 425: 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. PREREQUISITES: One 300-level course in Spanish or consent of instructor *Units: 6.*

*Also listed as Art History 275*

*Prerequisite: One 300-level course in Spanish or consent of instructor*

### **SPAN 440: FRIENDSHIP IN AL ANDALUS**

From 711 to 1492, the Iberian Peninsula was home to Muslim, Christian, and Jewish communities. The period was marked by conflict and persecution, but also by extraordinary collaboration and cultural flourishing. In this class, we study the architecture, music, literature, and philosophy produced by vibrant multiconfessional communities, paying particular attention to the role of friendship in creation. Class is taught as a writing intensive seminar. PREREQUISITES: One 300-level Spanish course, its equivalent, or consent of instructor *Units: 6.*

*Prerequisite: One 300-level Spanish course, its equivalent, or consent of instructor*

### **SPAN 466: LATINX STUDIES (IN ENGLISH)**

This course covers the main cultural issues in Latin@ communities. It concentrates on the Latin@s of the United States, the definitions of these communities, and their cultural expressions. Through theoretical materials as well as literature, film, historical documents, testimony, etc., this course addresses a variety of subjects related to Latin@ culture. Taught in English. PREREQUISITES: One 300-level Spanish course, its equivalent, or consent of instructor *Units: 6.*

*Also listed as Ethnic Studies 583*

*Prerequisite: One 300-level Spanish course, its equivalent, or consent of instructor*

### **SPAN 470: VISIONS OF CONQUEST**

This course explores the diverse accounts of the Spanish conquest of Latin America presented in contemporary historical writings and European and indigenous cultural artifacts. This course is held concurrently with HIST 274. Lectures and discussions are in English, but reading and writing assignments are in Spanish. Students who wish to work only in English should register for HIST 374. PREREQUISITES: One 300-level Spanish course or consent of instructor *Units: 6.*

*Prerequisite: One 300-level Spanish course or consent of instructor*

### **SPAN 473: PILGRIMAGE**

In this class, we study pilgrimage as a spiritual and social practice. We consider both the concept of pilgrimage and particular pilgrimages from throughout the Spanish speaking world from anthropological, religious, artistic, and historical perspectives. Throughout the term, we simulate a pilgrimage to Santiago de Compostela, acquainting ourselves with the art and architecture along the way, to gain practical insights into the material we study. PREREQUISITES: One 300-level Spanish course, its equivalent, or consent of instructor *Units: 6.*

*Prerequisite: One 300-level Spanish course, its equivalent, or consent of instructor*

### **SPAN 480: SPANISH CINEMA**

This course studies significant Spanish films from the 20th and 21st centuries as cultural and historical documents with the goal of discussing social and political change in Spain through the lens of cinema. Topics may include the genesis of Spanish film, representations of the Second Republic, the Civil War, and the Francoist dictatorship on the big screen, cinema of the transition to democracy, Spanish film from the 1990s to the 2000s, Latin American and European co-productions, and contemporary Spanish cinema in the era of streaming. This class is taught in Spanish. PREREQUISITES: SPAN 300-level class or instructor approval *Units: 6.*

*Also listed as Film Studies 480*

*Prerequisite: SPAN 300-level class or instructor approval*

### **SPAN 485: LATIN AMERICAN URBAN CULTURES - BUENOS AIRES**

Urban cultures express the transformations of a globalized world. Taking the Buenos Aires case as its focus, the course analyzes the cultural production from, of, and about the city, from multiple perspectives, in order to achieve an understanding of the issues facing Latin American urban spaces in the 21st century. PREREQUISITES: One 300-level Spanish course, its equivalent, or consent of instructor *Units: 6.*

*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. PREREQUISITES: One 400-level Spanish course, its equivalent, or consent of instructor *Units: 6.*

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

### **SPAN 512: THE (EN)GENDERING OF MODERN SPAIN: GENDER AND NATIONAL NARRATIVES FROM ROMANTICISM TO THE AVANT-GARDE**

A thematic analysis of Spanish literature and selected visual art from the Romantic period to the 1936 civil war. The course focuses on the connection between various artistic representations of gender and their (re)production or defiance of national narratives. Readings include works by renowned authors like Emilia Pardo Bazan and Federico Garcia Lorca, as well as avant-garde films and paintings by Luis Buñuel, Salvador Dali and Pablo Picasso. PREREQUISITES: One course in Spanish at the 400-level *Units: 6.*

*Prerequisite: One course in Spanish at the 400-level*

### **SPAN 513: TRANSLATION IN CONTEXT: THE THEORY, HISTORY, AND PRACTICE OF SPANISH TRANSLATION**

This course surveys the theory, history and practice of Spanish translation. In it, students acquire the knowledge and basic skills required for translation between Spanish and English while becoming acquainted with the history of translation. Course readings introduce relevant philosophical and political debates. PREREQUISITES: One 500-level or two 400-level courses or consent of instructor *Units: 6.*

*Prerequisite: One 500-level or two 400-level courses or consent of instructor*

### **SPAN 514: READING THE BORDER: GENDER, TEXTS AND PERFORMANCE**

This course will focus on textual and cultural (re)presentations—including narratives, performance, film, photography and genre-defying texts—of the Central American-Mexico-U.S. borders, where spaces, race, violence and ethnicity become gendered. The course will cover the mid-1980s until contemporary times, a period tempered by the events of 9/11, as well as more recent political discourses focused on the border. Seminar with papers and a final project. PREREQUISITES: SPAN 300-level course or equivalent official placement *Units: 6.*

*Also listed as Ethnic Studies 514*

*Prerequisite: SPAN 300-level course or equivalent official placement*

### **SPAN 515: RUINING THE IMAGINARY OF PARADISE: ECO-CRITICISM IN THE SPANISH-SPEAKING CARIBBEAN**

This seminar examines the history and cultural expressions of the Spanish-speaking Caribbean--both the insular and the continental areas--from an eco-critical perspective. Parting from the so-called discovery, conquest and colonization and moving through slavery, independence and postcolonial movements, the course provides an account of the exploitative processes of imperial powers that have imagined the Caribbean as a tropical paradise. Lecture/discussion with papers. PREREQUISITES: 400-level course in Spanish or consent of instructor *Units: 6.*

*Also listed as Ethnic Studies 515*

*Prerequisite: 400-level course in Spanish 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 537: TOPICS IN HISPANIC LINGUISTICS**

Topics for special study in Hispanic Linguistics. 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. Readings in English and Spanish, assignments in Spanish/English. *Units: 6.*

*Also listed as Linguistics 537*

*Prerequisite: One 400-level Spanish class or SPAN 350/345 or LING 150 and advanced Spanish ability*

### **SPAN 542: BILINGUALISM IN THE SPANISH-SPEAKING WORLD**

This course serves as an overview of bilingualism and the acquisition of Spanish in contact with other languages. It covers early and late acquisition of bilingual speech, Spanish in contact with other languages, and the sociopolitical dynamics of diglossia across the Spanish-speaking world. The course combines lectures with critical readings of empirical articles, research projects, and class discussions. Readings in English, assignments in Spanish/English. PREREQUISITES: One 300- or 400-level Spanish class, or LING 150 and advanced Spanish ability. *Units: 6.*

*Also listed as Linguistics 542*

*Prerequisite: One 300- or 400-level Spanish class, or LING 150 and advanced Spanish ability.*

### **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. PREREQUISITES: One 400-level Spanish course, its equivalent, or consent of instructor *Units: 6.*

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

### **SPAN 554: LAW AND LITERATURE**

The course examines the relationships between law and literature. To do so, students will study a variety of literary texts with legal themes, as well as literary and legal theories. By the end of the course, students will be able to analyze legal themes in literary texts. The course will be conducted as a seminar. Assessment will be based on participation, a presentation, examinations, and a final project. PREREQUISITES: 400-level course in Spanish or consent of instructor *Units: 6.*

*Prerequisite: 400-level course in Spanish or consent of instructor*

### **SPAN 561: JORGE LUIS BORGES**

A seminar course on Borges' literary works in historical and cultural context. The course will explore Borges' short stories, and examine their multidisciplinary resonances from film and visual arts to physics and linguistics, among others. Seminar with exams, presentations, and papers. In Spanish. PREREQUISITES: One 400-level Spanish course, its equivalent, or consent of instructor *Units: 6.*

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

### **SPAN 577: SPACE AS TEXT**

A geocritical analysis of the role of space and borders in contemporary literature. We will examine the critical theory on the topic and apply those insights to texts mainly from or about Latin American and the Atlantic regions. We will include spatial representations from the visual arts and films. Seminar with exams, presentations, and papers. In Spanish. PREREQUISITES: One 400-level course in Spanish or consent of instructor *Units: 6.*

*Prerequisite: One 400-level course in Spanish or consent of instructor*

### **SPAN 580: *Dis(re)MEMBERING THE NATION: CONTEMPORARY FILM & FICTION OF SPAIN AND LATIN AMERICA***

A thematic analysis of film and fiction produced in the late and post-dictatorial context of Spain and several Latin American countries. The course studies the cultural processes of historical memory, collective trauma, oblivion, and questioning of national narratives in selected works from the past four decades. Readings include Manuel Puig's *Kiss of the Spider Woman*, Ariel Dorfman's *Death and the Maiden*, and Carmen Martin Gaité's *The Back Room*, as well as films by Lucrecia Martel, Victor Erice, Pablo Larraín, and Guillermo del Toro, among others. *Units: 6.*

*Also listed as Film Studies 580*

*Prerequisite: One 400-level course in Spanish or consent of instructor*

### **SPAN 590: *TUTORIAL STUDIES IN SPANISH***

Topic of study will be determined by the student's interest and the availability of a faculty member who has the necessary expertise. Tutorials are not substitutes for courses but opportunities to pursue topics suggested by courses. **PREREQUISITES:** Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **SPAN 591: *DIRECTED STUDY IN SPANISH***

An individual or small-group study directed towards the acquisition of knowledge or specific skills, not research or creative work. Directed studies are not a substitute for existing courses but opportunities to pursue pertinent advanced topics that clearly fall under the field of expertise of a faculty member in the department.

**PREREQUISITES:** Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **SPAN 595: *INTERNSHIP IN SPANISH***

An opportunity for students to apply their Spanish language and culture skills in business, government and the non-profit sector. National or international internships are coordinated between the Office of Career Services and the Spanish faculty who acts as supervisor. In order to earn academic credit, internships must meet the required guidelines and receive prior approval from the Spanish chairperson. Credit requirements may include readings, discussions, and a report and/or portfolio. The faculty supervisor determines the submission calendar for internship-related assignments. **PREREQUISITES:** Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **SPAN 599: *INDEPENDENT STUDY IN SPANISH***

An independent and thorough investigation of a topic of the student's choice, carried out in consultation with a faculty member. The Spanish department chair must approve all independent studies in Spanish in advance.

**PREREQUISITES:** Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **SPAN 690: *TUTORIAL STUDIES IN SPANISH***

Topic of study will be determined by the student's interest and the availability of a faculty member who has the necessary expertise. Tutorials are not substitutes for courses but opportunities to pursue topics suggested by courses. **PREREQUISITES:** Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

**SPAN 691: DIRECTED STUDY IN SPANISH**

An individual or small-group study directed towards the acquisition of knowledge or specific skills, not research or creative work. Directed studies are not a substitute for existing courses but opportunities to pursue pertinent and highly advanced topics that clearly fall under the field of expertise of a faculty member in the department. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

**SPAN 695: INTERNSHIP IN SPANISH**

An opportunity for students to apply their Spanish language and culture skills in business, government and the non-profit sector. National or international internships are coordinated between the Office of Career Services and the Spanish faculty who acts as supervisor. In order to earn academic credit, internships must meet the required guidelines and receive prior approval from the Spanish chairperson. Credit requirements may include readings, discussions, and a report and/or portfolio. The faculty supervisor determines the submission calendar for internship-related assignments. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

**SPAN 699: INDEPENDENT STUDY IN SPANISH**

An independent and thorough investigation of a topic of the student's choice, carried out in consultation with a faculty member. The Spanish department chair must approve all independent studies in Spanish in advance. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

# THEATRE ARTS

<b>Professor:</b>	T. Troy ( <i>J. Thomas and Julie E. Hurvis Professor of Theatre and Drama</i> ) (on leave term(s) I, II, III)
<b>Associate professor:</b>	K. Privatt ( <i>James G. and Elthel M. Barber Professor of Theatre and Drama, chair</i> )
<b>Visiting assistant professor:</b>	A. Sherkow
<b>Instructor:</b>	K. Kopischke
<b>Lecturers:</b>	M. Donegan Kraker, A. Rose, J. Troy

Since 1930, the Department of Theatre Arts provides an environment of academic exploration and production experiences in the innovative and collaborative tradition of theatre-making throughout history. A broad knowledge of theater history and its literary heritage combines with the mastery of skills in performance, design, and production, leading to clear and nuanced expression from our stages. Our faculty instills a professional standard in each main-stage production as we constantly encourage students to integrate their whole education at each stage of development as young artists and scholars. If students engage in our brand of serious and joyful theatre-making in close collaboration with their peers and faculty mentors, they will be ready to enter the profession or graduate training with the best our discipline offers. Our decades-long tradition of senior projects provides a platform where students mark their development with research, performances, and production designs that rise to the level of enthusiastic young professionals. We are equally pleased when our graduates bring the skills and methods they learn in our department to other professions. As life-long learners, the passion for theatre they explored during their years with us will inspire them to contribute as audience members and supporters of the theatre community.

The core curriculum in our major mirrors our general belief that all young theatre-makers must encounter the complementary disciplines of performance, production practice, and dramatic literature and theatre history. We invite students to 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.

Students are strongly encouraged to participate in one or more off-campus programs, such as the Lawrence London Centre or the Gaiety School of Acting in Dublin, to deepen their understanding of the various areas of concentration prior to designing their senior projects.

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 they hope 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, resumés, or portfolio presentations are appropriately prepared.

## Required for the major in theatre arts

Students who major in Theatre Arts will develop abilities in the following areas:

- *Literature and history*: a) recognize major dramatic forms and understand the historical context from which they arose; b) interrogate a text (question closely, in a formal manner); and c) integrate systematic research to support creative choices.
- *Design and technical theatre*: a) design a performance environment; and b) synthesize cultural history.
- *Performance*: a) skillfully prepare a live theatrical performance; and b) execute and then evaluate a live performance.

The major in theatre arts requires the following:

1. THAR 187: *Acting I*
2. THAR 135: *Stagecraft* or THAR 137: *Costume Crafts and Technology*
3. THAR 212: *Theatre Traditions I: Greeks through the 18th Century*
4. THAR 224: *Theatre Traditions II: Romanticism through the Present*
5. THAR 231: *Design and Production*
6. THAR 327: *Playscript Analysis*
7. Seven terms of participation in either THAR 355: *Theatre Production Laboratory* or THAR 357: *Musical Theatre Production Laboratory*. Normally granted at one unit per term of participation.
8. Three additional courses (18 units) in a focus area or courses across focus areas or continue a generalist approach. No more than twelve units of tutorials may be counted in the theatre arts major.
9. Senior project including enrollment in THAR 687 (1 unit)

## Focus on performance

Additional courses in performance include *Movement & Text*, *Acting II: Premodern*, *Acting III* or *Play Directing*, and 12 additional units in performance-related courses, including voice, dance/movement, and make-up.

## Focus on design and technical theatre

Additional production-related courses include *Costume*, *Set*, *Lighting Design*, *Stage Management*, *Make-up*, *Control Systems*, *Props* (3-units each), *Advanced Design Studio*.

## Focus on 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 language department. We urge students who intend to pursue graduate studies in this area to continue their language studies to the level of advanced proficiency.

## Senior Experience in theatre arts

The required Senior Experience 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 at the beginning of Spring Term 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, department pays for license and scripts)
- Set, lighting, costume, or sound design for a main-stage or senior project 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 an initial reading of it for a general audience. Preparation for an initial reading consists of 2–3 rehearsals. In performance, stage directions are read and actors present from music stands.
- Scholarly activities such as writing on an aspect of theatre history for presentation or publication.
- Presenting a staged reading of a play. Preparation for staged readings usually consists of 4–6 rehearsals. In performance, actors should be at music stands and occasionally use key props and/or costume accessories to clarify action. Lighting is general. We encourage the use of sound elements to establish setting, set mood, and clarify action.

### PROPOSALS FOR PROJECTS MUST ADDRESS THE FOLLOWING:

1. The requirements and challenges of the project, including impact on and intersection with the department's ongoing activity
2. The course and production work and internship experiences that have prepared you to successfully complete the project
3. The scholarly, artistic, and personal goals you hope to achieve with your project
4. 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 teaching certification.

## Required for the minor in theatre arts

1. THAR 111: *Introduction to the Theatre*
2. THAR 135: *Stagecraft* or THAR 137: *Costume Crafts and Technology*
3. THAR 187: *Acting I*
4. THAR 212 or 224: *Theatre Traditions*

5. THAR 327: *Playscript Analysis*
6. THAR 347: *Acting II: Premodern* or THAR 231: *Design and Production*
7. An additional course in performance, design, or theatre history/literature
8. THAR 355 or 357: *Theatre Production Laboratory* (3 terms of participation, normally granted at one unit per term of participation)

## Teacher certification in theatre arts

Theatre arts majors can seek certification to teach theatre arts at the secondary level. Students can add an endorsement in a second area (such as English as a second language) by completing the appropriate minor. Students who plan to seek teacher certification should review the requirements in the Education section of the catalog and meet with the director of teacher education, preferably before the end of the sophomore year.

## Courses - Theatre Arts

### THAR 110: *DANCE APPRECIATION*

How do you define dance? Where is dance found? How does dance affect you? As we explore this line of inquiry, we will touch on topics such as dance history, theory, culture and documentation. Drawing from a variety of somatic practices and our collaborative experience, we will physically sample approaches to dance and practice noticing dance in our lives. *Units: 3.*

*Also listed as Dance 110*

### THAR 111: *INTRODUCTION TO THE THEATRE*

This project-based course encourages students to explore the variety of artistic capabilities required to create theatre. Operating as both a means to inspire a deeper appreciation of the art form and to provide a foundation for theatre making at Lawrence, students in this class will interact artistically with a variety of short format plays. Through meeting with guest artists and experimenting with acting, playwriting and design, students will understand how play texts serve as a blueprint for performance and often illuminate larger social and cultural issues. *Units: 6.*

### THAR 132: *ENSEMBLE THINKING*

Ensemble Thinking is a system of physical, improvisational, group exercises that provides organizing lenses through which we observe and participate in movement and performance. Using this technique, we will develop awareness and listening skills for relating to others, build a common language, and practice collaboratively creating dances. Through embodied studio investigations, this course introduces students to dance composition. *Units: 3.*

*Also listed as Dance 132*

### THAR 134: *CONTACT IMPROVISATION*

Contact Improvisation is a partnering dance form that explores movement possibilities created when two or more individual bodies are touching and/or sharing weight, balance or support. The practice of Contact Improvisation encourages the development of self-responsibility, awareness, clear physical communication and a strong, versatile body. This is a rigorous dance lab in which we will experiment with action, physics and

listening. *Units: 3.*

*Also listed as Dance 134*

### **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. In addition to regular class meeting times, there is a lab component that gives students hands-on application of technical and theatre design. *Units: 6.*

### **THAR 136: EMBODIED CREATIVE PRACTICE**

This is a course designed to build your creative muscle. In the supportive community of this class, we will access your individual story, writing, drawing, movement and voice to create and perform for each other every class meeting. Employing diverse performance techniques and referencing various readings, we will discover and craft our unique inspirations, directions, and experience. *Units: 3.*

*Also listed as Dance 136*

### **THAR 137: COSTUME CRAFTS AND TECHNOLOGY**

An introduction to the technical aspects of costume creation and production for the theatre. Course includes hands-on experience in costume construction, cutting, draping, millinery, and other costume crafts. Practicum in the costume shop in support of current productions is required. In addition to regular class meeting times, there is a lab component that gives students hands-on application of technical and theatre design. *Units: 6.*

### **THAR 138: ARTICULATING THE SOLO BODY**

Based in ReWire/Dancing States and other contemporary techniques, this course will build a movement foundation for the solo dancing body. In the studio, we will work with clarity, speed, and precision to develop a versatile and conscious dancer. We will also explore topics such as performance, intention, and habits while dancing. *Units: 3.*

*Also listed as Dance 138*

### **THAR 143: FUNDAMENTALS OF MOVEMENT: PRACTICES OF CARE FOR THE PERFORMING ARTIST, ATHLETE**

*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. *Laban Movement* explores the expressive and analytical movement system developed by Rudolf Laban. Application of Laban's work began in Dance and spread to Actor Training, Psychology, Music Conducting, and more. The course will explore movement and theoretical work through the BESS (Body, Effort, Shape, Space) pedagogical paradigm. 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.*

*Also listed as Dance 143*

### **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.*

*Also listed as Dance 147*

### **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.*

*Also listed as Dance 149*

### **THAR 161: STAGE MAKE-UP**

A hands-on course offering experience in the proper design and application of stage make-up for students interested in theatre or music-theatre performance. Practicum in stage makeup in support of current productions is required. In addition to regular class meeting times, there is a lab component that gives students hands-on application of technical and theatre design. *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.* PREREQUISITES: Must be attending Lawrence London Centre *Units: 6.*

*Also listed as English 170*

*Prerequisite: Must be attending Lawrence London Centre*

### **THAR 172: MODERN IRISH DRAMA**

The class will read and discuss plays by contemporary Irish playwrights from Brendan Behan to Martin McDonagh. It will analyse personal and the political issues in modern day Ireland, the question of Irish identities and the gradual social changes since the beginning of the Troubles. Particular emphasis will be on the performance history of the plays, both in Ireland and abroad. PREREQUISITES: Must be attending the Lawrence London Centre. *Units: 6.*

*Also listed as English 172*

*Prerequisite: Must be attending the Lawrence London Centre.*

### **THAR 174: LITERATURE OF THE IRISH TROUBLES**

The class includes poetry, short stories, novels, plays and film scripts which document the cultural and political conflict in Northern Ireland ("The Troubles"). Analysing literature from both sides of the conflict and from the Republic and Ulster, will allow for an in-depth understanding of the socio-historical context influencing these works, and the importance of literature as a personal and political voice. PREREQUISITES: Must be attending the Lawrence London Centre. *Units: 6.*

*Also listed as English 171*

*Prerequisite: Must be attending the Lawrence London Centre.*

### **THAR 185: MOVEMENT AND TEXT**

This studio-based introductory course examines the interplay of physical movement with verbal and written texts. Using choreographic approaches and improvisational structures, students will investigate how to mine a theatrical text for its range of expression, embodiment, and compositional qualities, and to examine the kinesthetic body as a text. *Units: 6.*

*Also listed as Dance 185*

### **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 Michael Shurtleff (LU'46). **PREREQUISITES:** Freshman or sophomore standing or consent of instructor *Units: 6.*

*Prerequisite: Freshman or sophomore standing or consent of instructor*

### **THAR 191: 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. **PREREQUISITES:** Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **THAR 195: 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. **PREREQUISITES:** Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

### **THAR 211: INTRODUCTION TO LONDON THEATRE**

Introduction to a critical approach to theatrical performance. Students read play scripts before attending a wide range of plays in a variety of performance spaces in London, working towards a developed understanding of dramatic form. Study of literary and theatrical conventions is designed to enhance students' critical sophistication. **PREREQUISITES:** Open to students attending the London Centre only *Units: 6.*

*Prerequisite: Open to students attending the London Centre only*

### **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. **PREREQUISITES:** Sophomore standing or consent of instructor *Units: 6.*

*Prerequisite: Sophomore standing or consent of instructor*

### **THAR 220: TOPICS IN MOVEMENT/PERFORMANCE**

Topics in this series vary from year to year. May be repeated when topic is different. *Units: 3.*

*Also listed as Dance 220*

**THAR 221: DANCE STUDIES: GLOBAL PERSPECTIVES**

This course introduces major concepts, approaches and issues in the study of dance as a cultural, historical and artistic practice. By examining key texts in dance studies, viewing dance films and engaging in the practice of dancing, students will investigate how moving bodies shaped history while considering dance as a form of cultural identity and political power. *Units: 6.*

*Also listed as Dance 221*

**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. PREREQUISITES: Sophomore standing or consent of instructor *Units: 6.*

*Prerequisite: Sophomore standing or consent of instructor*

**THAR 231: DESIGN AND PRODUCTION**

A survey covering all aspects of visual design for the theatre. Emphasis on the necessary techniques of drafting, painting, and modelmaking, with attention to aesthetic and practical problems of theatre design. In addition to regular class meeting times, there is a lab component that gives students hands-on application of technical and theatre design. *Units: 6.*

**THAR 237: RECONSTRUCTING COSTUME HISTORY: A HANDS-ON COSTUME HISTORY SURVEY**

A survey of the evolution of clothing in Western Civilization as it reflects historical events and social culture from Ancient Greece to the Elizabethan England. Hands-on patterning and draping provides an immersive experience as we explore period silhouettes and techniques unique to each period. We will also explore representative plays and theatrical conventions from each period. Practicum in the costume shop in support of current productions is required. PREREQUISITES: THAR 137 *Units: 6.*

*Prerequisite: THAR 137*

**THAR 253: THEATRE TECHNIQUES FOR EDUCATORS**

Whether preparing to work as a classroom teacher or in an arts organization, students will explore the power of theatre as a means to teach core content. Taught largely through the guided execution of theatre activities, students will participate in and create interactive curriculum. We will explore how theatre engages a variety of learners and research its history of efficacy with English Learners, underserved communities and students with special needs. *Units: 6.*

*Also listed as Education 253*

**THAR 255: START-UP THEATRE**

Open to students from theatre, economics, and other students interested in entrepreneurship in the performing arts. Topics change each year. May be repeated when topic is different up to 6 total units. PREREQUISITES: Sophomore standing *Units: 1 TO 3.*

*Also listed as Innovation & Entrepreneurship 255, Economics 255*

*Prerequisite: Sophomore standing*

### **THAR 257: DIVERSITY ON THE LONDON STAGE**

This seminar discusses how London theatre is addressing diversity with regard to race, ethnic background, gender, sexuality, religion, disability, and mental health. We will see theatre productions at different London theatres, analyze both performances and play texts, and talk with theatre practitioners about their work. In reviews, presentations, projects, and a paper, students will demonstrate their individual engagement with London. *Offered at the London Centre.* PREREQUISITES: Open to students attending the London Centre only  
*Units: 6.*

*Prerequisite: Open to students attending the London Centre only*

### **THAR 261: STAGE MANAGEMENT**

Proper Stage Management is essential to facilitate the creative process of theatre making. This course covers the proper theory and practice of stage management from pre-production through performances. These skills are useful for all manner of creative and collaborative endeavors: PREREQUISITES: THAR 135 or consent of instructor  
*Units: 3.*

*Prerequisite: THAR 135 or consent of instructor*

### **THAR 263: STAGE PROPERTIES**

Stage properties serve as the way an actor interacts with the dramatic world. properties cross into other areas of design and direction, making them a unique challenge. This class will explore ingenuity, resourcefulness, meticulousness, and creativity. Fabrication techniques from THAR 135 will be expanded to include more material and technologies. PREREQUISITES: THAR 135  
*Units: 3.*

*Prerequisite: THAR 135*

### **THAR 265: PRODUCTION SYSTEMS**

Lighting, Sound, and video are all evolving with the advancement of technology. Setting up and programming these systems is more complex and integrated than ever before. This class will cover lighting systems, sound systems, projections, DMX, Qlab, ETC Consoles, and Sound boards PREREQUISITES: THAR 135  
*Units: 3.*

*Prerequisite: THAR 135*

### **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.* PREREQUISITES: Sophomore standing Must be attending Lawrence London Centre  
*Units: 6.*

*Prerequisite: Sophomore standing Must be attending Lawrence London Centre*

### **THAR 306: RUSSIA ON STAGE: THREE CENTURIES OF RUSSIAN THEATER**

This course introduces students to the rich theatrical tradition of Russia. The readings for the course span over two centuries, starting from the social comedies of the late eighteenth century to the contemporary "New Drama" and documentary theater. The plays are situated within the larger historical and political context of Imperial, Soviet and post-Soviet Russia. Lecture/discussion. Taught in English. *Units: 6.*

*Also listed as Russian 306*

### **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. PREREQUISITES: 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. *Units: 3.*

*Also listed as Music 310*

*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: PLAYSRIPT 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. PREREQUISITES: Sophomore standing Recommended sophomore or junior year Recommended to be taken before THAR 527 *Units: 6.*

*Prerequisite: Sophomore standing Recommended sophomore or junior year Recommended to be taken before THAR 527*

### **THAR 340: MUSICAL THEATRE PRODUCTION OVERVIEW**

This course is designed to equip future educators with a basic understanding of the various details and responsibilities involved in mounting a musical theatre production. Topics include: choosing a musical, rehearsal schedules, finances, stage direction/blocking, lighting, sound, choreography, and pit orchestra. Offered every other year, fall term (even years). PREREQUISITES: Sophomore standing *Units: 3.*

*Also listed as Music Education and Pedagogy 340*

*Prerequisite: Sophomore standing*

### **THAR 341: CONSTRUCTION SITES: TOOLS FOR EMBODIED RESEARCH**

What constitutes performance and how is performance a site of possibility, discourse, dissension, and connection? Through the lens of dance as a foundation, we grapple with embodying our research and creating action in our campus communities and beyond. This upper-level course is meant to prepare students for their senior capstone and for any students who want to dive into deep research. *Units: 6.*

*Also listed as Dance 341*

### **THAR 344: GREEK TRAGEDY**

In this course we will read excerpts from one tragedian (e.g. Aeschylus, Sophocles, Euripides) in ancient Greek. Our discussion will be supplemented with additional tragic material in English translation and secondary scholarship. Meets concurrently with THAR 444/CLAS 423. Not open to students who have received credit for THAR 444/CLAS 423 or who need to receive credit for THAR 444/CLAS 423. PREREQUISITES: CLAS 225 or three years of high school Greek *Units: 6.*

*Also listed as Classics 323*

*Prerequisite: CLAS 225 or three years of high school Greek*

### **THAR 347: ACTING II: PREMODERN**

We will continue to explore core concepts from Acting I including an exploration of the literary conventions, theatrical practices, and performance demands required of plays from the Greeks, through Shakespeare, and the French Neo-Classists. Students should expect to work closely with scene partners throughout the term. Attendance is strictly enforced PREREQUISITES: THAR 187 or consent of instructor *Units: 6.*

*Prerequisite: THAR 187 or consent of instructor*

### **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.*

### **THAR 352: INTRODUCTION TO FILM**

An introduction to the critical analysis of Latin American and Spanish film. Selected films represent various countries, genres and directors from Latin America and Spain. Readings of relevant film theory, class discussions and composition tasks prepare students for other advanced courses in the Spanish program. PREREQUISITES: SPAN 202, its equivalent, or consent of instructor; 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.*

### **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 362: ACTING FOR SINGERS 1**

An opera/song performance course that develops the fundamental tools to create on stage. This term concentrates on basic acting techniques beginning with spoken word and then transferring those skills to intoned speech (song). These building blocks include understanding and breaking down a script, navigating the stage and movement on it, creating and motivating character choices, response to your fellow performers, honesty on-stage, concentration, imagination and commitment to the script, the environment and your character. *Units: 3.*

*Also listed as Music Repertoire-Perf Study 361*

### **THAR 363: GREEK AND ROMAN DRAMA IN TRANSLATION**

In this course we analyze ancient plays both as great works of literature and as artifacts of a particular artistic, cultural, and political context. Students will read excerpts and complete plays in English from a variety of ancient authors, including (from Classical Athens) Aeschylus, Sophocles, Euripides, Aristophanes, and

Menander, and (from late Republican and early Imperial Rome) Plautus, Terence, and Seneca.

PREREQUISITES: Sophomore standing or consent of instructor *Units: 6.*

*Also listed as English 263, Classics 363*

*Prerequisite: Sophomore standing or consent of instructor*

### **THAR 364: ACTING FOR SINGERS 2**

An opera/song performance course that develops the fundamental tools to create on stage. This term concentrates on expanding the techniques from the previous term and on developing a stronger sense of ensemble work. Viewpoints and Theatrical Composition will be the main thrust of the exploration, using the current song and aria repertoire of the individual student. PREREQUISITES: MURP 361 or equivalent *Units: 3.*

*Also listed as Music Repertoire-Perf Study 362*

*Prerequisite: MURP 361 or equivalent*

### **THAR 370: SOUND DESIGN FOR THE THEATRE**

A study of the theatrical sound design process for live performance. Students will create and modify sounds and music for plays and musicals. We focus on research, supporting the text, and creating an immersive sonic environment. Laboratory responsibility is required as part of course. THAR 231 required. PREREQUISITES: THAR 231 *Units: 6.*

*Prerequisite: THAR 231*

### **THAR 387: LET US ARISE: IRELAND'S DEEP TIME**

Taking a dramaturgical and geographical approach to explore a deep sense of place, we will use the lens of culture (drama, poetry, fiction, music, film, history and visual arts) to investigate the variegated quality of Ireland's land and its people. PREREQUISITES: Sophomore standing or ENST 150, ENST 151, or THAR 327 *Units: 6.*

*Also listed as Environmental Studies 387*

*Prerequisite: Sophomore standing or ENST 150, ENST 151, or THAR 327*

### **THAR 390: TUTORIAL STUDIES IN THEATRE ARTS**

Advanced work, arranged and carried out in consultation with an instructor. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **THAR 391: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **THAR 395: 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. PREREQUISITES: Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

### **THAR 399: INDEPENDENT STUDY IN THEATRE ARTS**

Advanced work in directing, design, performance, or criticism, arranged in consultation with department.

PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **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. PREREQUISITES: Sophomore standing or consent of instructor *Units: 6.*

*Also listed as Musicology 160*

*Prerequisite: Sophomore standing or consent of instructor*

### **THAR 427: PLAYWRITING**

Students will employ the vocabulary and dramaturgical insight we explored in Playscript Analysis to the task of writing for the stage. We will examine important plays in the one-act repertory while each student drafts a 25-40 minute play. PREREQUISITES: THAR 327 *Units: 6.*

*Prerequisite: THAR 327*

### **THAR 430: ALEXANDER TECHNIQUE II: FOR PERFORMERS**

This studio-style class applies Alexander Movement Technique (AMT) to performance broadly defined as an activity completed for an audience. Students will work on performance and rehearsal/practice techniques with hands-on guidance from the teacher and will also serve as trained observers for their colleagues. May be taken for 3 or 6 units. PREREQUISITES: THAR 310 *Units: 3 OR 6.*

*Also listed as Music 410, Music Repertoire-Perf Study 430*

*Prerequisite: THAR 310*

### **THAR 432: SHAKESPEARE**

An introduction to Shakespeare's plays and their literary, historical, and theatrical context. PREREQUISITES: Junior standing, ENG 230, or consent of instructor *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.

PREREQUISITES: Junior standing, ENG 230, or consent of instructor *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. PREREQUISITES: Junior standing, ENG 230, or consent of instructor *Units: 6.*

*Also listed as English 435*

*Prerequisite: Junior standing, ENG 230, or consent of instructor*

### **THAR 440: MODERN DRAMA**

Studies in some of the major playwrights in Europe, England, and America from the time of Ibsen to the present. PREREQUISITES: Junior standing, an intermediate course in English, or consent of instructor *Units: 6.*

*Also listed as English 490*

*Prerequisite: Junior standing, an intermediate course in English, or consent of instructor*

### **THAR 442: COMEDIA: THEORY AND PERFORMANCE**

An introduction to the major playwrights of early modern Spain and Latin America. Readings include plays, interludes, contemporary dramatic theory, and historical accounts of performance practices. Discussion topics include the ethics of theatrical performance, the construction of gender on stage, and the place of the *comedia* in the emergent empire. PREREQUISITES: One 300-level course in Spanish, its equivalent, or consent of instructor *Units: 6.*

*Also listed as Spanish 420*

*Prerequisite: One 300-level course in Spanish, its equivalent, or consent of instructor*

### **THAR 477: ACTING III**

We will begin by re-engaging our exploration of Shurtleff's Guideposts from Acting I, then explore approaches from Keith Johnstone and Marina Caldarone. We will also explore the Lessac tradition of voice and diction training. Students should expect to work closely with scene partners throughout the term. Attendance and an active neutral dress code will be strictly enforced. *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. PREREQUISITES: THAR 187 or consent of instructor; Two units of either THAR 355 or THAR 357 *Units: 6.*

*Prerequisite: THAR 187 or consent of instructor; Two units of either THAR 355 or THAR 357*

### **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. PREREQUISITES: THAR 231 or consent of instructor *Units: 6.*

*Prerequisite: 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. PREREQUISITES: THAR 231 or consent of instructor *Units: 6.*

*Prerequisite: 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. PREREQUISITES: THAR 231 or consent of instructor *Units: 6.*

*Prerequisite: THAR 231 or consent of instructor*

### **THAR 581: ADVANCED DESIGN STUDIO**

Advanced Design Studio provides emerging designers and intensive learning environment where they explore their unique voice as theatrical designers and gain practical design knowledge through individual mentoring. PREREQUISITES: One of the following: THAR 551, 553, 555, or 557 *Units: 6.*

*Prerequisite: One of the following: THAR 551, 553, 555, or 557*

### **THAR 590: TUTORIAL STUDIES IN THEATRE ARTS**

Advanced work, arranged and carried out in consultation with an instructor. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **THAR 591: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **THAR 595: 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. PREREQUISITES: Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

### **THAR 599: INDEPENDENT STUDY IN THEATRE ARTS**

Advanced work in directing, design, performance, or criticism, arranged in consultation with department. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **THAR 687: SENIOR EXPERIENCE**

Students enroll in this course during the term they complete their Senior Experience and self-assessment. Projects are discussed with the academic advisor and proposed using the senior theatre projects Moodle page.

PREREQUISITES: Senior standing *Units: 1.*

*Prerequisite: Senior standing*

**THAR 690: TUTORIAL STUDIES IN THEATRE ARTS**

Advanced work, arranged and carried out in consultation with an instructor. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

**THAR 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

**THAR 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. PREREQUISITES: Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

**THAR 699: INDEPENDENT STUDY IN THEATRE ARTS**

Advanced work in directing, design, performance, or criticism, arranged in consultation with department. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

## UNIVERSITY COURSES

University courses (listed with the prefix UNIC) deal with subjects of interest and importance that are outside the purview of any given department. These include courses in languages, academic skills, or personal development, as well as interdisciplinary courses on contemporary concerns that cross traditional academic boundaries. Students from all disciplines may enroll in university courses.

### Courses - 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. PREREQUISITES: UNIC 101 or consent of instructor *Units: 6.*

*Prerequisite: UNIC 101 or consent of instructor*

#### **UNIC 103: *INTRODUCTION TO LIBERAL LEARNING FOR INTERNATIONAL STUDENTS***

This course provides an introduction to learning in the liberal arts tradition at Lawrence University, with a special focus on the challenges faced by international, non-native speakers of English. The specific works and topics may vary each year, but will be representative of the courses typically encountered by first-year students. In addition, the course will focus on the aspects of academic language and culture that often present hurdles for international students. PREREQUISITES: Student must be a participant in the Summer Institute *Units: 3.*

*Prerequisite: Student must be a participant in the Summer Institute*

#### **UNIC 104: *INTRODUCTION TO LIBERAL LEARNING***

An introduction to the rigorous tradition of liberal learning at Lawrence University, this course includes two components: a seminar emphasizing close reading of works in various disciplines, classroom discussion and writing thesis-driven essays; and a study of topics in a particular academic discipline through lecture-based instruction, assigned reading and discussion. PREREQUISITES: Student must be a participant in the Summer Institute. *Units: 2 OR 3.*

*Prerequisite: Student must be a participant in the Summer Institute.*

#### **UNIC 105: *FIRST YEAR SEMINAR FOR STUDENTS WITH GLOBAL BACKGROUNDS***

This course is designed for first year students with global backgrounds to become familiar with higher education in the U.S. context. The course is designed to support students through their initial transition to college in the academic, co-curricular, and cultural contexts, as well as by engaging with campus-based resources. Scholarly readings from the fields of International Education and Intercultural Communication will allow students to apply relevant theory to their cross-cultural collegiate experience. This course will include lecture, discussion, written

reflection, experiential learning, and a final project. *Units: 3.*

#### **UNIC 106: *LIFT: LAWRENCE INTEGRATED FIRST-YEAR TRANSITION***

College is the most significant investment many of us make in our lifetime. This course will help you leverage Lawrence by exploring academic, co-curricular, and career opportunities connected to your interests and pursuit of a larger purpose. Holistic in focus: course assignments, projects, and reflections will support you in navigating Lawrence's structures while maintaining your wellbeing. Open to First-Year students. *Units: 2.*

#### **UNIC 110: *ESL: LEARNING IN THE LIBERAL ARTS***

An introduction to learning in the liberal arts tradition. Through the study of works representing multiple disciplines, including selections from current *First Year Studies* texts, this course prepares students with limited English proficiency to fully engage in learning in the liberal arts. (This course can be taken prior to FRST 100 and does not count toward the First Year Studies requirement.) PREREQUISITES: Open only to visiting exchange students and students in the pathway program. *Units: 6.*

*Prerequisite: Open only to visiting exchange students and students in the pathway 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.*

#### **UNIC 116: *ESL: ENGLISH FOR ACADEMIC PURPOSES II***

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 117: *ACADEMIC WELL-BEING: SUCCESS THEORIES IN PRACTICE***

This course is designed to introduce students to cognitive and affective theories that can positively impact success in a university environment. Integration of current theory and evidence-based research allows students to study and apply effective strategies applicable to their own academic lives. *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. Not open to students who have completed UNIC 123. *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. Not open to students who have completed UNIC 123 or UNIC 223. PREREQUISITES: UNIC 121 *Units: 6.*

*Prerequisite: UNIC 121*

#### **UNIC 123: *INTENSIVE BEGINNING ARABIC***

In this course students will undertake intensive study of Modern Standard Arabic, including some colloquial expressions. Students will be introduced to basic language skills: speaking listening, reading, writing, and culture. The primary goal of this course is to enable students to communicate about everyday situations in Modern Standard Arabic, both orally and in writing. Not open to students who have already completed UNIC 121 or UNIC 122. *Units: 6.*

### **UNIC 130: PUBLIC-SPEAKING PRACTICUM**

Emphasizes theory, skills, and practice of presentational speaking relative to a variety of forms of communication (including ceremonial, persuasive, and impromptu speaking; intercultural communication; use of PowerPoint; and podcasts). This course will assist students in developing their academic and professional communication skills through hands-on practice, classroom activities, self-assessments, and review of others' speeches. *Units: 3.*

### **UNIC 135: DOING NOTHING**

The act of purposefully slowing down and doing less has been proven to boost creativity, prevent burnout, and promote the ability to cope with stress. This participatory course, taught by members of the Lawrence community, helps students develop the skills to intentionally do nothing in order to promote deep thinking, an essential skill for learning in a liberal arts environment. Requirements: attendance and collaborative projects. *Units: 1.*

### **UNIC 140: PERSONAL SUSTAINABILITY**

This course offers a broad, holistic examination and reflection of the effects of lifestyle, wellness, and health promotion on the individual and society. The goal will be to discuss and research current wellness topics and examine ways to improve personal well-being. PREREQUISITES: Sophomore standing or consent of instructor *Units: 3.*

*Prerequisite: Sophomore standing or consent of instructor*

### **UNIC 153: DESIGNING YOUR LIFE AFTER LAWRENCE**

The course uses design thinking to address the very real challenge of leveraging one's Lawrence education in designing a meaningful life and career. This two unit course offers a framework, tools, and a community of peers and mentors where we'll work on these issues through assigned readings, reflections, and in-class exercises aimed at tackling the existential question "What do I do with my life?". *Units: 2.*

### **UNIC 155: INTRODUCTION TO SCIENCE AND TECHNOLOGY STUDIES**

Through a variety of texts, in-class discussions, and written and oral assignments, students will develop a critical appreciation of science and technology not simply as objective endeavors governed by rationality, truth and efficiency, but rather as contested and politically embedded endeavors whose trajectory depends upon the influence of multiple users, competing ideologies, and unique historical and social circumstances. *Units: 6.*

### **UNIC 160: THE PRACTICE OF COMMUNITY IN APPLETON**

The diverse human communities in which we participate are defined by shared location, history, identity, employment, or interests. This course explores the idea and practice of community using written works, films, and other resources in combination with field trips to and guest speakers from the community surrounding campus. PREREQUISITES: Limited to students with freshman class standing; consent of instructor required for sophomores, juniors, and seniors *Units: 6.*

*Prerequisite: Limited to students with freshman class standing; consent of instructor required for sophomores, juniors, and seniors*

### **UNIC 161: INTRO TO COMMUNITY BASED LEARNING**

This course introduces theoretical and practical aspects of ethical and responsible community engagement. Core themes include cultural humility, intersectionality, asset-based community development, collective impact theory, systems thinking, and impact assessment. Through discussion, written reflection, guest speakers, and observational trips, students explore their own motivations for community engagement while gaining transferrable skills for Community-Based Learning designated courses and other forms of community engagement at Lawrence. *Units: 2.*

### **UNIC 165: MATHEMATICS AND COMMUNITY**

This course explores relationships between mathematics, mathematicians, and community. Students will build classroom community through in-class enrichment activities. Readings and discussion will focus on ways mathematicians of various identities build and maintain professional communities. In the second half of the term, students will connect with the Appleton community by leading an outreach activity in a local school. This course welcomes students of all mathematical backgrounds. *Units: 2.*

### **UNIC 166: SOCIAL CAPITAL AND CAREERS IN BUSINESS**

This course introduces students to the concept of "social capital" and its component parts (e.g., bonds, bridges, and linkages). It provides students with an understanding of how social capital informs network access in careers in business and how personalized networking strategies lead individuals to make more meaningful connections in work and, more broadly, in life. Additionally, It provides access to a diverse and rotating group of Lawrence alumni as mentors in competitive business fields. *Units: 2.*

### **UNIC 175: TOPICS IN PRECALCULUS**

This course provides an opportunity for students to learn/review necessary topics from precalculus in preparation for the study of calculus at Lawrence. *Units: 6 Units: 6.*

### **UNIC 185: NEW DIGITAL TOOLS OF THE LIBERAL ARTS**

Introduction to digital medial used in the humanities, STEM, and social sciences. Lectures, studio, and hands-on experience will develop familiarity with open-source tools for data visualization, text analysis, GIS mapping and metadata, as well as introduce the structure of information and the cultural impact of digital media. Assignments include digital projects, presentations, and a final portfolio. *Units: 3.*

### **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. **PREREQUISITES:** UNIC 102 or consent of instructor *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. **PREREQUISITES:** Must be attending the Lawrence London Centre. Sophomore standing *Units: 6.*

*Prerequisite: Must be attending the Lawrence London Centre. Sophomore standing*

### **UNIC 206: ESL: ENGLISH IN THE AMERICAN UNIVERSITY (WASEDA)**

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. *Units: 6.*

### **UNIC 207: ESL: SPEAKING AND LISTENING**

This course focuses on developing speaking and listening skills in English. May be taken for 3 or 6 units. *Units: 3 OR 6.*

### **UNIC 208: ESL: 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. *Units: 6.*

### **UNIC 209: ESL: EXPERIENTIAL LANGUAGE LEARNING (WASEDA)**

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. The course may be repeated if based on the exploration of a different and progressively more challenging language-learning environment. *Enrollment limited to students in the Waseda Visiting Student program.* **PREREQUISITES:** Open only to students in the Waseda Visiting Student program *Units: 3 OR 6.*

*Prerequisite: Open only to students in the Waseda Visiting Student program*

### **UNIC 211: INTRODUCTION TO AMERICAN SOCIETY I (WASEDA)**

An introduction to life in the United States and to academic life at a US university for students with global backgrounds. Students will explore cultural values, attitudes, and patterns of behavior through formal study, observation, and interviews, and through the analysis of their everyday life at Lawrence. **PREREQUISITES:** Open only to students in the Waseda Visiting Student program *Units: 2.*

*Prerequisite: Open only to students in the Waseda Visiting Student program*

### **UNIC 212: INTRODUCTION TO AMERICAN SOCIETY II (WASEDA)**

An introduction to life in the United States and to academic life at a US university for students with global backgrounds. Students will explore cultural values, attitudes, and patterns of behavior through formal study, observation, and interviews, and through the analysis of their everyday life at Lawrence. The class meets five times during the term (every other week). **PREREQUISITES:** Open only 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 (WASEDA)**

An introduction to life in the United States and to academic life at a US university for students with global backgrounds. Students will explore cultural values, attitudes, and patterns of behavior through formal study, observation, and interviews, and through the analysis of their everyday life at Lawrence. The class meets five times during the term (every other week). PREREQUISITES: Open only to students in the Waseda Visiting Student program *Units: 1.*

*Prerequisite: Open only to students in the Waseda Visiting Student program*

#### **UNIC 214: *ESL: THROUGH AMERICAN FICTION (WASEDA)***

Through close reading and analysis of American fiction, visiting students in the Waseda program will continue to develop their English language proficiency and their understanding of American culture. *Units: 6.*

#### **UNIC 215: *ESL THROUGH WORLD LITERATURE (WASEDA)***

Waseda students will develop reading comprehension and conversational skills through the discussion of stories, poems, and novels. *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. Not open to students who have completed UNIC 223. PREREQUISITES: UNIC 122 *Units: 6.*

*Prerequisite: UNIC 122*

#### **UNIC 223: *INTENSIVE EARLY INTERMEDIATE ARABIC***

Building on the work done in Intensive Beginning Arabic, this course will keep strengthening students' knowledge of Modern Standard Arabic. Using Arabic as the only means of communication, students will continue their study of Arabic grammar and syntax and their discovery of Arab culture through newspaper articles, literary texts and contemporary cinematographic productions in the target language. Not open to students who have already completed UNIC 122 or UNIC 221. PREREQUISITES: UNIC 123 *Units: 6.*

*Prerequisite: UNIC 123*

#### **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. PREREQUISITES: Must be attending the Lawrence London Center *Units: 2.*

*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*. PREREQUISITES: Must be attending the Lawrence 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. PREREQUISITES: Must be attending the Lawrence London Centre. *Units: 6*.

*Prerequisite: Must be attending the Lawrence London Centre.*

#### **UNIC 271: PRACTICING LEADERSHIP**

This course provides an opportunity for purposeful leadership development, connecting the liberal arts, performing arts, and athletics. Students will cultivate introspection and a growth mindset through study and practice of leadership, develop effective communication skills, and articulate a personal philosophy of leadership informed by relevant scholarship. Seminar course: guest speakers, discussion, reflective and analytical writing, and a term-length project focused on a real-world leadership challenge. PREREQUISITES: Sophomore standing *Units: 6*.

*Prerequisite: Sophomore standing*

#### **UNIC 361: BRITISH LIFE AND CULTURE II**

This class is the core class for students who spend a second term at the London Centre. It allows students to explore topics regarding life and culture in modern Britain in a mix of weekly classes and independent research, leading to a final paper which showcases their deeper involvement with the chosen topics. PREREQUISITES: Student must be in their second term at the London Centre. They must be prepared to work independently and willing to actively contribute to the classes with the instructor. *Units: 2*.

*Prerequisite: Student must be in their second term at the London Centre. They must be prepared to work independently and willing to actively contribute to the classes with the instructor.*

#### **UNIC 370: ACADEMIC RESEARCH AND ACADEMIC CULTURE**

This course will help students who are involved in a research project, developing a senior experience, or pursuing an honors project, to locate, understand, and evaluate published academic resources in relevant fields, and expand their familiarity with the work of the academy beyond the classroom. PREREQUISITES: Sophomore standing *Units: 1 OR 2*.

*Prerequisite: Sophomore standing*

#### **UNIC 401: COMPASSION: THEORY, PRACTICE, POLITICS**

What are the paths and obstacles to living a compassionate life? Can attempts to act compassionately in public life succeed? How can we cultivate an ethic of compassion towards ourselves and others? In this seminar we will discuss readings from a range of disciplines, genres, and spiritual traditions. Requirements include short papers, experiments with strategies for more compassionate living, and a final project. PREREQUISITES: Junior standing or consent of instructor *Units: 6.*

*Prerequisite: Junior standing or consent of instructor*

### **UNIC 409: *THE MEANING OF LIFE***

Seminar course featuring focused readings paired with conversations with members of the Lawrence and Fox Valley communities concerning life's big questions: How do such activities as work, service, community, political engagement, spiritual faith and family make life meaningful? Which pursuits in life warrant more time and energy than others? How do we know we're choosing the right paths? Student discussion with short papers. PREREQUISITES: Junior standing *Units: 6.*

*Prerequisite: Junior standing*

# CONSERVATORY OF MUSIC

<b>Professors:</b>	S. Devine ( <i>Lawrence Community Music School, Teacher Early Childhd-Spec Ed</i> ), J. Hittner ( <i>Lawrence Community Music School, Arioso Girl Choir Conductor</i> ), S. Jordheim, C. Kautsky ( <i>George and Marjorie Olsen Chandler Professor of Music</i> ), K. Leigh-Post, A. Mast ( <i>Kimberly-Clark Professor of Music</i> ), M. Mizrahi, D. Richeson
<b>Associate professors:</b>	M. Arau, I. Bates, D. Bell, G. Biringer, S. Ceballos, J. Daniel, S. Downing, M. Dupere, J. Encarnacion, S. George, W. Gu, J. Holiday ( <i>on leave term(s) I</i> ), E. Lesser, N. Lewis, J. McQuinn, J. Metcalf, M. Michelic ( <i>on leave term(s) III</i> ), B. Miller, A. Padilla, B. Pertl, S. Sieck ( <i>on leave term(s) II, III</i> ), S. Spears, A. Srinivasan, P. Swan, M. Urness, C. Woodruff ( <i>Director of Opera Studies</i> )
<b>Assistant professors:</b>	T. Albright ( <i>on leave term(s) II</i> ), A. Ellsworth, E. Gomez, R. Perry, K. Roach
<b>Visiting assistant professors:</b>	M. Ambrosio, M. Clayville, J. Gates, M. Paek, T. Prieto, E. Scheinberg, J. Sommer ( <i>Visiting Assistant Professor of Music</i> )
<b>Instructors:</b>	A. Boeckman, R. Cannizzo ( <i>Director of Conservatory Oper.</i> ), P. Darling, D. DiBella, M. Erickson, C. Evans, J. Johnson ( <i>Dir Con Prog &amp; Comm Outreach</i> ), C. Rath, M. Turner
<b>Lecturers:</b>	I. Adnyana, N. Agbeli ( <i>Lecturer in Music</i> ), A. Boncher, N. Buchman ( <i>Lawrence Community Music School</i> ), B. Carrothers, C. Chisel, L. Dempster, L. Donatelle ( <i>Student Music Assistant</i> ), E. Dupere ( <i>Lecturer in Music</i> ), F. Fernandez Morales, S. Gravelle ( <i>Lecturer in Music</i> ), E. Grover, B. Hauer ( <i>Audio Rec Tech Engr &amp; Lect Rec</i> ), J. Jensen, S. Jordheim, R. Korb, S. Peplin, O. Pimentel, J. Planet, L. Ramagopal Pertl, A. Reiser ( <i>Lawrence Community Music School, Lecturer of Music</i> ), G. Riss, D. Schwandt ( <i>Lecturer of Music &amp; Organist</i> ), C. Walby ( <i>Lawrence Community Music School</i> ), N. Wysock

## Conservatory of Music

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 in the conservatory. The conservatory is an accredited institutional member of the National Association of Schools of Music.

Four separate courses of study lead to a degree in music: the Bachelor of Musical Arts degree; the Bachelor of Music degree with majors in performance, music education, music composition, or music theory; the five-year double 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 (see the Bachelor of Arts degree requirements and the major and minor in music). The Bachelor of Music degree and Bachelor of Arts degree 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 which contain important information about recitals, departmental examinations, and other rules governing student academic life within the conservatory.

Students who wish to pursue two music majors in the Bachelor of Music degree must petition the Conservatory Committee on Administration.

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.

## Bachelor of Musical Arts Degree

The Bachelor of Musical Arts is a professional degree. Courses in music represent approximately one-half of the curriculum while the other half is devoted to *First Year Studies*, general education requirements, and a secondary field of study (cognate).

### Requirements for the Bachelor of Musical Arts Degree

1. Completion of a minimum of 216 units.
2. Of the 216 units required to complete the degree, a student must present:
  - a. a minimum of 108 units in music
  - b. a minimum of 78 units in courses other than music
  - c. a minimum of 30 units in a secondary field of study (cognate), developed according to procedures described below.
  - d. no more than 18 units in ESL courses
  - e. no more than 12 units from academic internships
3. Completion of 12 units of *First-Year Studies*, normally taken during the fall and winter terms of the first year
4. Completion of the general education requirements:
  - a. 6 units selected from courses designated as writing-intensive
  - b. International diversity. One of the following: Note: While some music courses may satisfy general education requirements, a minimum of 78 units in courses other than music is required for the degree.
    - 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 language other than English. The language competency requirement may be satisfied in other ways described under Academic Procedures and Regulations
    - iii. Participation for one term in a Lawrence or affiliated off-campus study program held outside the United States
5. Completion of music requirements:
  - a. Applied Musicianship I, II, and III: MUJI 150, 250, and 350

- b. Theory and improvisation: 3 units selected from MUJI 410 or 420
- c. Keyboard skills
  - i. MURP 201, 202, 203 or MURP 301, 302
  - ii. MURP 320
- d. Musicology
  - i. MUCO 211 and 212
  - ii. 6 units selected from courses in musicology numbered 400 or above
- e. Applied music individual instruction: a minimum of 36 units and 12 terms of study
- f. Ensemble study
  - i. a minimum of 9 units selected from major ensembles
  - ii. a minimum of 3 units selected from MUEN 245 or 248
  - iii. students are required to participate in an ensemble every term in which they are attending classes on the Appleton campus.
- g. Jazz composition and arranging
  - i. MUCA 230
  - ii. MUCA 330
  - iii. 3 units selected from MUCA 100 or 530
- h. MUEP 305 Jazz Pedagogy
  - i. MUEP 120 Basic Audio Recording
  - j. MUJI 130 Contemporary Orchestration for Digital Workstations
- 6. Presentation of a half recital during junior year and a full recital during senior year
- 7. A 2.000 grade-point average in all Lawrence courses
- 8. Completion of required terms and units in residence as specified by the [residence requirements](#)

## SENIOR EXPERIENCE

The required senior recital is considered the standard *Senior Experience* for students in the Bachelor of Musical Arts degree program. 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.

## STIPULATIONS PERTAINING TO THE GENERAL EDUCATION REQUIREMENTS

A single course may be used to satisfy both requirement a. (writing intensive) and b. (international diversity) above. Credits granted pursuant to university policy for advanced placement or for transfer work may be used to fulfill general education requirements with the exception that coursework from other institutions may not be used to fulfill requirement a. (writing intensive).

## STIPULATIONS PERTAINING TO THE SECONDARY FIELD OF STUDY (COGNATE)

Depending upon each student's academic objectives, the secondary field can consist of courses from a single academic department, courses from a single existing Lawrence interdisciplinary program, or courses from multiple departments and/or programs that can be combined to constitute a coherent interdisciplinary/multi-disciplinary secondary field not represented by one of Lawrence's already established interdisciplinary programs.

The procedure for establishing the courses to be taken for the secondary field is as follows:

1. With both the academic advisor and a faculty member from the secondary field, the student develops a statement on the planned secondary field. The statement indicates (a) the proposed secondary field of study; (b) how the secondary field will serve the student's academic objectives; and (c) the specific courses to be taken as part of the secondary field.
2. The student submits the statement of the proposed secondary course of study, endorsed by the faculty advisor and faculty member from the secondary field, to the associate dean of the conservatory for review by the conservatory committee on administration before the end of Term I of the student's sophomore year.
3. The conservatory committee on administration takes action on the proposal and through the associate dean communicates its action to the student, the faculty academic advisor, and the faculty member from the secondary field.

## 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 *First Year Studies* and general education requirements.

## Admission to the Bachelor of Music degree

An entrance audition is required of all applicants for admission to the Bachelor of Music degree. Bachelor of Arts or Bachelor of Musical 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.

## 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 18 units in ESL courses

d. no more than 12 units from academic internships

The additional 12 units may be selected from any department.

3. Completion of 12 units of *First-Year Studies*, normally taken during the fall and winter terms of the first year
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 language other than English. The language competency requirement may be satisfied in other ways described under Academic Procedures and Regulations.
    - 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.

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. Musicology
    - i. MUCO 211 and 212
    - ii. 12 units selected from courses in musicology 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.
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 non-music 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 [residence requirements](#).

Completion of a minor or interdisciplinary area is optional. If a minor is declared, a 2.000 grade-point average in the minor (all courses taken in the minor department, program, or area and any other courses required for the minor) is required to complete the minor and have it recorded on the academic record.

## STIPULATIONS PERTAINING TO THE GENERAL EDUCATION REQUIREMENTS

A single course may be used to satisfy both requirement a. (writing intensive) and b. (international diversity) above. Credits granted pursuant to university policy for advanced placement or for transfer work may be used

to fulfill general education requirements with the exception that coursework from other institutions may not be used to fulfill requirement a. (writing intensive).

## Performance Major

### 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 MUEN 245: *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: 17 units
  - a. MURP 391: Directed Study *Organ Pedagogy* (3 units)
  - b. MURP 391: Directed Study *Organ Design and Literature* (6 units)
  - c. Keyboard skills: MURP 301, 302: *Functional Skills for Keyboard Majors* (2 units)
  - d. MUEP 380: *Conducting Principles* (6 units)
3. Ensemble: 12 units
  - a. 3 units in major ensemble
  - b. 3 units in MUEN 245: *Chamber Music*
  - c. 6 units in major ensemble, chamber music, or supervised accompanying

### 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: 22 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 Science & Pedagogy I, II* (4 units)
  - d. MUEP 380: *Conducting Principles* (6 units)

- e. MURP 361: *Acting for Singers 1* (3 units)
- 3. Ensemble: 18 units
  - a. 6 units in MUEN 272: *Concert Choir* or 275: *Cantata*
  - b. 6 additional units in a major choral ensemble
  - c. 2 units in opera theatre
- 4. General education:
  - a. 12 units each of courses taught in two of the following languages (or placement at the intermediate level): French, German, or Italian. Must be taken for a grade.
  - b. 1 unit selected from: THAR 355: *Theatre Production*, THAR 357: *Musical Theatre Production*, MUEN 278: *Opera Production*

## **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. Pedagogy: One course selected from MUEP 201, 245, 252, or 333 (1–3 units)
- 3. Conducting: MUEP 380: *Conducting Principles* (6 units)
- 4. MUCA/MUCO/MUTH: 6 units from courses numbered 300 or above beyond degree requirements
- 5. Ensemble: 18 units
  - a. 12 units in MUEN 290: *Symphony Orchestra*
  - b. 6 units in MUEN 245: *Chamber Music*, 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 315: *Fretboard Harmony for the Classical Guitarist* (1 unit)
  - b. MUEP 304: *Guitar Pedagogy* (1 unit)
  - c. MURP 317: *History and Literature of the Guitar* (1 unit)
  - d. MUEP 380: *Conducting Principles* (6 units)
- 3. MUCA/MUCO/MUTH: 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 MUEN 245: *Chamber Music*
  - c. 6 units in major ensemble or chamber music

## **Brass and Woodwinds: flute, oboe, clarinet, saxophone, bassoon, horn, trumpet, trombone,**

## euphonium, tuba

1. Brass/Woodwind 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. Pedagogy: One course selected from MUEP 201, 245, 259, 260, or 261 (1-3 units)
3. Conducting: MUEP 380: *Conducting Principles* (6 units)
4. MUCA/MUCO/MUTH: 6 units from courses numbered 300 or above beyond degree requirements
5. Ensemble: 15 units
  - a. 6 units in MUEN 285: *Wind Ensemble* or MUEN 287: *Symphonic Band*
  - b. 6 units in a major instrumental ensemble
  - c. 3 units in MUEN 245: *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. Pedagogy: MUEP 245: *Instrumental Pedagogy* or MUEP 201: *Intro to Music Education* (3 units)
3. Conducting: MUEP 380: *Conducting Principles* (6 units)
4. MUCA/MUCO/MUTH: 6 units from courses numbered 300 or above beyond degree requirements
5. Ensemble: 16 units
  - a. 12 units in a major instrumental ensemble, including
    - i. 3 units in MUEN 285: *Wind Ensemble*
    - ii. 3 units in MUEN 290: *Symphony Orchestra* (a minimum of 3 units in MUEN 285 or MUEN 290 must be completed after the student has passed the qualifying examination for the major)
  - b. 4 units of MUEN 230: *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.

## 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.

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.

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
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 230: *Small Group Jazz Composition and Arranging* (3 units)
  - d. MUCA 330: *Large Ensemble Jazz Composition and Arranging* (3 units)
  - e. MUCA 530: *Advance Jazz Writing Skills* (3 units)
  - f. MUIN 329: *Jazz Studies* - one term of applied individual study in jazz piano (3 units)
  - g. MUEP 305: *Jazz Pedagogy* (1 unit)
  - h. 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 of wind ensemble, symphonic band, IGLU or symphony orchestra; 3 terms of chamber music
    - Strings: 9 terms symphony orchestra or IGLU; 3 terms chamber music
    - Piano: 3 terms symphony orchestra, wind ensemble, symphonic band, concert choir, women's choir, chorale or IGLU; 3 terms supervised accompanying
    - Guitar: 3 terms symphony orchestra, wind ensemble, symphonic band, concert choir, women's choir, chorale, IGLU 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.

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.

## 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 and 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 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.

## 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: 10 units
  - a. MURP 420: *Collaborative Piano: Vocal* (3 units)
  - b. MURP 425: *Collaborative Piano: Instrumental* (3 units)
  - c. MURP 599: *Independent Study-Collaborative Piano* (1 unit)
  - d. MURP 272: *English Singing Diction* (1 unit); must be fulfilled before requirement 1.e. below
  - e. Two of the following in a language not used to satisfy requirement 3: General education language requirement below (2 units):

- MURP 273: *Italian and Latin Singing Diction*
- MURP 274: *German Singing Diction*
- MURP 275: *French Singing Diction*

- f. One term of the supervised accompanying requirement must be fulfilled with Opera Scenes.
2. Recitals: In addition to required solo degree recitals, accompany one half vocal recital and one half instrumental recital; must be prepared under supervision of keyboard faculty member(s) through registration in an accompanying class, supervised accompanying, or chamber music.
  3. General education: Completion of the degree requirements must include 12 units of one of the following (or placement at the intermediate level): French, German, or Italian, taken for a grade.

## Minor in pedagogy

### KEYBOARD

1. MUEP 301, 302, 303: *Piano Pedagogy I, II, III* (9 units)
2. Two of the following (6 units total):
  - MUEP 502: *Early Advanced Piano Pedagogy*
  - MUEP 503: *Group Piano Pedagogy*
  - MUEP 505: *Internship in Piano Pedagogy*
3. MUEP 581, 582: *Student Teaching in Piano I, II* (6 units)
4. MURP 451, 452: *Literature of the Piano I, II* (12 units)
5. Completion of the general education requirement must include PSYC 260: *Developmental Psychology* or PSYC 340: *Cognitive Psychology* (6 units)
6. Presentation of a half recital.
7. Students must participate in individual performance study in each term in which they are in residence on the Appleton campus.

### VOICE

1. MUEP 371, 372: *Voice Science and Pedagogy I, II* (4 units)
2. MUEP 373: *The Brain, Music, and Optimal Performance* (3 units)
3. MUEP 395: *Internship in Music Pedagogy* (3 units; 1 unit per term for 3 terms)
4. MUEP 399: Additional independent study in historic pedagogy, acoustics, and/or body/mind research (3 units)
5. MURP 223: *Educators' Keyboard Skills* (1 unit)
6. Completion of the general education requirement must include one of the following (6 units):
  - PSYC 180: *Psychology of Learning*
  - PSYC 260: *Developmental Psychology*
  - PSYC 340: *Cognitive Psychology*
7. Students must participate in individual performance study in each term in which they are in residence on the Appleton campus.

### STRINGS

1. MUEP 245: *Instrumental Pedagogy* (3 units)

2. MUEP 345: *Applied Instrumental Pedagogy* (3 units)
3. MUEP 331, 332: *String Techniques I, II* (6 units)
4. MUEP 395: *Internship in Music Pedagogy* (3 units)
5. Completion of the general education requirements must include one of the following (6 units):
  - EDST 180: *Psychology of Learning*
  - PSYC 260: *Developmental Psychology*
  - PSYC 340: *Cognitive Psychology*
  - EDST 350: *Ethnicity, Cultural Diversity, and Education*
  - EDST 440: *Sociology of Education*
6. Students must participate in individual performance study in each term in which they are in residence on the Appleton campus.

## BRASS

1. MUEP 245: *Instrumental Pedagogy* (3 units)
2. MUEP 345: *Applied Instrumental Pedagogy* (3 units)
3. MUEP 310: *Brass Techniques* (3 units)
4. MUEP 259: *Brass Pedagogy* (1 unit)
5. MUEP 395: *Internship in Music Pedagogy* (3 units)
6. Completion of the general education requirements must include one of the following (6 units):
  - EDST 180: *Psychology of Learning*
  - PSYC 260: *Developmental Psychology*
  - PSYC 340: *Cognitive Psychology*
  - EDST 350: *Ethnicity, Cultural Diversity, and Education*
  - EDST 440: *Sociology of Education*
7. Students must participate in individual performance study in each term in which they are in residence on the Appleton campus.

## PERCUSSION

1. MUEP 245: *Instrumental Pedagogy* (3 units)
2. MUEP 345: *Applied Instrumental Pedagogy* (3 units)
3. MUEP 315: *Percussion Techniques* (3 units)
4. MUEP 390: *Tutorial in Music Pedagogy-Percussion* (3 units)
5. MUEP 395: *Internship in Music Pedagogy* (3 units)
6. Completion of the general education requirements must include one of the following (6 units):
  - EDST 180: *Psychology of Learning*
  - PSYC 260: *Developmental Psychology*
  - PSYC 340: *Cognitive Psychology*
  - EDST 350: *Ethnicity, Cultural Diversity, and Education*
  - EDST 440: *Sociology of Education*
7. Students must participate in individual performance study in each term in which they are in residence on the Appleton campus.

## WOODWINDS

1. MUEP 245: *Instrumental Pedagogy* (3 units)

2. MUEP 345: *Applied Instrumental Pedagogy* (3 units)
3. MUEP 321, 322: *Woodwind Techniques I, II* (6 units)
4. MUEP 395: *Internship in Music Pedagogy* (3 units)
5. Completion of the general education requirements must include one of the following (6 units):
  - EDST 180: *Psychology of Learning*
  - PSYC 260: *Developmental Psychology*
  - PSYC 340: *Cognitive Psychology*
  - EDST 350: *Ethnicity, Cultural Diversity, and Education*
  - EDST 440: *Sociology of Education*
6. Students must participate in individual performance study in each term in which they are in residence on the Appleton campus.

## Music Education

The Bachelor of Music degree with a major in music education is subject to revision. It is the student's responsibility to confirm requirements with the chair of the music education department. A cumulative GPA of 2.75 is required for admission to music education and for certification to teach music, and students must demonstrate content knowledge through either a 3.00 major GPA or a passing score on the *Praxis II: Music Content Knowledge* test before they may student teach. A passing score on the edTPA, a teacher performance assessment completed during student teaching, is required for certification for licensure. Students seeking licensure should consult the Music Education Student Teaching Handbook for further information and requirements.

Students in the Bachelor of Music degree program may qualify for a 13th-term tuition waiver for student teaching, paying only a registration fee (see Tuition, Fees, and Financial Assistance). Students must have completed all graduation requirements except student teaching, and this term must immediately follow the 12th term. For students in the five-year double-degree program, a 16th term of student teaching is available under the same policy; this term must immediately follow the 15th term.

## Common requirements for the major in music education

In addition to [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 350: *Ethnicity, Cultural Diversity, and Education* (6 units)
  - c. EDST 440: *Sociology of 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. Students are reminded that at least 60 units outside music are required for the degree.
- 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, and instrumental/general.
- 7. Completion of major requirements for one of the 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 certification and licensure in Wisconsin and other states. 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. A culminating product of the student teaching experience is a final teaching portfolio that includes a teacher performance assessment (edTPA), reflective essay, and final student teaching evaluations, which together provide evidence 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

- a. Students whose principal performance instrument is not voice must complete MUEP 230: *Voice for Instrumental Educators* (1 unit)
  - b. Students whose principal performance instrument is voice must complete MUEP 371, 372: *Voice Science & Pedagogy I, II* (4 units)
  - c. MUEP 240, 350: *General Music Methods I, II* (12 units)
  - d. MUEP 336: *Guitar for the Music Educator* (1 unit)
  - e. MUEP 340/THAR 340: *Musical Theatre Production Overview* (3 units)
  - f. MUEP 403: *Large Ensemble Rehearsal Techniques* (6 units)
  - g. MUEP 307: *Orchestration for the Music Educator* (1 unit)
2. Keyboard skills: MURP 223: *Educators' Keyboard Skills* (1 unit) 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
      - 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
      - iii. 3 units in any major ensemble.
    - c. Strings:
      - i. 6 units in Symphony Orchestra
      - ii. 3 units in any major choral ensemble
      - iii. 3 units in any major ensemble

Note: B.Mus. students earning this major should expect to attend Lawrence for four and one-half years; double degree students earning this major should expect to attend Lawrence for five and one-half years.

## 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: 31-33 units
  - a. MUEP 371, 372: *Voice Science & Pedagogy I, II* (4 units)
  - b. MUEP 240, 350: *General Music Methods* (12 units)
  - c. MUEP 307: *Orchestration for the Music Educator* (1 unit)
  - d. MUEP 336: *Guitar for the Music Educator* (1 unit)
  - e. MUEP 340/THAR 340: *Musical Theatre Production Overview* (3 units)
  - f. MUEP 403: *Large Ensemble Rehearsal Techniques* (6 units)
  - g. MUEP 452: *Choral Techniques* (6 units)
2. Keyboard skills: MURP 223: *Educators' Keyboard Skills* (1 unit) 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: B.Mus. students earning this major should expect to attend Lawrence for four and one-half years; double degree students earning this major should expect to attend Lawrence for five and one-half years.

## 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: 33 units
  - a. MUEP 230: *Voice for Instrumental Music Educators* (1 units)
  - b. One of the following: MUEP 305: *Jazz Pedagogy* (1 unit), MUEP 333 *String Pedagogy: Pedagogues and Methods* (1 unit), or MUEP 334 *String Pedagogy: Editing Orchestral String Parts* (1 unit)
  - c. MUEP 403: *Large Ensemble Rehearsal Techniques* (6 units)
  - d. MUEP 451: *Instrumental Methods and Rehearsal Techniques* (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 MUEN 285: *Wind Ensemble* or MUEN 287: *Symphonic Band*
    - ii. an additional 3 units in any major ensemble
  - b. Strings:
    - i. 9 units in MUEN 290: *Symphony Orchestra*
    - ii. 3 additional units in any major ensemble

Note: B.Mus. students earning this major should expect to attend Lawrence for four and one-half years; double degree students earning this major should expect to attend Lawrence for five and one-half years.

## 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. One of the following: MUEP 305: *Jazz Pedagogy* (1 unit), MUEP 333 *String Pedagogy: Pedagogues and Methods* (1 unit), or MUEP 334 *String Pedagogy: Editing Orchestral String Parts* (1 unit)
  - b. MUEP 230: *Voice for Instrumental Music Educators* (1 unit)
  - c. MUEP 240, 350: *General Music Methods* (12 units)
  - d. MUEP 336: *Guitar and Recorder for the Music Educator* (1 unit)
  - e. MUEP 403: *Large Ensemble Rehearsal Techniques I* (6 units)
  - f. MUEP 451: *Instrumental Methods and Rehearsal Techniques* (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 223: *Educators' Keyboard Skills* (1 unit) 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 choral ensemble
    - iii. 3 additional units in any major ensemble
  - b. Strings:
    - i. 6 units in Symphony Orchestra
    - ii. 3 units in any major choral ensemble
    - iii. 3 units in any major ensemble

Note: B.Mus. students earning this major should expect to attend Lawrence for four and one-half years; double degree students earning this major should expect to attend Lawrence for five and one-half years.

## Music Composition

### Required for the major in composition

1. Music composition: 45 units
  - a. MUCA 100: *Fundamentals of Composition* (6 units)
  - b. MUCA 345: *Composition* (27 units; 9 terms, 3 units per term)
  - c. MUCA 300: *Techniques of the Contemporary Composer* (6 units)
  - d. MUCA 400: *Topics in Electronic Music* (6 units)
2. Music theory in addition to the core courses required for the B.Mus. degree: 12 units
  - a. One course in counterpoint (6 units), either:
    - MUTH 400: *Renaissance Counterpoint* (6 units) or
    - MUTH 401: *Counterpoint in the Style of J.S. Bach I* (6 units)
  - b. One course in analysis (6 units) selected from the following:
    - MUTH 421: *Theory and Analysis of Music Since 1900* (6 units)
    - MUTH 550: *Topics in Music Theory and Analysis* (6 units); topic must concern music composed since 1900

3. Orchestration: MUCA 411, 412: *Orchestration I, II* (12 units)
4. Conducting: MUEP 380: *Conducting Principles* (6 units)
5. Performance: A minimum of 18 units in applied individual instruction
6. Ensemble: 12 units; participation in an ensemble is required every term in residence on the Appleton campus, as specified by the following requirements:
  - a. 6 units selected from wind ensemble, symphonic band, symphony orchestra, or a major choral ensemble
  - b. 6 additional units selected in consultation with the composition faculty

## The qualifying examination in composition

The qualifying examination in composition comprises a portfolio of compositions that is submitted to and adjudicated by a committee of composition faculty members. The examination must be completed no later than the end of the first term of the sophomore year.

## Senior Experience in composition

For students majoring in 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 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.

## Required for the emphasis in jazz and improvisational music

Admission to the Bachelor of Music in 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 (6 units):
  - MUTH 421: *Theory and Analysis of Music Since 1900* (6 units)
2. Music composition and arranging
  - a. MUCA 230: *Small Group Jazz Composition and Arranging* (3 units)
  - b. MUCA 330: *Large Ensemble Jazz Composition and Arranging* (3 units)
  - c. MUCA 411: *Orchestration I* (6 units)
  - d. MUCA 530: *Advanced Jazz Writing Skills* (12 units)
  - e. MUCA 300: *Techniques of the Contemporary Composer* (6 units)
  - f. 6 units from MUCA 345: *Composition*

3. Supporting courses for the emphasis:
  - a. MUCA 220, 221: *Jazz Improvisation I, II* (6 units)
  - b. MUTH 240: *Jazz Theory and Aural Training* (3 units)
  - c. MUIN 329: *Jazz Studies* - one term of applied individual study in jazz piano (3 units)
  - d. MUEP 305: *Jazz Pedagogy* (1 unit)
  - e. 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, students 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.

## Music Theory

### Required for the major in music theory

1. Music theory in addition to the core courses required for the B.Mus. degree (36 units):
  - a. MUTH 401: *Counterpoint in the Style of J.S. Bach* (6 units)
  - b. MUTH 421: *Theory and Analysis of Music since 1900* (6 units)
  - c. MUTH 520: *Schenkerian Analysis* (6 units)
  - d. Two iterations of MUTH 350 or 550: *Topics in Music Theory and Analysis* (12 units)
  - e. MUTH 599: Independent Study in Music Theory or one additional iteration of MUTH 550 (6 units)
2. Music composition and arranging (9 units):
  - a. MUCA 100: *Fundamentals of Composition* (6 units)
  - b. One term of MUCA 345: *Composition* (3 units)
3. Any one of the following courses: (6 units)
  - ANTH 531/LING 531: *Semiotics*
  - EDST 545/LING 545/PSYC 545: *Gesture Studies*
  - ENG 401, 402, or 403: Topics in Literary Criticism
  - FIST 100: *Introduction to Film Studies* or FIST 120: *Image and Sound I*
  - GEST 100: *Introduction to Gender Studies* or GEST 222: *Music and Gender*
  - LING 470: *Cognitive Linguistics*
  - MUCO 411: *Aesthetics of Music*
  - PHYS 107: *Physics of Music*
  - PSYC 230: *Psychology of Music*
  - Other cognate-area course approved by the music theory department
4. Performance: A minimum of 24 units in applied individual instruction
5. Ensemble: 12 units; participation in an ensemble is required every term in residence on the Appleton campus, as specified by the following requirements:
  - a. 6 units selected from wind ensemble, symphonic band, symphony orchestra, or a major choral ensemble
  - b. 6 additional units in any ensemble
6. Language: 6 units in languages other than English taken from courses numbered 200 or above

### Required for the minor in music theory

Four upper-level MUTH courses (24 units):

1. MUTH 401: *Counterpoint in the Style of J.S. Bach* (6 units)
2. MUTH 421: *Theory and Analysis of Music since 1900* (6 units)

3. MUTH 520: *Schenkerian Analysis* (6 units)
4. One iteration of MUTH 350 or 550: *Topics in Music Theory and Analysis* (6 units)

## Senior Experience in music theory

The topic of the *Senior Experience* in music theory will arise from the student's encounter, in organized and/or independent study upper-level courses, with advanced theoretical and analytical concepts, methods, and techniques. Topics may take one of the following forms, subject to approval by the music theory faculty:

1. an original essay, of substantive length and publishable quality, on a theoretical or analytic topic
2. a critical exegesis of a monograph by a contemporary or historical music theorist or of a series of interrelated essays
3. a lecture-recital
4. a software application for music theory pedagogy or analysis

## Ensemble performance study

Major ensembles are:

- MUEN 203 Balinese Gamelan Music
- MUEN 212 Hybrid Vocal Ensemble
- MUEN 230 Percussion Ensemble
- MUEN 231 Kinkiviwo
- MUEN 232 Tambo Toké
- MUEN 233 Sambistas
- MUEN 235 Improvisation Group
- MUEN 270 Viking Chorale
- MUEN 272 Cantala Women's Choir
- MUEN 275 Concert Choir
- MUEN 282/283/284 Opera
- MUEN 285 Wind Ensemble
- MUEN 287 Symphonic Band
- MUEN 290 Symphony Orchestra
- MUEN 293 Jazz Band
- MUEN 295 Jazz Ensemble

## Bachelor of Arts/Bachelor of Music Degree

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, theory, or 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. 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 and the director of teacher education.

## 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. December Term does not count as a term toward this requirement. 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. no more than 18 units in ESL courses
  - e. a minimum of 72 units from courses numbered 200 and above
  - f. no more than 90 units from a single department outside of music
  - g. no more than 12 units from academic internships
2. Completion of 12 units of *First-Year Studies*, normally taken in the fall and winter terms of the first year.
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 language other than English 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

See [divisions within the university](#) under Structure of the Curriculum.

- 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 language other than English taken from courses numbered 200 or above and taught primarily in a language other than English. The language competency requirement may be satisfied in other ways described under Academic Procedures and Regulations.
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 and encouraged to declare a major by spring term of the sophomore year, when they advance register for junior-year courses.
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. Musicology
    - i. MUCO 211 and 212
    - ii. 12 units selected from courses in musicology 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.
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 college major (all courses in the major department or program and any other courses required for the major)
  - c. 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.

Completion of a minor or interdisciplinary area is optional. If a minor is declared, a 2.000 grade-point average in the minor (all courses taken in the minor department, program, or area and any other courses required for the minor) is required to complete the minor and have it recorded on the academic record.

## STIPULATIONS PERTAINING TO THE GENERAL EDUCATION REQUIREMENTS

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 (Advanced Placement [AP], International Baccalaureate [IB], or A-levels) may be used as appropriate to fulfill diversity or competency requirements; such credit may not be used to fulfill distribution requirements. Coursework from other institutions may not be used to fulfill the writing or speaking competency requirement.

## Courses - Music Composition & Arranging

### **MUCA 100: FUNDAMENTALS OF COMPOSITION**

An introduction to the craft of contemporary classical composition. Intended for composition majors, theory majors, and other students interested in music composition. Weekly compositions are supplemented by listening, analysis, and writing assignments. PREREQUISITES: MUTH 201 or MUTH 100 *Units: 6*.

*Prerequisite: MUTH 201 or MUTH 100*

### **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 191: DIRECTED STUDY IN MUSIC 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. PREREQUISITES: Counter Registration Required *Units: 1 TO 98*.

*Prerequisite: Counter Registration Required*

### **MUCA 195: 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. PREREQUISITES: Counter Registration Required *Units: 1 TO 98*.

*Prerequisite: Counter Registration Required*

### **MUCA 210: IMPROVISATION**

An introduction to improvisation for students in all music disciplines. Exploration of the concepts of improvisation in the varied settings of ethnic/world music, jazz, and contemporary classical music. *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.

PREREQUISITES: MUTH 240 *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. PREREQUISITES: MUCA 220 *Units: 3.*

*Prerequisite: MUCA 220*

### **MUCA 230: SMALL GROUP JAZZ COMPOSITION AND ARRANGING**

Fundamentals of notation, orchestration, rhythmic embellishment, melodic development, jazz harmony, vertical sonorities, basic forms, and 2-5 part densities for jazz small groups. PREREQUISITES: MUJI 350 or MUTH 301 *Units: 3.*

*Prerequisite: MUJI 350 or MUTH 301*

### **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. PREREQUISITES: Two terms of MUCA 345 or consent of instructor *Units: 6.*

*Prerequisite: Two terms of MUCA 345 or consent of instructor*

### **MUCA 330: LARGE ENSEMBLE JAZZ COMPOSITION AND ARRANGING**

Scoring techniques for the jazz big band and expanded chamber jazz ensembles. Focus upon melodic, harmonic, rhythmic, textual, and formal variation in the large jazz ensemble format. PREREQUISITES: MUCA 230 or consent of instructor *Units: 3.*

*Prerequisite: MUCA 230 or consent of instructor*

### **MUCA 345: COMPOSITION**

Private instruction in music composition. PREREQUISITES: MUCA 100 and MUTH 251 or consent of instructor *Units: 3.*

*Prerequisite: MUCA 100 and MUTH 251 or consent of instructor*

### **MUCA 390: TUTORIAL STUDIES IN MUSIC COMPOSITION AND ARRANGING**

PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **MUCA 391: DIRECTED STUDY IN MUSIC 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. PREREQUISITES: Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

### **MUCA 395: 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. PREREQUISITES: Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

### **MUCA 399: INDEPENDENT STUDY IN MUSIC COMPOSITION AND ARRANGING**

Students considering an honors project should register for independent study for one or more terms. *Units: 1 TO 98.*

### **MUCA 400: TOPICS IN MUSIC COMPOSITION**

Selected topics in contemporary music, intended for composition majors and other students interested in music composition. *Units: 6.*

*Prerequisite: MUTH 301 or consent of instructor*

### **MUCA 411: ORCHESTRATION I**

Capabilities and uses of strings, woodwinds and horn; notational practices; scoring for chamber orchestra. PREREQUISITES: MUTH 301 and two terms of MUCA 345 or consent of instructor *Units: 6.*

*Prerequisite: MUTH 301 and two terms of MUCA 345 or consent of instructor*

### **MUCA 412: ORCHESTRATION II**

Capabilities and uses of brass, percussion and harp; advanced orchestration techniques; scoring for wind ensemble and full symphony orchestra. PREREQUISITES: MUCA 411 *Units: 6.*

*Prerequisite: MUCA 411*

### **MUCA 530: ADVANCED JAZZ WRITING SKILLS**

A continuation of MUCA 230 and MUCA 330 that focuses upon special recital, concert, recording, and honors projects in jazz composition. May be repeated for credit. PREREQUISITES: MUCA 330 and admission to the emphasis in jazz, or consent of instructor *Units: 3.*

*Prerequisite: MUCA 330 and admission to the emphasis in jazz, or consent of instructor*

### **MUCA 590: TUTORIAL STUDIES IN MUSIC COMPOSITION AND ARRANGING**

PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **MUCA 591: DIRECTED STUDY IN MUSIC 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. PREREQUISITES: Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

**MUCA 595: *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. PREREQUISITES: Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

**MUCA 599: *INDEPENDENT STUDY IN MUSIC COMPOSITION AND ARRANGING***

Students considering an honors project should register for independent study for one or more terms. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

**MUCA 690: *TUTORIAL STUDIES IN MUSIC COMPOSITION AND ARRANGING***

PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

**MUCA 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. PREREQUISITES: Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

**MUCA 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. PREREQUISITES: Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

**MUCA 699: *INDEPENDENT STUDY IN MUSIC COMPOSITION AND ARRANGING***

Students considering an honors project should register for independent study for one or more terms. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

## Courses - Dance

### **MUDA 110: *DANCE APPRECIATION***

How do you define dance? Where is dance found? How does dance affect you? As we explore this line of inquiry, we will touch on topics such as dance history, theory, culture and documentation. Drawing from a variety of somatic practices and our collaborative experience, we will physically sample approaches to dance and practice noticing dance in our lives. *Units: 3.*

*Also listed as Theatre Arts 110*

### **MUDA 132: *ENSEMBLE THINKING***

Ensemble Thinking is a system of physical, improvisational, group exercises that provides organizing lenses through which we observe and participate in movement and performance. Using this technique, we will develop awareness and listening skills for relating to others, build a common language, and practice collaboratively creating dances. Through embodied studio investigations, this course introduces students to dance composition. *Units: 3.*

*Also listed as Theatre Arts 132*

### **MUDA 134: *CONTACT IMPROVISATION***

Contact Improvisation is a partnering dance form that explores movement possibilities created when two or more individual bodies are touching and/or sharing weight, balance or support. The practice of Contact Improvisation encourages the development of self-responsibility, awareness, clear physical communication and a strong, versatile body. This is a rigorous dance lab in which we will experiment with action, physics and listening. *Units: 3.*

*Also listed as Theatre Arts 134*

### **MUDA 136: *EMBODIED CREATIVE PRACTICE***

This is a course designed to build your creative muscle. In the supportive community of this class, we will access your individual story, writing, drawing, movement and voice to create and perform for each other every class meeting. Employing diverse performance techniques and referencing various readings, we will discover and craft our unique inspirations, directions, and experience. *Units: 3.*

*Also listed as Theatre Arts 136*

### **MUDA 138: *ARTICULATING THE SOLO BODY***

Based in ReWire/Dancing States and other contemporary techniques, this course will build a movement foundation for the solo dancing body. In the studio, we will work with clarity, speed, and precision to develop a versatile and conscious dancer. We will also explore topics such as performance, intention, and habits while dancing. *Units: 3.*

*Also listed as Theatre Arts 138*

### **MUDA 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.*

*Also listed as Theatre Arts 143*

#### **MUDA 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.*

*Also listed as Theatre Arts 145*

#### **MUDA 147: PHYSICAL PRACTICE: 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.*

*Also listed as Theatre Arts 147*

#### **MUDA 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.*

*Also listed as Theatre Arts 149*

#### **MUDA 185: MOVEMENT AND TEXT**

This studio-based introductory course examines the interplay of physical movement with verbal and written texts. Using choreographic approaches and improvisational structures, students will investigate how to mine a theatrical text for its range of expression, embodiment, and compositional qualities, and to examine the kinesthetic body as a text. *Units: 6.*

*Also listed as Theatre Arts 185*

#### **MUDA 191: DIRECTED STUDY IN DANCE**

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: 1 TO 98.*

#### **MUDA 220: TOPICS IN MOVEMENT/PERFORMANCE**

Topics in this series vary from year to year. May be repeated when topic is different. *Units: 3.*

*Also listed as Theatre Arts 220*

### **MUDA 221: DANCE STUDIES: GLOBAL PERSPECTIVES**

This course introduces major concepts, approaches and issues in the study of dance as a cultural, historical and artistic practice. By examining key texts in dance studies, viewing dance films and engaging in the practice of dancing, students will investigate how moving bodies shaped history while considering dance as a form of cultural identity and political power. *Units: 6.*

*Also listed as Theatre Arts 221*

### **MUDA 222: DANCE, YOGA, AND BODY KNOWLEDGE IN RELIGION**

This class introduces students to the concept of embodied knowledge, asking students 'what do our bodies know and how do they learn?' and 'what do the performances of our bodies create?' Students will explore embodied ways of knowing at the intersection of Indian classical dance, yoga, and Hindu traditions and then create and analyze their own movement practices as part of the class. *Units: 6.*

*Also listed as Religious Studies 221*

### **MUDA 341: C.S: TOOLS FOR EMBODIED RESEAR**

What constitutes performance and how is performance a site of possibility, discourse, dissension, and connection? Through the lens of dance as a foundation, we grapple with embodying our research and creating action in our campus communities and beyond. This upper-level course is meant to prepare students for their senior capstone and for any students who want to dive into deep research. *Units: 6.*

*Also listed as Theatre Arts 341*

### **MUDA 390: TUTORIAL IN DANCE**

A tutorial is a student-driven course of study undertaken by an individual student or a small group of students in collaboration with one or more faculty members from the department. The primary goal of a tutorial is the expansion, refinement, and synthesis of knowledge through in-depth exploration of a specific topic. A tutorial may be arranged with an instructor in accordance with the guidelines contained in the course catalog and any departmental requirements. *Units: 1 TO 98.*

### **MUDA 391: DIRECTED STUDY IN DANCE**

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: 1 TO 98.*

### **MUDA 399: INDEPENDENT STUDY IN DANCE**

An independent study is largely student-directed work in scholarship or creative activity supervised by a member of an academic department. An independent study may be arranged with an instructor in accordance with the guidelines contained in the course catalog and any departmental requirements. *Units: 1 TO 98.*

### **MUDA 590: TUTORIAL IN DANCE**

A tutorial is a student-driven course of study undertaken by an individual student or a small group of students in collaboration with one or more faculty members from the department. The primary goal of a tutorial is the expansion, refinement, and synthesis of knowledge through in-depth exploration of a specific topic. A tutorial

may be arranged with an instructor in accordance with the guidelines contained in the course catalog and any departmental requirements. *Units: 1 TO 98.*

#### **MUDA 591: DIRECTED STUDY IN DANCE**

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: 1 TO 98.*

#### **MUDA 599: INDEPENDENT STUDY IN DANCE**

An independent study is largely student-directed work in scholarship or creative activity supervised by a member of an academic department. An independent study may be arranged with an instructor in accordance with the guidelines contained in the course catalog and any departmental requirements. *Units: 1 TO 98.*

#### **MUDA 690: TUTORIAL IN DANCE**

A tutorial is a student-driven course of study undertaken by an individual student or a small group of students in collaboration with one or more faculty members from the department. The primary goal of a tutorial is the expansion, refinement, and synthesis of knowledge through in-depth exploration of a specific topic. A tutorial may be arranged with an instructor in accordance with the guidelines contained in the course catalog and any departmental requirements. *Units: 1 TO 98.*

#### **MUDA 691: DIRECTED STUDY IN DANCE**

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: 1 TO 98.*

#### **MUDA 699: INDEPENDENT STUDY IN DANCE**

An independent study is largely student-directed work in scholarship or creative activity supervised by a member of an academic department. An independent study may be arranged with an instructor in accordance with the guidelines contained in the course catalog and any departmental requirements. *Units: 1 TO 98.*

### **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.*

*Prerequisite: Untrapped error in STU\_COURSE\_INFO: -1422*

#### **MUEP 150: INTRODUCTION TO ARTS MANAGEMENT**

This class will introduce students to the skills, knowledge, and passion required for a career in arts management and non-profit arts leadership. Lectures, projects, and presentations will address topics including programming, marketing, fundraising, finance, crisis management, arts advocacy, community engagement, and board management. Field trips to local arts organizations and visits from arts professionals will provide networking opportunities and enable students to explore career paths. Students will engage with the challenges facing the arts industry, including the urgent need to diversify organizations and programming and to increase audiences and support for the arts. *Units: 3.*

### **MUEP 191: 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. PREREQUISITES: Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

### **MUEP 195: 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. PREREQUISITES: Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

### **MUEP 201: INTRODUCTION TO MUSIC EDUCATION**

An introduction to the philosophy of music education and the principles of learning theory and pedagogy, and improvisation as applied to the private lesson, instrumental and choral ensembles, and the general music classroom. In addition, the course includes observation of experienced teachers, in-class teaching, and improvisation. *Units: 3.*

### **MUEP 220: AUDIO EDITING AND MIXING TECHNIQUES**

Study of temporal, timbral, and dynamic signal processing, digital audio editing and mixing techniques. PREREQUISITES: MUEP 120 and instructor approval *Units: 3.*

*Prerequisite: MUEP 120 and instructor approval*

### **MUEP 230: VOICE FOR INSTRUMENTAL MUSIC EDUCATORS**

An introduction to singing technique, voice use, and health. PREREQUISITES: Sophomore standing *Units: 1.*

*Prerequisite: Sophomore standing*

### **MUEP 240: GENERAL MUSIC METHODS I**

An examination of various approaches to designing music instruction for general music environments. The course provides future teachers with strategies and learning theories for improving large group teaching and motivating all learners to succeed. Instructional skills and evaluation techniques needed for classroom application in diverse school settings will be addressed. PREREQUISITES: Prior completion or concurrent enrollment in MUEP 336, and MURP 223, or consent of instructor. *Units: 6.*

*Prerequisite: Prior completion or concurrent enrollment in MUEP 336, and MURP 223, 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. PREREQUISITES: Sophomore standing and consent of instructor *Units: 3.*

*Prerequisite: Sophomore standing and consent of instructor*

### **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 259: BRASS PEDAGOGY**

An introduction to individualized brass instrument instruction. Directed reading and discussion concerning brass instrument technique, pedagogy, and lesson planning. *Units: 1.*

### **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. PREREQUISITES: Sophomore standing *Units: 3.*

*Prerequisite: Sophomore standing*

### **MUEP 280: THE ENTREPRENEURIAL MUSICIAN**

A broad introduction to entrepreneurship for musicians, dancers, thespians, visual artists, and other interested students. 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 visiting entrepreneurs. This is a project-oriented course with extensive speaking that will challenge convention, push you to new realms of creative thought, and stretch the boundaries of collaborative learning. Are you ready to unleash the power of the liberal arts? *Units: 6.*

### **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. PREREQUISITES: Sophomore standing or consent of instructor *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. PREREQUISITES: MUEP 301 *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. PREREQUISITES: MUEP 302 *Units: 3.*

*Prerequisite: MUEP 302*

### **MUEP 304: GUITAR PEDAGOGY**

An introduction to class guitar and individual guitar instruction. Includes reading and discussion, lesson and curriculum planning, observation of experienced teachers and a survey of pedagogical materials.

PREREQUISITES: Sophomore standing *Units: 1.*

*Prerequisite: Sophomore standing*

### **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. PREREQUISITES: Junior standing or consent of instructor *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. PREREQUISITES: MUTH 301 *Units: 1.*

*Prerequisite: MUTH 301*

### **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. PREREQUISITES: Sophomore standing *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. PREREQUISITES: Sophomore standing *Units: 3.*

*Prerequisite: Sophomore standing*

### **MUEP 320: AUDIO MASTERING AND CRITICAL LISTENING**

Studio-based exploration of audio mastering techniques, to include: corrective equalization, limiting, metadata generation, and master file creation. Critical listening exercises to develop a production-based paradigm for analyzing audio and thinking critically to create competitive audio files in multiple genres. PREREQUISITES: MUEP 220 and instructor approval *Units: 3.*

*Prerequisite: MUEP 220 and instructor approval*

### **MUEP 321: WOODWIND TECHNIQUES I**

A study of the woodwind instruments, with emphasis on teaching principles and their application to school music. Laboratory fee. PREREQUISITES: Sophomore standing *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. PREREQUISITES: MUEP 321 or consent of instructor. *Units: 3.*

*Prerequisite: MUEP 321 or consent of instructor.*

### **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. PREREQUISITES: Sophomore standing; recommended that string majors take this course during the sophomore year *Units: 3.*

*Prerequisite: Sophomore standing; recommended that string majors take this course during the sophomore year*

### **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. PREREQUISITES: MUEP 331 or consent of instructor. *Units: 3.*

*Prerequisite: MUEP 331 or consent of instructor.*

### **MUEP 333: STRING PEDAGOGY: PEDAGOGUES & METHODS**

A concentrated course encompassing a wide range of pedagogical approaches and principles involved in teaching and playing the violin, viola, cello, and double bass. Topics include the study of major pedagogues, including Galamian, Suzuki, Rolland, and others. Offered even years only. *Units: 1.*

### **MUEP 336: GUITAR TECHNIQUES FOR THE MUSIC EDUCATOR**

Beginning guitar and recorder instruction providing practical application of basic performance techniques to the elementary music classroom for the purpose of teaching. *Units: 1.*

### **MUEP 337: INDIGENEITY UNLEASHED: PERSPECTIVES OF INSTITUTIONAL DECOLONIZATION TODAY**

This course centers Indigeneity by exploring how we may practice and enact decolonization at institutions through ethnographic analyses and studying talk and symbolic practice. We will equip students with the skills to identify and assess how colonialism currently affects them today in an effort to create innovation around systemic structural change. Using an interdisciplinary lens students will investigate the topic through music, art, literature, and ethnographic research. Field experiences and guest presenters from Indigenous communities will be an important component of this course. PREREQUISITES: Sophomore standing *Units: 6.*

*Also listed as Anthropology 337, Ethnic Studies 337*

*Prerequisite: Sophomore standing*

### **MUEP 340: MUSICAL THEATRE PRODUCTION OVERVIEW**

This course is designed to equip future educators with a basic understanding of the various details and responsibilities involved in mounting a musical theatre production. Topics include: choosing a musical, rehearsal schedules, finances, stage direction/blocking, lighting, sound, choreography, and pit orchestra. Offered every other year, fall term (even years). PREREQUISITES: Sophomore standing *Units: 3.*

*Also listed as Theatre Arts 340*

*Prerequisite: Sophomore standing*

### **MUEP 345: APPLIED INSTRUMENTAL PEDAGOGY**

Application of teaching strategies, learning theory, and lesson planning to private lesson instruction. Directed teaching and discussion of journal articles and texts addressing issues relevant to studio teaching. Students enrolled in the course are assigned a student from outside the university and teach an observed private lesson each week. May be repeated for credit. PREREQUISITES: MUEP 201 or MUEP 245 *Units: 3.*

*Prerequisite: MUEP 201 or MUEP 245*

### **MUEP 350: GENERAL MUSIC METHODS II**

This course is designed to develop pedagogical competencies necessary for teaching general music in grades pre-K to 12. This course will strengthen understanding of culturally relevant pedagogy, Kodaly, Orff, and Dalcroze methodologies through solfège, improvisation, theory and movement. A practicum at a diverse area school is a key feature of this course. PREREQUISITES: MUEP 240, MUEP 336 and MURP 223 *Units: 6.*

*Prerequisite: MUEP 240, MUEP 336 and MURP 223*

### **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 practicum hours required prior to student teaching. PREREQUISITES: MUEP 232, MUEP 335, MUEP 350, and MURP 212; or consent of instructor *Units: 3.*

*Prerequisite: MUEP 232, MUEP 335, MUEP 350, and MURP 212; or consent of instructor*

### **MUEP 371: VOICE SCIENCE AND 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. PREREQUISITES: Junior standing or consent of instructor; credit awarded upon completion of MUEP 372 *Units: 3.*

*Prerequisite: Junior standing or consent of instructor; credit awarded upon completion of MUEP 372*

### **MUEP 372: VOICE SCIENCE AND PEDAGOGY II**

A continuation of MUEP 371. Supervised student teaching with weekly lab discussions on issues arising from the teaching experience. PREREQUISITES: MUEP 371 *Units: 1.*

*Prerequisite: MUEP 371*

### **MUEP 373: THE BRAIN, MUSIC AND OPTIMAL PERFORMANCE**

The course will highlight how sensory and motor systems function from the practical perspective of neural anatomy and how we, through the application of cognitive psychology and perceptual-motor skills may optimize our performance in an ideal performing state. Required for the vocal pedagogy minor, but relevant for both vocal and instrumental majors. PREREQUISITES: Junior standing *Units: 3.*

*Prerequisite: Junior standing*

### **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. PREREQUISITES: Sophomore standing, MUTH 301 and BKS Units: 6.

*Prerequisite: Sophomore standing, MUTH 301 and BKS*

### **MUEP 390: TUTORIAL IN MUSIC PEDAGOGY**

PREREQUISITES: Counter Registration Required. Units: 1 TO 98.

*Prerequisite: Counter Registration Required.*

### **MUEP 391: 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. PREREQUISITES: Counter Registration Required Units: 1 TO 98.

*Prerequisite: Counter Registration Required*

### **MUEP 395: 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. PREREQUISITES: Counter Registration Required Units: 1 TO 98.

*Prerequisite: Counter Registration Required*

### **MUEP 399: INDEPENDENT STUDY IN MUSIC PEDAGOGY**

Students considering an honors project should register for independent study for one or more terms. Units: 1 TO 98.

### **MUEP 403: LARGE ENSEMBLE REHEARSAL TECHNIQUES**

Concepts and techniques appropriate to effective leadership of musical ensembles in the 6th-12th grade band, choir, or orchestra setting. Topics include programming and repertoire, rehearsal planning, assessment, community leadership, strategies for working with wind, brass, string, percussion instruments and vocalists, adaptive strategies, and curriculum design with incorporation of national standards for learning.

PREREQUISITES: Junior Standing, MUEP 380 Units: 6.

*Prerequisite: Junior Standing, MUEP 380*

### **MUEP 431: EDUCATING ALL LEARNERS - MUSIC**

This course for students seeking certification to teach music (choral, general, and/or instrumental) focuses on adapting music instruction to learners with disabilities. Practicum of 10 hours required in a music class that includes learners with special needs. PREREQUISITES: EDST 180, junior standing, and declared major in music education Units: 3.

*Also listed as Education 431*

*Prerequisite: EDST 180, junior standing, and declared major in music education*

### **MUEP 451: INSTRUMENTAL METHODS AND REHEARSAL TECHNIQUES**

A continuation of instrumental conducting studies; rehearsal technique; aural, vocal, and written score analysis; and improvisation. Specific topics pertinent to the student's emphasis addressed. Required participation in instrumental lab. PREREQUISITES: MUEP 403 *Units: 6.*

*Prerequisite: MUEP 403*

### **MUEP 452: CHORAL TECHNIQUES, REHEARSAL PROCEDURES AND REPERTOIRE**

Students will transfer ensemble techniques from MUEP 403 to the choral setting. 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. PREREQUISITES: MUEP 403 Corequisite: MUEP 307 *Units: 6.*

*Prerequisite: MUEP 403 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. PREREQUISITES: MUEP 303 *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. PREREQUISITES: MUEP 303 *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. PREREQUISITES: MUEP 303 *Units: 3.*

*Prerequisite: MUEP 303*

### **MUEP 581: STUDENT TEACHING IN PIANO I**

Supervised teaching in the Lawrence Academy of Music. Includes weekly conferences with the pedagogy instructor. PREREQUISITES: MUEP 303 *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. PREREQUISITES: MUEP 303 *Units: 3.*

*Prerequisite: MUEP 303*

### **MUEP 590: TUTORIAL IN MUSIC PEDAGOGY**

PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **MUEP 591: 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. PREREQUISITES: Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

### **MUEP 595: 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. PREREQUISITES: Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

### **MUEP 599: INDEPENDENT STUDY IN MUSIC PEDAGOGY**

Students considering an honors project should register for independent study for one or more terms. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **MUEP 660: ADVANCED METHODS IN TEACHING MUSIC**

The seminar will engage students in critical reflection upon their 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. PREREQUISITES: Concurrent enrollment in MUEP 680 or consent of the instructor *Units: 3.*

*Prerequisite: Concurrent enrollment in MUEP 680 or consent of the instructor*

### **MUEP 680: STUDENT TEACHING**

Student teaching is a full-day, full-semester (18-week) experience combining observation with practice teaching in K-12 schools within a 45-mile radius of campus. Concurrent registration in MUEP 660 Advanced Methods in Teaching Music is required. PREREQUISITES: Senior standing and admission to student teaching program; contact department chair about specific prerequisites and co-requisites *Units: 18.*

*Prerequisite: Senior standing and admission to student teaching program; contact department chair about specific prerequisites and co-requisites*

### **MUEP 685: INTERNATIONAL STUDENT TEACHING**

This is an overseas student teaching option in music. After nine weeks of student teaching in the greater Fox Valley, students will be placed in one of 16 countries to complete the student teaching practicum. International student teaching is available during 13th term. For students in the five-year double-degree program, a 16th term of student teaching is available under the same policy. Students must have been admitted to the student

teaching program and have met all requirements for domestic student teaching. Contact the department chair for additional admission and fee requirements. **PREREQUISITES:** Senior standing and admission to student teaching program; contact the music education department chair about specific prerequisites, co-requisites, admission and fee requirements *Units: 18.*

*Prerequisite: Senior standing and admission to student teaching program; contact the music education department chair about specific prerequisites, co-requisites, admission and fee requirements*

### **MUEP 690: TUTORIAL IN MUSIC PEDAGOGY**

**PREREQUISITES:** Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **MUEP 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. **PREREQUISITES:** Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

### **MUEP 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. **PREREQUISITES:** Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

### **MUEP 699: INDEPENDENT STUDY IN MUSIC PEDAGOGY**

Students considering an honors project should register for independent study for one or more terms. **PREREQUISITES:** Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

## **Courses - Music Ensemble Performance**

### **MUEN 191: DIRECTED STUDY IN MUSIC ENSEMBLE PERFORMANCE**

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. **PREREQUISITES:** Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

### **MUEN 199: INDEPENDENT STUDY MUSIC ENSEMBLE PERFORMANCE**

*Units: 1 TO 98.*

*Prerequisite: Student initiated course form required for registration.*

### **MUEN 203: *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. PREREQUISITES: Registration occurs through the ensemble request process in Voyager. *Units: 1.*

*Prerequisite: Registration occurs through the ensemble request process in Voyager.*

### **MUEN 205: *DANCE COLLECTIVE ENSEMBLE***

This dance performance ensemble is collectively driven and uses dance as an art form to change spaces, shift perspectives, and challenge boundaries. Sparked by experience with Articulating the Solo Body, Contact Improvisation, Ensemble Thinking and/or other Lawrence post-modern dance classes, Dance Collective Ensemble works together using movement and improvisation as foundation for weekly studio practice, building community, and creating performances across campus. May be repeated for credit. PREREQUISITES: Registration occurs through the ensemble request process in Voyager. An audition may be required. *Units: 1.*

*Prerequisite: Registration occurs through the ensemble request process in Voyager. An audition may be required.*

### **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. PREREQUISITES: Registration occurs through the ensemble request process in Voyager. An audition may be required. *Units: 1.*

*Prerequisite: Registration occurs through the ensemble request process in Voyager. An audition may be required.*

### **MUEN 213: *FLUTE ENSEMBLE***

Open to all students by audition. May be repeated for credit. PREREQUISITES: Students may not register for ensemble study using Voyager; registration will be handled by ensemble directors at the beginning of each term. *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 217: *BASSOON ENSEMBLE***

Open to all students by audition. May be repeated for credit. PREREQUISITES: Registration occurs through the ensemble request process in Voyager. An audition may be required. *Units: 1.*

*Prerequisite: Registration occurs through the ensemble request process in Voyager. An audition may be required.*

### **MUEN 220: *BRASS ENSEMBLE***

Open to all students by audition. May be repeated for credit. PREREQUISITES: Registration occurs through the ensemble request process in Voyager. An audition may be required. *Units: 1.*

*Prerequisite: Registration occurs through the ensemble request process in Voyager. An audition may be required.*

### **MUEN 224: *HORN ENSEMBLE***

Open to all students by audition. May be repeated for credit. PREREQUISITES: Registration occurs through the ensemble request process in Voyager. An audition may be required. *Units: 1.*

*Prerequisite: Registration occurs through the ensemble request process in Voyager. An audition may be required.*

### **MUEN 225: *TROMBONE ENSEMBLE***

Open to all students by audition. May be repeated for credit. PREREQUISITES: Registration occurs through the ensemble request process in Voyager. An audition may be required. *Units: 1.*

*Prerequisite: Registration occurs through the ensemble request process in Voyager. An audition may be required.*

### **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. PREREQUISITES: Registration occurs through the ensemble request process in Voyager. An audition may be required. *Units: 1.*

*Prerequisite: Registration occurs through the ensemble request process in Voyager. An audition may be required.*

### **MUEN 231: *KINKAVIWO ENSEMBLE***

Open to all students by audition. African drum and dance ensemble performing music from the Ewe people of Ghana. May be repeated for credit. PREREQUISITES: Registration occurs through the ensemble request process in Voyager. An audition may be required. *Units: 1.*

*Prerequisite: Registration occurs through the ensemble request process in Voyager. An audition may be required.*

### **MUEN 232: *TAMBO TOKÉ***

Open to all students by audition. Drum and song ensemble dedicated to performing Afro-Cuban music. May be repeated for credit. PREREQUISITES: Registration occurs through the ensemble request process in Voyager. An audition may be required. *Units: 1.*

*Prerequisite: Registration occurs through the ensemble request process in Voyager. An audition may be required.*

### **MUEN 233: *SAMBISTAS ENSEMBLE***

Open to all students by audition. Brazilian drum ensemble. May be repeated for credit. PREREQUISITES: Registration occurs through the ensemble request process in Voyager. An audition may be required. *Units: 1.*

*Prerequisite: Registration occurs through the ensemble request process in Voyager. An audition may be required.*

### **MUEN 235: *IMPROVISATION GROUP***

Solo and group improvisation without stylistic boundaries. Membership determined by audition. May be repeated for credit. PREREQUISITES: Registration occurs through the ensemble request process in Voyager. An audition may be required. *Units: 1.*

*Prerequisite: Registration occurs through the ensemble request process in Voyager. An audition may be required.*

### **MUEN 237: POST-MODERN OPERA PERFORMANCE**

A collaborative ensemble environment utilizing improvisation, devised theatre techniques, and extended vocal and performing techniques, with an invited performance at the end of the term. PREREQUISITES: MURP 361  
Registration occurs through the ensemble request process in Voyager. An audition may be required. *Units: 1.*

*Prerequisite: MURP 361 Registration occurs through the ensemble request process in Voyager. An audition may be required.*

### **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. PREREQUISITES: Registration occurs through the ensemble request process in Voyager. An audition may be required. *Units: 1.*

*Prerequisite: Registration occurs through the ensemble request process in Voyager. An audition may be required.*

### **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. PREREQUISITES: Registration occurs through the ensemble request process in Voyager. An audition may be required. *Units: 1.*

*Prerequisite: Registration occurs through the ensemble request process in Voyager. An audition may be required.*

### **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. PREREQUISITES: Consent of instructor and students applied teacher. Supervised Accompanying Permission Form is required to register. Counter Registration Required. *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. PREREQUISITES: Registration occurs through the ensemble request process in Voyager. An audition may be required. *Units: 1.*

*Prerequisite: Registration occurs through the ensemble request process in Voyager. An audition may be required.*

### **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. PREREQUISITES: Registration occurs through the ensemble request process in Voyager. An audition may be required. *Units: 1.*

*Prerequisite: Registration occurs through the ensemble request process in Voyager. An audition may be required.*

### **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. PREREQUISITES: Registration occurs through the ensemble request process in Voyager. An audition may be required. *Units: 1.*

*Prerequisite: Registration occurs through the ensemble request process in Voyager. An audition may be required.*

### **MUEN 278: OPERA PRODUCTION**

Practicum in Opera Production. May be repeated for credit. PREREQUISITES: Registration occurs through the ensemble request process in Voyager. *Units: 1.*

*Prerequisite: Registration occurs through the ensemble request process in Voyager.*

### **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. PREREQUISITES: Students may not register for ensemble study using Voyager; registration will be handled by ensemble directors at the beginning of each term. *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. PREREQUISITES: MUEN 280 Registration occurs through the ensemble request process in Voyager. An audition may be required. *Units: 1.*

*Prerequisite: MUEN 280 Registration occurs through the ensemble request process in Voyager. An audition may be required.*

### **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. PREREQUISITES: Registration occurs through the ensemble request process in Voyager. An audition may be required. *Units: 1.*

*Prerequisite: Registration occurs through the ensemble request process in Voyager. An audition may be required.*

### **MUEN 283: MAINSTAGE OPERA PERFORMANCE**

Final preparation and performance of an operatic or music theatre production. May be repeated for credit. PREREQUISITES: Registration occurs through the ensemble request process in Voyager. An audition may be required. *Units: 1.*

*Prerequisite: Registration occurs through the ensemble request process in Voyager. An audition may be*

required.

### **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. PREREQUISITES: Registration occurs through the ensemble request process in Voyager. An audition may be required. *Units: 1.*

*Prerequisite: Registration occurs through the ensemble request process in Voyager. An audition may be required.*

### **MUEN 285: WIND ENSEMBLE**

A select group chosen by audition. Emphasis on wind repertoire with one player per part. May be repeated for credit. PREREQUISITES: Registration occurs through the ensemble request process in Voyager. An audition may be required. *Units: 1.*

*Prerequisite: Registration occurs through the ensemble request process in Voyager. An audition may be required.*

### **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. PREREQUISITES: Registration occurs through the ensemble request process in Voyager. An audition may be required. *Units: 1.*

*Prerequisite: Registration occurs through the ensemble request process in Voyager. An audition may be required.*

### **MUEN 290: SYMPHONY ORCHESTRA**

Membership determined by audition. May be repeated for credit. PREREQUISITES: Registration occurs through the ensemble request process in Voyager. An audition may be required. *Units: 1.*

*Prerequisite: Registration occurs through the ensemble request process in Voyager. An audition may be required.*

### **MUEN 293: JAZZ BAND**

Membership determined by audition. May be repeated for credit. PREREQUISITES: Registration occurs through the ensemble request process in Voyager. An audition may be required. *Units: 1.*

*Prerequisite: Registration occurs through the ensemble request process in Voyager. An audition may be required.*

### **MUEN 295: JAZZ ENSEMBLE**

Membership determined by audition. May be repeated for credit. PREREQUISITES: Registration occurs through the ensemble request process in Voyager. An audition may be required. *Units: 1.*

*Prerequisite: Registration occurs through the ensemble request process in Voyager. An audition may be required.*

### **MUEN 297: JAZZ WORKSHOP**

Membership determined by audition. May be repeated for credit. PREREQUISITES: Registration occurs through the ensemble request process in Voyager. An audition may be required. *Units: 1.*

*Prerequisite: Registration occurs through the ensemble request process in Voyager. An audition may be required.*

### **MUEN 391: DIRECTED STUDY IN MUSIC ENSEMBLE PERFORMANCE**

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. PREREQUISITES: Student Initiated Course Form Required for Registration. *Units: 1 TO 98.*

*Prerequisite: Student Initiated Course Form Required for Registration.*

### **MUEN 399: INDEPENDENT STUDY IN MUSIC ENSEMBLE PERFORMANCE**

Independent study for music ensemble. PREREQUISITES: Student initiated course form required for registration. *Units: 1 TO 98.*

*Prerequisite: Student initiated course form required for registration.*

### **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. PREREQUISITES: 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 *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. PREREQUISITES: 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 *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. PREREQUISITES: Consent of instructor and students applied teacher Registration occurs through the ensemble request process in Voyager. An audition may be required. *Units: 1.*

*Prerequisite: Consent of instructor and students applied teacher Registration occurs through the ensemble request process in Voyager. An audition may be required.*

## **MUEN 440: ADVANCED CHAMBER MUSIC STUDIES**

Year-long study and performance of advanced chamber music repertoire for an ensemble chosen by audition. May be repeated for credit. PREREQUISITES: Registration occurs through the ensemble request process in Voyager. An audition may be required. *Units: 1.*

*Prerequisite: Registration occurs through the ensemble request process in Voyager. An audition may be required.*

## **Courses - Musicology**

### **MUCO 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.*

### **MUCO 110: TOPICS IN MUSICOLOGY 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 when topic is different. Does not satisfy course requirements for any music major. *Units: 6.*

### **MUCO 111: CANTIGAS DE SANTA MARIA**

The Cantigas de Santa Maria, a thirteenth century songbook from Spain, contains hundreds of songs and dozens of miniatures. In this class, we analyze the poetry, music, and artwork of the Cantigas in regular class meetings for the first five weeks of the term. Students submit short analytic papers in tenth week, but no classes are held after week five. *Units: 3.*

*Also listed as Spanish 302, Art History 160*

### **MUCO 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.*

### **MUCO 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 received, or need to receive credit for MUCO 431. *Offered at the London Centre.* PREREQUISITES: Must be attending the Lawrence London Centre. *Units: 6.*

*Prerequisite: Must be attending the Lawrence London Centre.*

### **MUCO 133: PERSPECTIVES ON GENIUS: THE LIFE AND MUSICAL IMPACT OF BEETHOVEN**

Ludwig van Beethoven, arguably one of the most famous composers of all time, is a compelling and fascinating figure in classical music. He occupies a central position as the architect of musical Romanticism and his

influence continues today. In additions to studying his music from the perspective of his own time, we will discuss his extraordinary creative personality and the reception of his music by subsequent composers and listeners. 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. The course does not satisfy requirements for any music major. Not open to students who have received or need to receive credit for MUCO 433. PREREQUISITES: Must be attending the Lawrence London Centre *Units: 6.*

*Prerequisite: Must be attending the Lawrence London Centre*

### **MUCO 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 MUCO 435. *Offered at the London Centre.* PREREQUISITES: Must be attending the Lawrence London Centre. *Units: 6.*

*Prerequisite: Must be attending the Lawrence London Centre.*

### **MUCO 160: 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. PREREQUISITES: Sophomore standing or consent of instructor *Units: 6.*

*Also listed as Theatre Arts 425*

*Prerequisite: Sophomore standing or consent of instructor*

### **MUCO 180: INTRODUCTION TO WORLD MUSIC & CULTURE**

This course offers the opportunity to explore music and music cultures in a variety of ways and to increase your understanding of and appreciation for musics from around the world. We will discuss what music means to different people, how this relates to issues of ethnic, national, and gender identity, and how music traditions are changing due to forces of globalization. We will also discuss current ethnomusicological and anthropological theories that can help explain and analyze different contexts and understandings of music and why music is so important in human life. Students will apply these ideas in conducting their own musical ethnographic projects. *Units: 6.*

### **MUCO 191: DIRECTED STUDY IN MUSICOLOGY**

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. PREREQUISITES: Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

### **MUCO 195: INTERNSHIP IN MUSICOLOGY**

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. PREREQUISITES: Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

### **MUCO 210: TOPICS IN MUSICOLOGY FOR THE NON-MAJOR**

This course will enable non-music majors to engage with the discipline of music history. May be repeated when topic is different. Does not satisfy course requirements for any music major.

*Topic for*

*Topic for Fall 2022: Popular Music, 1954-1979: The Rise of Rock-and-Roll*

Prerequisites: Sophomore standing

MUCO 210: Topics—Popular Music, 1954-1979: The Rise of Rock-and-Roll Growing out of the need for the young generation to have a voice separate from the influence of their parents, Rock-and-Roll will be studied from its genesis in the mid-50s, combining influences from R&B, Country, and Pop, through the variety of sub-genres in the 60s to the punk and disco movements in the 70s that attempted to return R/R to its simpler origins and functions. Movers and shakers who shaped the growth and acceptance of R/R as a popular artistic culture as well as the multitude of social, political, and racial challenges that influenced popular music will be the basis of discussions in class. *Units: 6.*

*Prerequisite: Sophomore standing*

### **MUCO 211: INTRODUCTION TO MUSICOLOGIES I**

This course is the first in a two-term sequence that takes an interdisciplinary approach to the study of music, drawing upon fields such as ethnomusicology, music history, popular music studies, sound studies, cultural studies, music hermeneutics, gender studies, critical race theory, post-colonial studies, historiography and performance studies. We will explore musical styles, practices, functions, meanings and values in cross-cultural and transhistorical contexts. We will develop--and think critically about--the power of engaging actively, intensively and creatively with questions, ideas and sources. PREREQUISITES: Sophomore standing *Units: 6.*

*Prerequisite: Sophomore standing*

### **MUCO 212: INTRODUCTION TO MUSICOLOGIES II**

This course is the second in a two-term sequence that takes an interdisciplinary approach to the study of music, drawing upon fields such as ethnomusicology, music history, popular music studies, sound studies, cultural studies, music hermeneutics, gender studies, critical race theory, post-colonial studies, historiography and performance studies. We will explore musical styles, practices, functions, meanings and values in cross-cultural and transhistorical contexts. We will develop--and think critically about--the power of engaging actively, intensively and creatively with questions, ideas and sources. PREREQUISITES: MUCO 211 *Units: 6.*

*Prerequisite: MUCO 211*

### **MUCO 221: 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. PREREQUISITES: Sophomore standing *Units: 6*.

*Also listed as Gender Studies 222*

*Prerequisite: Sophomore standing*

### **MUCO 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. Not open to students who have received, or need to receive, credit for MUCO 423.

PREREQUISITES: Sophomore standing *Units: 6*.

*Prerequisite: Sophomore standing*

### **MUCO 225: MUSIC IN THE MONASTERY**

This course examines intersections of music and art in pre- and early-modern monasteries. Students will gain facility analyzing visual and musical traditions as we explore themes such as the cosmos and community, gender, and the Christian body politic. Students will learn about varied disciplinary approaches to chant and polyphony, architecture and sculpture, the politics of enclosure, and practices of faith and spirituality, among other topics. PREREQUISITES: Sophomore Standing *Units: 6*.

*Also listed as Art History 225*

*Prerequisite: Sophomore Standing*

### **MUCO 232: SIGNIFYING IDENTITY: THE SEMIOTICS OF EMBODYING MUSICAL GENRE AFFILIATIONS**

The exploration of how people embody and display their identities as they relate to musical genres. From Doc Martens to zoot suits, body mod to makeup, we will learn about the semiotics of musical genre affiliations, paying attention to how embodied expressions of affiliation intersect with different aspects of identities such as ethnicity, queerness, or race. Class includes discussions, projects, and speakers. PREREQUISITES: Sophomore Standing *Units: 6*.

*Also listed as Anthropology 332, Linguistics 232*

*Prerequisite: Sophomore Standing*

### **MUCO 390: TUTORIAL IN STUDIES MUSICOLOGY**

*Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

### **MUCO 391: DIRECTED STUDY IN MUSICOLOGY**

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. PREREQUISITES: Counter Registration Required *Units: 1 TO 98*.

*Prerequisite: Counter Registration Required*

### **MUCO 395: INTERNSHIP IN MUSICOLOGY**

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. PREREQUISITES: Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

### **MUCO 399: INDEPENDENT STUDY IN MUSICOLOGY**

Students considering an honors project should register for independent study for one or more terms. PREREQUISITES: Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

### **MUCO 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, and that it is a universal language. This study will also assess the extent that music is a social activity informed by cultural context and will consider music from a broad variety of styles and cultures. PREREQUISITES: MUCO 212 or consent of instructor *Units: 6.*

*Prerequisite: MUCO 212 or consent of instructor*

### **MUCO 421: MUSIC AND GENDER**

In this course we will explore some of the relationships between western musickings and gender identities in specific contexts. We will consider musickings' functions as reflections of, reactions to, and active participants in gender construction, experience, and expression. We will examine musicking as a normative force and as a space for being and making in defiance of or complex interaction with hegemonic control. We will explore ambiguities and possibilities of queer musicology, virtualities, and intersectionalities. PREREQUISITES: MUCO 212 or MUCO 202 *Units: 6.*

*Also listed as Gender Studies 421*

*Prerequisite: MUCO 212 or MUCO 202*

### **MUCO 422: BORROWED MUSIC IN THE MOVIES**

In this course we will explore some of the complexities, ambiguities, and powers of film musickings. Focusing primarily on pre-existing musics in filmscapes, we will pursue the multiple ways that film musickings reveal, reinforce, cross, and break constructed boundaries of space, time, identity, and community. Engaging with elements of film, film sound, and film music studies, gender and queer theory, critical race theory, and disability theory, we will experience and examine the spaces that film musickings can create and provide access to; the pleasures, violences, and possibilities of those spaces; as well as ambiguities and possibilities of interpretation. PREREQUISITES: MUCO 212 or MUCO 202 *Units: 6.*

*Also listed as Film Studies 422*

*Prerequisite: MUCO 212 or MUCO 202*

### **MUCO 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. Not open to students who have received credit, or need to receive credit, for MUCO 223. PREREQUISITES: MUCO 212 or MUCO 202 *Units: 6.*

*Prerequisite: MUCO 212 or MUCO 202*

### **MUCO 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 MUCO 131. *Offered at the London Centre.* PREREQUISITES: Must be attending the Lawrence London Centre. MUCO 212 *Units: 6.*

*Prerequisite: Must be attending the Lawrence London Centre. MUCO 212*

### **MUCO 433: *PERSPECTIVES ON GENIUS: THE LIFE AND MUSICAL IMPACT OF BEETHOVEN***

Ludwig van Beethoven, arguably one of the most famous composers of all time, is a compelling and fascinating figure in classical music. He occupies a central position as the architect of musical Romanticism and his influence continues today. In additions to studying his music from the perspective of his own time, we will discuss his extraordinary creative personality and the reception of his music by subsequent composers and listeners. 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 received credit for MUCO 133. PREREQUISITES: MUCO 202; must be attending the Lawrence London Centre *Units: 6.*

*Prerequisite: MUCO 202; must be attending the Lawrence London Centre*

### **MUCO 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 MUCO 135. *Offered at the London Centre.* PREREQUISITES: MUCO 202 *Units: 6.*

*Prerequisite: MUCO 202*

### **MUCO 440: *TOPICS IN MUSICOLOGY: 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 when topic is different. *Units: 6.*

*Prerequisite: MUCO 212 or MUCO 202*

### **MUCO 441: *DEBUSSY: CONTEXTUAL PERSPECTIVES***

In this course we will explore the music, attitudes, and life of Claude Debussy in interaction with multiple cultural forces. We will explore the interpretive potential of resonances between Debussy's music and the political, social, and artistic world of Paris at the turn of the twentieth century; conceptions and constructions of cultural identities; questions, challenges, and possibilities related to biography and primary source materials; possibilities related to practices of listening, analysis, and performance; and the power of writing. We will consider some of the ways that the value and meaning of Debussy's music have been categorized and theorized during his life and after, as well as some of the ways that these discourses might affect conceptions of and relationships with this music, blocking and revealing possibilities. **PREREQUISITES:** MUCO 212 or MUCO 202 *Units: 6.*

*Prerequisite: MUCO 212 or MUCO 202*

### **MUCO 450: *TOPICS IN MUSICOLOGY: 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 when topic is different.

*Topic for*

In this course,

*Topic for Fall 2022: Music and Disability*

**Prerequisites:** MUCO 212 or MUCO 202

In this course we will pursue the multifaceted relationship between music and conceptions, constructions, and experiences of disability. Grounded in the field of Disability Studies, our exploration will involve performers, composers, and hearers; multiple musical genres, traditions, and practices; and issues of meaning, value, and difference. We will consider music's power to reflect and configure bodies, attitudes, and ideas—to limit, but also to provide access to extraordinary possibilities. *Units: 6.*

*Prerequisite: MUCO 212 or MUCO 202*

### **MUCO 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. **PREREQUISITES:** MUCO 212 or MUCO 202 *Units: 6.*

*Prerequisite: MUCO 212 or MUCO 202*

### **MUCO 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. **PREREQUISITES:** MUCO 212 or MUCO 202 *Units: 6.*

*Prerequisite: MUCO 212 or MUCO 202*

### **MUCO 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. PREREQUISITES: MUCO 212 or MUCO 202 *Units: 6.*

*Prerequisite: MUCO 212 or MUCO 202*

### **MUCO 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. PREREQUISITES: MUCO 212 *Units: 6.*

*Prerequisite: MUCO 212 or MUCO 202*

### **MUCO 460: TOPICS IN MUSICOLOGY: 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*

In this course,

*Topic for Fall 2022: Music and Power Under the Sun King*

Prerequisites: MUCO 212 or MUCO 202

In this course we will explore the relationships between musickings (ballet, opera, court dance, instrumental music, and sacred music) and power during the reign of Louis XIV. Course materials will also engage with other intersections of French culture and power in art, architecture, literature, fashion, and modes of decorum. *Units: 6.*

*Prerequisite: MUCO 212 or MUCO 202*

### **MUCO 470: TOPICS IN ETHNOMUSICOLOGY - REGIONS**

An examination of music of a particular geographic region or diasporic group. Topics and prerequisites may vary from year to year. May be repeated when topic is different.

*Topic for Fall 2019: Music of India*

We will explore aspects of North and South Indian classical musics and dance in this course, and touch on folk and popular musics as well. Students will become familiar with Indian tuning systems, rhythmic patterns, formal structures, and performance practices. We will examine music's role in society in India as well as among diasporic populations, and investigate music's connections to other areas of artistic, social, spiritual, and political life. *Units: 6.*

*Also listed as Global Studies 470*

*Prerequisite: MUCO 212 or MUCO 202 or consent of instructor*

### **MUCO 471: PERFORMING ARTS OF BALI**

This course explores the intersections of Balinese music, dance, drama, and ritual. Discussions will include how globalization, tourism, and economic and religious tensions affect the arts and performer's lives. Students will have hands-on experience learning to play Balinese gamelan instruments. PREREQUISITES: MUCO 212 or MUCO 202 or consent of instructor. *Units: 6.*

*Also listed as Ethnic Studies 471, Global Studies 471*

*Prerequisite: MUCO 212 or MUCO 202 or consent of instructor.*

### **MUCO 490: TOPICS IN ETHNOMUSICOLOGY - ISSUES**

An examination of a particular issue in ethnomusicological study. Topics and prerequisites may vary from course to course.

*Topic for Fall 2022: Sublime Frequencies: Punk Ethnography in our Digital Age*

*Prerequisites: MUCO 212 or MUCO 202 or consent of instructor.*

This course explores the idea of record production as ethnographic work, with a focus on the radical DIY record label Sublime Frequencies, founded by brothers Alan and Richard Bishop in 2003 in Seattle. As members of the punk band Sun City Girls, the Bishops traveled around the world to capture their sonic experiences in urban and rural settings typically regarded as inaccessible to western visitors, exploring places such as Iraq, North Korea, Syria, and Southeast Asia. Students will engage with the Sublime Frequencies catalog through video clips and sound recordings and will critically examine their work through discussion of a collection of essays that consider how the Bishops' ethical and aesthetic foundations in the American underground, and their uniquely "punk" approach to the academic discipline of ethnomusicology, leads to questions about appropriation, intellectual property, and colonialism, and how these questions are particularly challenging when positioned within our increasingly globalized and digitized twenty-first century. *Units: 6.*

*Prerequisite: MUCO 212 or MUCO 202 or consent of instructor.*

### **MUCO 492: MUSIC AND GLOBALIZATION**

How do forces of globalization affect musicians and music-making? How do people use music to make sense of their transnational and cross-border lives and identities? What happens to the meanings in music when it travels across borders and boundaries, is performed by new musicians in different contexts, and is heard by new listeners? What happens to local or ritual meanings when it becomes commodified and commercialized? Do international copyright laws adequately protect composers and musicians when their music travels, and what about when such laws are at odds with local notions of creation and ownership? This course explores answers to these questions through case studies on a variety of musical genres and places around the world. **PREREQUISITES:** MUCO 212 or GLST 100 *Units: 6.*

*Also listed as Global Studies 492*

*Prerequisite: MUCO 212 or GLST 100*

### **MUCO 493: MUSIC AND GENDER IN CROSS-CULTURAL PERSPECTIVE**

This course examines the relationship between the constructions of gender identities and music performance and practice, and looks at history and development of approaches, theories, and studies regarding this relationship. Each week contains theoretical readings from gender studies, women's studies, or feminist scholarship as well as ethnomusicological case studies from a variety of locations around the world. **PREREQUISITES:** MUCO 212 or MUCO 202 or GEST 100 or GLST 100 or consent of instructor. *Units: 6.*

*Also listed as Gender Studies 493*

*Prerequisite: MUCO 212 or MUCO 202 or GEST 100 or GLST 100 or consent of instructor.*

### **MUCO 494: MUSIC AND THE ENVIRONMENT**

In many societies around the world, people use music and specialized listening skills to connect with nature, specific places, and surrounding environments. This course will explore music performance practices that

express or enact these connections. Course materials will draw on ethnographic case studies and the growing fields of ecomusicology, acoustic ecology, and zoomusicology. PREREQUISITES: MUCO 212 or MUCO 202 or ENST 127 or consent of instructor *Units: 6.*

*Also listed as Global Studies 494, Environmental Studies 494*

*Prerequisite: MUCO 212 or MUCO 202 or ENST 127 or consent of instructor*

### **MUCO 495: METHODS, THEORIES, AND DEBATES IN ETHNOMUSICOLOGY**

This course will cover the history of the field of ethnomusicology, key debates, influential scholars, and significant case studies. Important concepts will include fieldwork methods, organology (the study of musical instruments), tuning systems, transcription, and issues in applied ethnomusicology. This course will be particularly helpful to students considering graduate work in ethnomusicology. PREREQUISITES: MUCO 212 or MUCO 202 or ANTH 110 or consent of instructor *Units: 6.*

*Prerequisite: MUCO 212 or MUCO 202 or ANTH 110 or consent of instructor*

### **MUCO 590: TUTORIAL IN STUDIES MUSICOLOGY**

*Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

### **MUCO 591: DIRECTED STUDY IN MUSICOLOGY**

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. PREREQUISITES: Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

### **MUCO 595: INTERNSHIP IN MUSICOLOGY**

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. PREREQUISITES: Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

### **MUCO 599: INDEPENDENT STUDY IN MUSICOLOGY**

Advanced study culminating in an independent project, to be completed in consultation with a member of the musicology faculty. Students must have fulfilled all required musicology coursework for the degree and major before undertaking an independent study. Students considering an independent study should consult in advance (preferably during spring registration) with the member of the department with whom they wish to work. PREREQUISITES: Counter Registration Required and Completion of required musicology coursework *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required and Completion of required musicology coursework*

### **MUCO 690: TUTORIAL IN STUDIES MUSICOLOGY**

*Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

### **MUCO 691: DIRECTED STUDY IN MUSICOLOGY**

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. PREREQUISITES: Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

### **MUCO 695: INTERNSHIP IN MUSICOLOGY**

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. PREREQUISITES: Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

### **MUCO 699: INDEPENDENT STUDY IN MUSICOLOGY**

Advanced study culminating in an independent project, to be completed in consultation with a member of the musicology faculty. Students must have fulfilled all required musicology coursework for the degree and major before undertaking an independent study. Students considering an independent study should consult in advance (preferably during spring registration) with the member of the department with whom they wish to work. PREREQUISITES: Counter Registration Required and completion of required musicology coursework *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required and completion of required musicology coursework*

## **Courses - Applied Music Indiv Instruct**

### **MUIN 102: ELEMENTARY INDIVIDUAL INSTRUCTION - ORGAN**

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. PREREQUISITES: Credit awarded upon completion of three terms of study *Units: 2.*

*Prerequisite: Credit awarded upon completion of three terms of study*

### **MUIN 103: ELEMENTARY INDIVIDUAL INSTRUCTION - VOICE**

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. PREREQUISITES: Credit awarded upon completion of three terms of study *Units: 2.*

*Prerequisite: Credit awarded upon completion of three terms of study*

#### **MUIN 104: ELEMENTARY INDIVIDUAL INSTRUCTION - VIOLIN**

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. PREREQUISITES: Credit awarded upon completion of three terms of study *Units: 2.*

*Prerequisite: Credit awarded upon completion of three terms of study*

#### **MUIN 105: ELEMENTARY INDIVIDUAL INSTRUCTION - VIOLA**

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. PREREQUISITES: Credit awarded upon completion of three terms of study *Units: 2.*

*Prerequisite: Credit awarded upon completion of three terms of study*

#### **MUIN 106: ELEMENTARY INDIVIDUAL INSTRUCTION - CELLO**

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. PREREQUISITES: Credit awarded upon completion of three terms of study *Units: 2.*

*Prerequisite: Credit awarded upon completion of three terms of study*

#### **MUIN 107: ELEMENTARY INDIVIDUAL INSTRUCTION - DOUBLEBASS**

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. PREREQUISITES: Credit awarded upon completion of three terms of study *Units: 2.*

*Prerequisite: Credit awarded upon completion of three terms of study*

#### **MUIN 108: ELEMENTARY INDIVIDUAL INSTRUCTION - GUITAR**

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. PREREQUISITES: Credit awarded upon completion of three terms of study *Units: 2.*

*Prerequisite: Credit awarded upon completion of three terms of study*

#### **MUIN 109: ELEMENTARY INDIVIDUAL INSTRUCTION - FLUTE**

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. PREREQUISITES: Credit awarded upon completion of three terms of study *Units: 2.*

*Prerequisite: Credit awarded upon completion of three terms of study*

### **MUIN 110: ELEMENTARY INDIVIDUAL INSTRUCTION - OBOE**

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. PREREQUISITES: Credit awarded upon completion of three terms of study *Units: 2.*

*Prerequisite: Credit awarded upon completion of three terms of study*

### **MUIN 111: ELEMENTARY INDIVIDUAL INSTRUCTION - CLARINET**

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. PREREQUISITES: Credit awarded upon completion of three terms of study *Units: 2.*

*Prerequisite: Credit awarded upon completion of three terms of study*

### **MUIN 112: ELEMENTARY INDIVIDUAL INSTRUCTION - SAXOPHONE**

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. PREREQUISITES: Credit awarded upon completion of three terms of study *Units: 2.*

*Prerequisite: Credit awarded upon completion of three terms of study*

### **MUIN 113: ELEMENTARY INDIVIDUAL INSTRUCTION - BASSOON**

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. PREREQUISITES: Credit awarded upon completion of three terms of study *Units: 2.*

*Prerequisite: Credit awarded upon completion of three terms of study*

### **MUIN 114: ELEMENTARY INDIVIDUAL INSTRUCTION - HORN**

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. PREREQUISITES: Credit awarded upon completion of three terms of study *Units: 2.*

*Prerequisite: Credit awarded upon completion of three terms of study*

**MUIN 115: ELEMENTARY INDIVIDUAL INSTRUCTION - TRUMPET**

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. PREREQUISITES: Credit awarded upon completion of three terms of study *Units: 2.*

*Prerequisite: Credit awarded upon completion of three terms of study*

**MUIN 116: ELEMENTARY INDIVIDUAL INSTRUCTION - TROMBONE**

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. PREREQUISITES: Credit awarded upon completion of three terms of study *Units: 2.*

*Prerequisite: Credit awarded upon completion of three terms of study*

**MUIN 117: ELEMENTARY INDIVIDUAL INSTRUCTION - EUPHONIUM**

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.*

**MUIN 118: ELEMENTARY INDIVIDUAL INSTRUCTION - TUBA**

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.*

**MUIN 119: ELEMENTARY INDIVIDUAL INSTRUCTION - HARPSICHORD**

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. PREREQUISITES: Credit awarded upon completion of three terms of study *Units: 2.*

*Prerequisite: Credit awarded upon completion of three terms of study*

**MUIN 120: ELEMENTARY INDIVIDUAL INSTRUCTION - PERCUSSION**

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. PREREQUISITES: Credit awarded upon completion of three terms of study *Units: 2.*

*Prerequisite: Credit awarded upon completion of three terms of study*

**MUIN 121: ELEMENTARY HARP**

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.*

### **MUIN 151: ELEMENTARY GROUP PIANO**

*Units: 2.*

*Prerequisite: Credit awarded upon completion of three terms of study*

### **MUIN 152: ELEMENTARY GROUP GUITAR**

A beginning course intended for students with little or no experience with the guitar. The purpose of this class is to provide a broad experience with the instrument. Students will learn to read music notation, use a variety of techniques and become familiar with several different styles of guitar music (Classical, Blues, Flamenco and Rock). Guitars will be provided if needed. Course may be repeated for up to 6 units. *Units: 2.*

### **MUIN 153: ELEMENTARY GROUP VOICE**

A beginning voice course for students without formal vocal study and those returning to vocal study after an extended absence. Study of body alignment, breath, onset, phonation, diction, and song interpretation. Does not satisfy requirements for any music major. May be repeated for credit. PREREQUISITES: Instructor Approval *Units: 1.*

*Prerequisite: Instructor Approval*

### **MUIN 191: 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. PREREQUISITES: Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

### **MUIN 195: INTERNSHIP IN INDIV PERF INSTR**

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. *Units: 1 TO 98.*

### **MUIN 251: INTERMEDIATE GROUP PIANO**

An upper-level keyboard proficiency course for students enrolling in any music education emphasis that includes general music. Students will develop a comfort level at the piano so it can be used as a teaching tool in the classroom. Main topics include vocal warm-ups, improvisation, creating and transposing accompaniments, reading three-part scores and teaching from the keyboard. PREREQUISITES: MURP 203 or equivalent *Units: 2.*

*Prerequisite: MURP 203 or equivalent*

### **MUIN 301: PIANO**

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 302: ORGAN**

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 303: VOICE**

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 304: VIOLIN**

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 305: VIOLA**

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 306: CELLO**

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 TO 6.*

### **MUIN 307: DOUBLEBASS**

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 308: GUITAR**

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 309: FLUTE**

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 310: OBOE**

*Units: 3 OR 6.*

### **MUIN 311: CLARINET**

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 312: SAXOPHONE**

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 313: BASSOON**

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 314: HORN**

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 315: TRUMPET**

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 316: TROMBONE**

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 317: EUPHONIUM**

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 318: TUBA**

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 319: HARPSICHORD**

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 320: PERCUSSION**

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 321: HARP**

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 329: JAZZ STUDIES**

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 354: TAUBMAN APPROACH - PIANO**

Instruction in the Taubman Approach *Units: 1 OR 3.*

### **MUIN 355: LONDON STUDIO INSTRUCTION**

Individual instruction in music at the London Centre. PREREQUISITES: Must be attending the Lawrence London Centre. *Units: 3.*

*Prerequisite: Must be attending the Lawrence London Centre.*

### **MUIN 390: TUTORIAL IN INDIVIDUAL PERFORMANCE INSTRUCTION**

*Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **MUIN 391: 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. PREREQUISITES: Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

**MUIN 399: INDEPENDENT STUDY IN INDIVIDUAL PERFORMANCE INSTRUCTION**

*Units: 1 TO 98.*

**MUIN 590: TUTORIAL IN INDIVIDUAL PERFORMANCE INSTRUCTION**

*Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

**MUIN 591: 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. PREREQUISITES: Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

**MUIN 599: INDEPENDENT STUDY IN INDIVIDUAL PERFORMANCE INSTRUCTION**

*Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

**MUIN 690: TUTORIAL IN INDIVIDUAL PERFORMANCE INSTRUCTION**

*Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

**MUIN 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. PREREQUISITES: Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

**MUIN 699: INDEPENDENT STUDY IN INDIVIDUAL PERFORMANCE INSTRUCTION**

*Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

## **Courses - Music Repertoire-Perf Study**

**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. PREREQUISITES: Credit awarded upon completion of three terms of study *Units: 2.*

*Prerequisite: Credit awarded upon completion of three terms of study*

### **MURP 102: *ELEMENTARY GUITAR***

A beginning course intended for students with little or no experience with the guitar. The purpose of this class is to provide a broad experience with the instrument. Students will learn to read music notation, use a variety of techniques and become familiar with several different styles of guitar music (Classical, Blues, Flamenco and Rock). Guitars will be provided if needed. Course may be repeated for up to 6 units. *Units: 2.*

### **MURP 110: *TOPICS IN REPERTOIRE AND PERFORMANCE***

This class will enable a variety of performance and repertoire topics to be studied for performers of all musical disciplines. Topics will include but not be limited to stage presence, memorization, professional performance strategies, repertoire history and repertoire development. *Units: 1 TO 6.*

### **MURP 120: *DEEP LISTENING LAB***

In this hands-on studio course, we will discover what it means to actively and deeply listen, and how expansive listening encourages one's creative impulse. using the works of Pauline Oliveros, John Cage, John Muir and others as a starting point, we will explore the vast yet nuanced world of sound, deep listening, and the creative act. Open to all creative explorers. *Units: 3.*

### **MURP 121: *SOUND LAB***

This immersive, experiential topics course will explore specific musical topics through a variety of approaches and methodologies. Critical listening and analysis of musical works, class visits from culture bearers, research and class readings, along with song writing, composing, improvisation, performing, and recording will all play a part in the exploration of a particular music tradition. Learning will be assessed through active participation, written assignments, creative assignments and a final project. May be repeated when topic is different.

*Topic for Fall 2022: American Roots Music*

Prerequisites: None

This immersive, experiential topics course will explore specific musical topics through a variety of approaches and methodologies. Critical listening and analysis of musical works, class visits from culture bearers, research and class readings, along with song writing, composing, improvisation, performing, and recording will all play apart in the exploration of a particular music tradition. Learning will be assessed through active participation, written assignments, creative assignments and a final project. May be repeated when topic is different. *Units: 3.*

### **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.

PREREQUISITES: MURP 101 *Units: 2.*

*Prerequisite: MURP 101*

### **MURP 191: *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. PREREQUISITES: Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

### **MURP 195: *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. PREREQUISITES: Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

### **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 223: EDUCATORS' KEYBOARD SKILLS**

An upper-level keyboard proficiency course for students enrolling in any music education emphasis that includes general music. Students will develop a comfort level at the piano so it can be used as a teaching tool in the classroom. Main topics include vocal warm-ups, improvisation, creating and transposing accompaniments, reading three-part scores and teaching from the keyboard. PREREQUISITES: MURP 203 or equivalent *Units: 1.*

*Prerequisite: MURP 203 or equivalent*

### **MURP 271: INTRODUCTION TO VOCAL STUDIES**

An orientation class with flexible content that includes strategies and resources for the college student beginning the study of voice. PREREQUISITES: Concurrent registration in voice lessons *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. PREREQUISITES: Concurrent registration in voice lessons *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. PREREQUISITES: Concurrent registration in voice lessons *Units: 1.*

*Prerequisite: Concurrent registration in voice lessons*

### **MURP 274: GERMAN SINGING DICTION**

An introduction to the pronunciation of written German for the singer. PREREQUISITES: Concurrent registration in voice lessons *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. PREREQUISITES: Prerequisite MURP 272 English diction or permission of instructor. *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. PREREQUISITES: Concurrent registration in voice lessons *Units: 1.*

*Prerequisite: Concurrent registration in voice lessons*

### **MURP 285: *THE ELOQUENT MUSICIAN***

Course explores and promotes the art of speaking elegantly and knowledgeably about music in the context of live musical performance, and writing engagingly about music for a general audience. Course designed for music majors and other students with strong musical background and interest in interactive concerts and other public programs. PREREQUISITES: Major in music or consent of instructor *Units: 6.*

*Also listed as Innovation & Entrepreneurship 285*

*Prerequisite: Major in music or consent of instructor*

### **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 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. PREREQUISITES: 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. *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.*

### **MURP 315: *FRETBOARD HARMONY FOR THE CLASSICAL GUITARIST***

Study of intervals, chord construction, and voice leading, using exercises and examples from the standard guitar repertoire. Includes sight-reading, realizing figured bass and harmonizing melodies. PREREQUISITES: Sophomore standing *Units: 1.*

*Prerequisite: Sophomore standing*

### **MURP 317: *HISTORY AND LITERATURE OF THE GUITAR***

A study of the guitar and its music from 1500 to present. This course examines the physical evolution of the instrument and surveys the important performers and composers for the guitar and other plucked instruments. Includes readings, listening, analysis, performance, transcription and written assignments. PREREQUISITES: Sophomore standing *Units: 1.*

*Prerequisite: Sophomore standing*

### **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. PREREQUISITES: MUJI 350 or MUTH 301; MURP 203 or MURP 302 *Units: 3.*

*Prerequisite: MUJI 350 or MUTH 301; MURP 203 or MURP 302*

### **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 350: SUZUKI/VOCAL VIEWPOINTS**

Explore vocal production from a physically-based, full-bodied approach using the methodology of Tadashi Suzuki and the research of Anne Bogart. A physically-demanding course helping the body gain strength and agility, the voice increase range and capacity, and the actor's brain expand spontaneous, kinesthetic awareness and responsiveness. PREREQUISITES: MUEN 280 *Units: 6.*

*Prerequisite: MUEN 280*

### **MURP 361: ACTING FOR SINGERS 1**

An opera/song performance course that develops the fundamental tools to create on stage. This term concentrates on basic acting techniques beginning with spoken word and then transferring those skills to intoned speech (song). These building blocks include understanding and breaking down a script, navigating the stage and movement on it, creating and motivating character choices, response to your fellow performers, honesty on-stage, concentration, imagination and commitment to the script, the environment and your character. PREREQUISITES: Two terms of MUIN 303 and instructor approval *Units: 3.*

*Also listed as Theatre Arts 362*

*Prerequisite: Two terms of MUIN 303 and instructor approval*

### **MURP 362: ACTING FOR SINGERS 2**

An opera/song performance course that develops the fundamental tools to create on stage. This term concentrates on expanding the techniques from the previous term and on developing a stronger sense of ensemble work. Viewpoints and Theatrical Composition will be the main thrust of the exploration, using the current song and aria repertoire of the individual student. PREREQUISITES: MURP 361 or equivalent *Units: 3.*

*Also listed as Theatre Arts 364*

*Prerequisite: MURP 361 or equivalent*

### **MURP 390: TUTORIAL STUDIES IN MUSIC REPERTOIRE AND PERFORMANCE**

PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **MURP 391: 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. PREREQUISITES: Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

### **MURP 395: *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. PREREQUISITES: Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

### **MURP 399: *INDEPENDENT STUDY IN MUSIC REPERTOIRE AND PERFORMANCE***

Students considering an honors project should register for independent study for one or more terms. *Units: 1 TO 98.*

### **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. PREREQUISITES: Must be attending the LU Francophone Seminar *Units: 3.*

*Also listed as Global Studies 404, French 404*

*Prerequisite: Must be attending the LU Francophone Seminar*

### **MURP 420: *COLLABORATIVE PIANO: VOCAL***

Vocal accompanying for the advanced pianist, including art song, opera recitative, and aria. Performances required of all participants. *Units: 3.*

### **MURP 425: *COLLABORATIVE PIANO: INSTRUMENTAL***

Instrumental accompanying for the advanced pianist, including duo sonatas and concerto orchestral reductions. Performances required of all participants. *Units: 3.*

### **MURP 430: *ALEXANDER TECHNIQUE II: FOR PERFORMERS***

This studio-style class applies Alexander Movement Technique (AMT) to performance broadly defined as an activity completed for an audience. Students will work on performance and rehearsal/practice techniques with hands-on guidance from the teacher and will also serve as trained observers for their colleagues. May be taken for 3 or 6 units. PREREQUISITES: THAR 310 *Units: 3 OR 6.*

*Also listed as Music 410, Theatre Arts 430*

*Prerequisite: THAR 310*

### **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. PREREQUISITES: Consent of instructor *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. PREREQUISITES: MUPR 451 *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. PREREQUISITES: Junior standing or consent of instructor *Units: 3.*

*Prerequisite: Junior standing or consent of instructor*

### **MURP 465: WOODWIND CHAMBER MUSIC LITERATURE**

A general survey of woodwind chamber music ensembles and music from the classical period to the current day, concentrating on the wind quintet, but also including other ensembles that feature at least one woodwind instrument. PREREQUISITES: Junior standing *Units: 1.*

*Prerequisite: Junior standing*

### **MURP 590: TUTORIAL STUDIES IN MUSIC REPERTOIRE AND PERFORMANCE**

PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **MURP 591: 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. PREREQUISITES: Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

### **MURP 595: 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. PREREQUISITES: Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

### **MURP 599: INDEPENDENT STUDY IN MUSIC REPERTOIRE AND PERFORMANCE**

Students considering an honors project should register for independent study for one or more terms. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **MURP 690: TUTORIAL STUDIES IN MUSIC REPERTOIRE AND PERFORMANCE**

PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **MURP 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. PREREQUISITES: Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

### **MURP 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. PREREQUISITES: Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

### **MURP 699: INDEPENDENT STUDY IN MUSIC REPERTOIRE AND PERFORMANCE**

Students considering an honors project should register for independent study for one or more terms. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

## **Courses - Music Theory**

### **MUTH 100: FUNDAMENTALS OF MUSIC THEORY**

An introduction to the fundamentals of music theory—notation, scales, intervals, chords, keys, basic harmony and counterpoint—and their practical application in analysis, composition, and performance. No previous musical experience required. N.B.: course does not apply toward the B.Mus degree program. *Units: 3.*

### **MUTH 151: MUSIC FUNDAMENTALS, THEORY, AND ANALYSIS 1**

An expanded version of MUTH 201, this course provides a comprehensive introduction to tonal harmony, counterpoint, and associated formal procedures in conjunction with a thorough grounding in music fundamentals. Placement determined by the Music Theory Placement Exam. Corequisites: MUTH 161 and 171 PREREQUISITES: Placement Corequisites: MUTH 161, 171 *Units: 6.*

*Prerequisite: Placement Corequisites: MUTH 161, 171*

### **MUTH 152: MUSIC FUNDAMENTALS, THEORY, AND ANALYSIS 2**

An expanded version of MUTH 202, this course provides a comprehensive introduction to tonal harmony, counterpoint, and associated formal procedures in conjunction with a thorough grounding in music fundamentals. Corequisites: MUTH 162, 172. PREREQUISITES: MUTH 151 Corequisites: MUTH 162, 172 *Units: 6.*

*Prerequisite: MUTH 151 Corequisites: MUTH 162, 172*

### **MUTH 161: AURAL SKILLS FUNDAMENTALS 1**

Ear training commensurate with MUTH 151. Melodic, harmonic, and contrapuntal dictation, error detection, and aural perception of basic formal procedures. Placement determined by the Music Theory Placement Exam. Credit does not count toward the B. Mus. degree. Corequisites: MUTH 151, 171. PREREQUISITES: Placement Corequisites: MUTH 151, 171 Credit does not count toward the B. Mus. degree *Units: 1.*

*Prerequisite: Placement Corequisites: MUTH 151, 171 Credit does not count toward the B. Mus. degree*

### **MUTH 162: AURAL SKILLS FUNDAMENTALS 2**

Ear training commensurate with MUTH 152. Melodic, harmonic, and contrapuntal dictation, error detection, and aural perception of basic formal procedures. Credit does not count toward the B.Mus. degree. Corequisites: MUTH 152, 172. PREREQUISITES: MUTH 161 Corequisites: MUTH 152, 172 Credit does not count toward the B.Mus degree *Units: 1.*

*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. Solo and ensemble singing using solfège; treble and bass clefs only. One- and two-part rhythmic exercises. Improvisation. Placement determined by corequisite course placement. Credit does not count toward the B. Mus. degree. Corequisites: MUTH 151, 161. PREREQUISITES: Placement Corequisites: MUTH 151, 161 Credit does not count toward the B. Mus. degree *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 152. Solo and ensemble singing using solfège; treble and bass clefs only. One- and two-part rhythmic exercises. Improvisation. Credit does not count toward the B. Mus. degree. Corequisites: MUTH 152, 162. PREREQUISITES: MUTH 171 Corequisites: MUTH 152, 162 Credit does not count toward the B. Mus. degree *Units: 1.*

*Prerequisite: MUTH 171 Corequisites: MUTH 152, 162 Credit does not count toward the B. Mus. degree*

### **MUTH 191: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **MUTH 195: 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. PREREQUISITES: Counter Registration Required *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required*

### **MUTH 201: MUSIC THEORY AND ANALYSIS 1**

A comprehensive introduction to the structural principles and compositional techniques of tonal music. Emphasis on diatonic harmony and elementary counterpoint through written exercises, model composition, and analysis. Introduction to associated formal procedures. Section assignment determined by the Music Theory Placement Exam. Corequisites: MUTH 211 and 221. PREREQUISITES: Placement Corequisites: MUTH 211, 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 tonal music. Emphasis on diatonic harmony and elementary counterpoint through written exercises, model composition, and analysis. Introduction to associated formal procedures. Corequisites: MUTH 212 and 222. PREREQUISITES: MUTH 201 Corequisites: MUTH 212, 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. Section assignment determined by the Music Theory Placement Exam. Corequisites: MUTH 201, 221. PREREQUISITES: Placement 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. Corequisites: MUTH 202, 222. PREREQUISITES: MUTH 211 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. Placement determined by corequisite course placement. Corequisites: MUTH 201, 211. PREREQUISITES: Placement 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. Corequisites: MUTH 202, 212. PREREQUISITES: MUTH 221 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 binary, ternary, rondo, and variation forms. Corequisites: MUTH 261, 271. PREREQUISITES: MUTH 152 or MUTH 202 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. More complex binary, ternary, and rondo forms. Sonata form and fugue. Corequisites: MUTH 262, 272. PREREQUISITES: MUTH 251 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 small-scale forms of tonal music. Corequisites: MUTH 251, 271. PREREQUISITES: MUTH 162 or MUTH 212 Corequisites: MUTH 251, 271 *Units: 1.*

*Prerequisite: MUTH 162 or MUTH 212 Corequisites: 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 large-scale forms of tonal music. Corequisites: MUTH 252, 272. PREREQUISITES: MUTH 261 Corequisites: MUTH 252, 272 *Units: 1.*

*Prerequisite: MUTH 261 Corequisites: 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. Corequisites: MUTH 251, 261. PREREQUISITES: MUTH 172 or MUTH 222 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. Corequisites: MUTH 252, 262. PREREQUISITES: MUTH 271 Corequisites: MUTH 252, 262 *Units: 1.*

*Prerequisite: MUTH 271 Corequisites: MUTH 252, 262*

### **MUTH 301: MUSIC THEORY AND ANALYSIS 5**

An introduction to the structural principles and formal procedures of music from the early 20th century to the present. Corequisites: MUTH 311, 321. PREREQUISITES: MUTH 252 Corequisites: MUTH 311, 321 *Units: 4.*

*Prerequisite: MUTH 252 Corequisites: MUTH 311, 321*

### **MUTH 311: AURAL SKILLS 5**

Ear training commensurate with MUTH 301. Corequisites: MUTH 301, 321. PREREQUISITES: MUTH 262  
Corequisites: MUTH 301, 321 *Units: 1.*

*Prerequisite: MUTH 262 Corequisites: MUTH 301, 321*

### **MUTH 321: SIGHT SINGING 5**

Sight singing commensurate with MUTH 301. Corequisites: MUTH 301, 311. PREREQUISITES: MUTH 272  
Corequisites: MUTH 301, 311 *Units: 1.*

*Prerequisite: MUTH 272 Corequisites: MUTH 301, 311*

### **MUTH 345: POST-CORE SIGHT SINGING**

An elective course in sight singing for students who have completed the core sequence. Repertoire includes various styles of part music from the Renaissance to the present day. Improvisation. May be repeated for credit. PREREQUISITES: MUTH 321 *Units: 1.*

*Prerequisite: MUTH 321*

### **MUTH 350: TOPICS IN MUSIC ANALYSIS**

Intermediate studies in music theory and analysis, focusing on a particular theoretical model, analytical approach, or corpus of works. Topics vary from year to year. Course may be repeated when the topic is different. *Units: 6.*

*Prerequisite: MUTH 301*

### **MUTH 390: TUTORIAL STUDIES IN MUSIC THEORY**

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. 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **MUTH 391: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **MUTH 395: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO*

98.

*Prerequisite: Counter Registration Required.*

### **MUTH 399: INDEPENDENT STUDY IN MUSIC THEORY**

Students considering an honors project should register for independent study for one or more terms.

PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **MUTH 401: COUNTERPOINT IN THE STYLE OF J.S. BACH**

A survey of the techniques of 18th-century counterpoint. Imitative and non-imitative counterpoint in two and three voices, leading to the composition of dance suite movements, canons, and three-voice fugues.

Complementary work in analysis. PREREQUISITES: MUTH 301 or consent of instructor *Units: 6.*

*Prerequisite: MUTH 301 or consent of instructor*

### **MUTH 402: COUNTERPOINT IN THE STYLE OF J.S. BACH 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. PREREQUISITES: MUTH 401 *Units: 6.*

*Prerequisite: MUTH 401*

### **MUTH 421: THEORY & ANALYSIS OF MUSIC SINCE 1900**

Study of a range of advanced analytical approaches to selected works composed between ca. 1900 and the present. PREREQUISITES: MUTH 301 *Units: 6.*

*Prerequisite: MUTH 301*

### **MUTH 520: SCHENKERIAN ANALYSIS**

An introduction to the theory and analytical techniques of Heinrich Schenker (1868-1935), one of the most influential twentieth-century theorists of tonal music. The course explores Schenkerian concepts of prolongation, composing-out, structural levels, and linear progression as applied to significant works of tonal music from Bach to Brahms, providing as well a thorough grounding in Schenker's elegant techniques of graphic analysis. PREREQUISITES: MUTH 301 or consent of instructor *Units: 6.*

*Prerequisite: MUTH 301 or consent of instructor*

### **MUTH 550: TOPICS IN MUSIC ANALYSIS**

Advanced studies in music analysis, such as Schenkerian analysis, late 19th-century chromaticism, and analysis and performance. Topics vary from year to year. Course may be repeated with consent of instructor. *Units: 6.*

*Prerequisite: MUTH 301*

### **MUTH 590: TUTORIAL STUDIES IN MUSIC THEORY**

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. 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **MUTH 591: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **MUTH 595: 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **MUTH 599: INDEPENDENT STUDY IN MUSIC THEORY**

Students considering an honors project should register for independent study for one or more terms. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **MUTH 690: TUTORIAL STUDIES IN MUSIC THEORY**

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. 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **MUTH 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

### **MUTH 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. PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

**MUTH 699: INDEPENDENT STUDY IN MUSIC THEORY**

Students considering an honors project should register for independent study for one or more terms.

PREREQUISITES: Counter Registration Required. *Units: 1 TO 98.*

*Prerequisite: Counter Registration Required.*

# DECEMBER TERM

## December Term

December Term (D-Term) is an optional two-week session of academic enrichment during the break between fall and winter terms.

In the first two weeks of December, Lawrence offers brief, intensive courses that can be taken for 3 units of credit toward a Lawrence degree. These are enrichment courses that are not offered during the academic year and are not required of any student. On-campus courses include workshops, fieldwork, or travel to sites or activities within a day's drive of Lawrence. Travel courses take students to locations around the world for hands-on learning in an immersive setting. All offer focused, experiential learning in a small class of interested students led by a Lawrence faculty member.

D-Term courses have separate tuition plus room and board if the course is on campus. On-campus courses may also charge a small course fee for supplies or travel expenses. Travel courses charge a program fee for lodging, ground transportation, museums/tours, travel insurance, and most meals; students are typically responsible for their own airfare to and from the course site.

D-Term courses are listed in the course schedule with a DECM prefix, and registration is through the Voyager system in the late spring or early fall. Students may register for one D-Term course. Any course that does not have five students will be canceled, and students will be given the opportunity to enroll in another course. Registration for D-Term courses closes at fall midterm reading period.

Academic performance in December Term will not change a student's academic standing, though the December term course grade will be included in a student's grade point average, which could affect academic standing in subsequent terms. December Term does not count as a term of residency in meeting degree requirements.

## Courses - December Term

### **DECM 111: *CULTURE, BIOLOGY, AND HUMAN NUTRITION***

Human nutrition is both biological and cultural. This course will explore ways in which biological heritage, population history, culture, genetics, trade, media, and other forces interact to shape variation in human nutritional outcomes. Students will be invited to suggest topics for focused study. *Units: 3.*

### **DECM 112: *ANCIENT AND BYZANTINE COINS: A STUDENT-DESIGNED EXHIBITION***

This course will examine themes in Greek, Roman, and Byzantine coins, using the University's well-known Ottilia Buerger Coin Collection as a resource. Students will research the coins and design and mount an exhibition of some of the coins. *Units: 3.*

### **DECM 113: *LIVING RESEARCH AND EXPLORATION -- DEvised THEATRE PROJECT***

An interdisciplinary, non-traditional approach to exploring subject matter through the act of writing as a group, in

time and space, using the language of theater. Students will create short pieces for the stage by putting together raw resource material through cooperation and quick, intuitive/improvised decisions. *Units: 3.*

#### **DECM 114: *EXPLORING THE CREATIVE SELF THROUGH DEEP LISTENING***

What does it mean to actively and deeply listen? How can expansive listening encourage one's creative impulse? Drawing on the works of Pauline Oliveros, John Cage, John Muir and others, we will explore the expansive yet nuanced world of sound, deep listening, and the creative act. Open to all explorers. *Units: 3.*

#### **DECM 115: *BEYOND THE PIN FACTORY: REAL FIRMS, LOCAL AND GLOBAL***

Adam Smith famously used the example of a pin factory to illustrate some of his theories. Where did he learn about pin-making? From a French encyclopedia. We will step outside the usual economics curriculum and study real firms around us. Through site visits and readings on each firm and industry, we will gain a solid understanding of economic activity in the area and learn economics through real-world, real-time case studies. Includes several day trips. PREREQUISITES: ECON 100 *Units: 3.*

*Prerequisite: ECON 100*

#### **DECM 116: *LOS ANGELES: A MODERN BIOGRAPHY***

This course offers an introduction to America's defining modern city. Using a variety of historical and literary texts. It explores the making of 20th (and 21st) century Los Angeles, as explosive growth, burgeoning power, and deep conflict framed a race and class-centered debate over its direction, identity, and future. *Units: 3.*

#### **DECM 117: *PRINTED BOOKS TO 1900***

An introduction to the physical aspects of books from the hand-press period through the machine-press period. The course will cover identification and description of paper, typography, illustration processes, binding materials and styles, and the use of physical evidence in bibliographical analysis. *Units: 3.*

#### **DECM 118: *PHILOSOPHY AND LITERATURE***

Explores interesting overlaps between literature and philosophy. Examines philosophical accounts of literature, and literary texts that invoke philosophical problems or theories. How are the aims of literature and philosophy similar? How can literature shape one's moral sense? Can literature provide insight to abstract philosophical debates? Should philosophy matter to authors? *Units: 3.*

#### **DECM 119: *SOVIET HISTORY THROUGH THE KITCHEN DOOR: SOVIET COOKING CULTURE***

For Russians, food has always been a prickly subject, especially in the Soviet period. This course examines the monumental and the prosaic in the history of culinary culture in the Soviet Union. Each day we address a decade's key moments in private life, and learn to prepare a signature dish. Additional course fee of \$50 plus purchase of book. *Units: 3.*

#### **DECM 120: *THE SHAKESPEARE INTENSIVE***

As we closely examine the First Folio texts, we will build a common vocabulary of performance practice, historical context, and literary exploration. Our showcase performance will feature scenes, songs and sonnets, dramaturgical posters, and at least one example of performance in the mode of the "Original Shakespeare Project." You don't need to be an actor to thrive in this course, just curious and a bit brave. *Units: 3.*

#### **DECM 121: *A PEEK AT ANIMAL BEHAVIOR: WORMS AND WHALES***

Students will explore how neurobiology, genetics, physiology, and ecology direct animal behavior, focusing on

two example animals (*C. elegans* and whales). Students will learn using direct observation, student-directed lab experiments, lecture, and discussion of readings. There will be a field trip to the Shedd Aquarium in Chicago with an optional Beluga Encounter. Additional material, field trip, or lab fees may be charged for this class. Additional course fee of \$40. The optional Beluga Encounter is approximately \$250. *Units: 3.*

### **DECM 122: *FOOD POLITICS AND CULTURE***

This course examines political and cultural forces that shape what we eat as well as implications for public health and the environment. Course material includes academic writing, food writing, and popular commentary, and students will undertake cooking projects based on course themes. Additional course fee: \$20 *Units: 3.*

### **DECM 123: *MUSIC THEORY FUNDAMENTALS THROUGH COMPOSITION***

A project-based introduction to music theory fundamentals, including scales, intervals, key signatures, triads, rhythm, and meter. Intended for majors and non-majors seeking to improve their grasp of theory fundamentals through guided composition and other creative activities. *Units: 3.*

### **DECM 124: *300 GALLERIES IN 3 DAYS: ART BASEL—MIAMI BEACH***

This mode of exhibition is the new center of power in the art world and this course will examine the phenomenon through readings, discussions, research, and experiential learning by visiting ART BASEL—MIAMI with over 300 galleries from across the globe showing works of contemporary art of the highest quality. This class includes a trip to Miami on December 4-6. An additional fee will be charged to cover the cost of the trip. *Units: 3.*

### **DECM 125: *THE CHEMISTRY OF COOKING***

This course will investigate the oldest and most widespread application in chemistry—cooking. We will discuss the chemistry behind basic cooking methods, then apply this knowledge in the kitchen to understand how variations in our methods affect the final products. Additional course fee of \$30. *Units: 3.*

### **DECM 126: *DIGITAL CURATORIAL PRACTICE***

This course will introduce students to the intellectual and practical elements of curatorial work and incorporate tools drawn from the digital liberal arts. Participants will research and curate their own online exhibition drawn from the university's interdisciplinary digital collections on the Omeka open-access platform. Course work will include readings on contemporary curatorial practice, research into digital collections, and the production of metadata for their exhibition. *Units: 3.*

### **DECM 127: *SCIENTIFIC VISUALIZATION***

Constructing figures, diagrams, and infographics for use in publications, websites, and presentations relies heavily on the use of digital technologies. This course will focus on approaches and techniques used to distill scientific information into effective visual representations using a variety of computer software packages, including Adobe Photoshop and Illustrator®. *Units: 3.*

### **DECM 128: *URBAN CULTURES - BUENOS AIRES***

An introduction to Buenos Aires urban culture, this travel course will provide students with an experiential learning opportunity through a series of itineraries related to the city's historical, political, literary, artistic, and musical scenes. The course will emphasize cultural exchange, engagement with the space, and personal transformation. Knowledge of Spanish helpful but not required.

Additional fees apply to this course: approximately \$2,500 plus airfare.

Deadline for registration is September 22, 2017. **PREREQUISITES:** Instructor's approval and a series of readings *Units: 3*.

*Prerequisite: Instructor's approval and a series of readings*

### **DECM 129: *THE HISTORY OF VIDEO GAMES: 1977-1996***

This course will explore the history of video games, with an emphasis on games and gaming systems from 1977 to 1996. Games will be explored as technology, entertainment and a product of culture. Students will play games on the original consoles and write about developments in visual design, evolution of sound and music, representations of gender and race and other topics. *Units: 3*.

### **DECM 130: *TOPOLOGICAL DATA ANALYSIS THROUGH STRUCTURAL DANCE IMPROVISATION***

Interdisciplinary exploration of topological data analysis—the mathematical study of "the shape of data"—and its interpretations in movement and physical metaphor. Includes in-class and in-studio components, culminating in a performance. Intended for open-minded students seeking to augment their mathematical/dance training and process with new modalities and vocabularies. *Units: 3*.

### **DECM 131: *CHILDREN'S STORIES IN COMMUNITIES: GOING BEYOND "AND THEY LIVED HAPPILY EVER AFTER"***

This service-learning course will consider how fairy tales, myths and folktales reflect and inflect cultural and community practices. Drawing on pedagogical and literary approaches, the course will examine how ideas of childhood, gender, race, ethnicity and class are constructed and sustained through children's stories. Participants will work with non-profit organizations in the Fox Valley community doing creative projects with children's stories. Additional fees will apply: estimated \$50 for performance attendance. *Units: 3*.

### **DECM 132: *SERIOUS GAMING AND LEARNING***

This course will explore learning, motivation and self-regulation involved in serious digital game play. Participants will explore current educational games being developed to capitalize on the popularity of gaming by playing and analyzing the game structure and components. Special attention will be paid to skill and content knowledge development through game play and the transfer of this knowledge outside of games. *Units: 3*.

### **DECM 133: *SHAKESPEARE IN PERFORMANCE***

Students will study the text and production history of a specific Shakespeare play in detail, then apply that knowledge to a major production of the play, usually in Chicago, Milwaukee or Madison. The major assignment will be an analysis of that production. In 2016, the course will study Georges Bigot's Macbeth at Theater Y in Chicago. Additional fees will apply: tickets for the performance (\$30-\$60), specific performance-oriented edition of play (\$20-\$50), and travel. *Units: 3*.

### **DECM 134: *WITCHCRAFT IN ART***

Engage the art of Europe's fascination with witchcraft and the supernatural from 1100 to 1800 using materials from the university's rare book and art collections. We will examine depictions of magicians, sorcerers, and witches, along with their rituals and politico-religious prosecution. Methods include historical contextualization, chronological comparison, slow looking, and analysis of the iconography and semiotics of witchcraft. Students will complete short, detail-oriented projects. *Units: 3*.

### **DECM 135: *ARCHIVAL DISCOVERY***

An in-depth exploration of archives and archival research. The course will address the theory and practice of locating, contextualizing, interpreting, and using archival primary sources. Students will work directly with collections in the University Archives and produce a digital project based on their research. *Units: 3.*

### **DECM 136: CONTEMPORARY APOCALYPSE NARRATIVES**

Pandemics, environmental disasters, zombie invasions: stories about catastrophes are more popular than ever. We will consider several examples of the genre in literature and film and ask: What cultural and political anxieties do these works explore? How do representations of apocalypse draw on science and religion? Can these stories spur change, or do they falsely reassure us? Students will also complete short creative projects. *Units: 3.*

### **DECM 137: WRITING YOUR LIFE**

An intensive writing seminar for those seeking to write memoir, creative non-fiction, or other self-reflective prose. We will be writing, reading, and editing shorter daily pieces while developing a major theme or idea. *Units: 3.*

### **DECM 138: LOVING LITERATURE: FICTION, FAN FICTION, AND FANS OF FICTION**

This course explores the hows and whys of literary affection: what do we mean when we say we "love" a book or writer? Why are authors like Jane Austen still beloved centuries after their deaths? We'll focus on a couple of historical examples of literary love, and students also will investigate their own affections as part of a final project on a writer or book of their choice. *Units: 3.*

### **DECM 139: COLOR, LIGHTING, AND ILLUSION**

This course explores the human perception of color and light with practical projects using flat paper, painting, simple sculptures, lighting, and our daily environment. In the studio we will make three colors look like four, four colors look like three, and flat objects look plastic. New skills and understanding will culminate in creating visual art pieces. The final class will be a showing and discussion of the work with the public. *Units: 3.*

### **DECM 140: HAPPINESS: MEDITATION AND SCIENCE**

What is happiness and how is it achieved? This course will examine some core ideas of Buddhist philosophy of mind and investigate the ways in which they are being studied and employed by psychologists, neuroscientists, and cognitive scientists. In addition to course readings, students will be instructed in basic meditation practices and expected to keep a meditation practice for the duration of the course. *Units: 3.*

### **DECM 141: MAKE IT STICK: USING THE LEARNING SCIENCES TO IMPROVE MEMORY**

In this seminar, students will study findings from the learning sciences and apply them in exercises designed to enhance learning and memory. Students will use the results of these exercises to explore the success of various learning strategies and discuss how they might be applied in their other Lawrence courses. *Units: 3.*

### **DECM 142: PRESIDENTIAL POWER IN TRUMP'S AMERICA**

The course focuses on U.S. public policy, specifically presidential control (or lack thereof) of administrative agencies such as the EPA, FDA, and others that some consider to be the "deep state." Readings and class discussion will provide an overview of the basic workings of relevant U.S. political institutions, followed by focus on policy making (and unmaking) within the Trump Administration. Content quizzes and a regulation project based on policy formation in a student's area of interest. *Units: 3.*

### **DECM 143: WAR ON CARS**

This interdisciplinary course brings together the study of transportation policy, sustainable urban planning, and climate change. Using case studies and connecting with experts from Appleton and around the world (New York, Madrid, Hong Kong, Medellin, Paris, and more). Students will engage in hands-on analysis of how sustainable transportation decisions aren't just individual choices about whether to buy an electric car or ride a bike. *Units: 3.*

#### **DECM 144: THE SCIENCE OF SUPER HEROES**

A seminar course that examines the good, the bad, and the indifferent approaches to science in popular super hero films (particularly the Marvel and DC Universes). No science background or prerequisites required. *Units: 3.*

#### **DECM 145: VISUAL UTOPIAS IN LATIN AMERICAN ART**

The seminar examines the art of Latin America from the 20th century to the present, emphasizing utopian ideas embodied in its images. The seminar will also discuss texts related to the art works, such as biographies, manifestos, and scholarly articles. Assessment will be based on class participation and a final written project. A visit to the Wriston Art Galleries will be included. *Units: 3.*

#### **DECM 146: THE ART AND SCIENCE OF METALS**

Metals are an amazing material! Come learn about metals through the lenses of art and science. In this course, we will study metals with hands-on activities from artistic (casting, forming, finishing) and scientific (structurally, crystallinity, phases) viewpoints. A metal-working project using both basic and advanced forming and analysis methods will be the basis for drawing connections between the beauty and structure of metals. *Units: 3.*

#### **DECM 147: DUBAI AND THE 2020 WORLD EXPO**

Through its architecture and projects Dubai has announced itself as a global city. This coming year Dubai will host the 2020 World Expo (delayed a year), taking its place as the latest world city to host this event. We will spend D-Term exploring both the Expo and the city of Dubai itself. This course will touch on themes relevant to each of the four GLST tracks (Cities, Nations & Identity, Arts & Exchange, Human Security). Additional fees for this course: program fee of \$2200 plus airfare. PREREQUISITES: Instructor Approval *Units: 3.*

*Prerequisite: Instructor Approval*

#### **DECM 148: INTRODUCTION TO TROPES AND STEREOTYPES IN THEATRE FILM AND MEDIA: THE GOOD, THE BAD, AND THE UGLY**

Tropes and character types have come down through the advent of western theatre and media to the present day. These characters have represented, and often embarrassed, those they portray from the earliest theatrical performances through international blockbuster films worldwide. Exploring their use and evolution of the good, the bad, and the ugly of various stereotypes will enlighten their perpetuation or suppression in future media. *Units: 3.*

#### **DECM 149: WHAT TO LISTEN FOR IN ROCK**

An introduction for students of any musical experience level to the analysis of rock and roll. In this seminar, students will learn to recognize the basics of harmony, timbre, instrumentation, and rhythm/meter that give a song its unique sonic profile. Through regular readings, listening assignments, and work on a final presentation, students will learn to approach individual songs with appropriate stylistic and cultural sensitivity. *Units: 3.*

#### **DECM 150: WORLD ENERGY MARKETS**

Amidst the dual threats of war in western Europe and the prospects of catastrophic climate change, energy

systems are at the fore of world attention. This course surveys world energy systems and markets, particularly the U.S. electricity system. The focus will be on a quantitative characterization of world energy sources and uses, along with theoretical and qualitative treatments of the economics and politics of world energy integration. Pending availability, classes will feature guests from business, government, and the academy. *Units: 3.*

### **DECM 211: *THE ARTIST BOOK***

An introduction to bookmaking as an art form with special emphasis on craft and conceptual development as a form of visual expression. Traditional and contemporary approaches to creating artist books are explored in detail to compliment a variety of binding methods. Additional \$30 course fee plus book. **PREREQUISITES:** ART 100 or ART 110 *Units: 3.*

*Prerequisite: ART 100 or ART 110*

### **DECM 213: *EDUCATIONAL INNOVATION***

This course engages students in the design of innovative educational programs or structures to promote integrative learning, personal development, and creative accomplishment. Students will work from core principles to produce a charter school design, after-school program, or multidisciplinary unit of instructions (as selected by the class). **PREREQUISITES:** One course in education studies or consent of instructor *Units: 3.*

*Prerequisite: One course in education studies or consent of instructor*

### **DECM 214: *FUN HOME'S INTRO TO LGBTQ+ STUDIES***

Alison Bechdel's *Fun Home* provides a literary and cultural history of the modern LGBTQ+ movement. Topics will include Stonewall, the Anita Bryant affair, the first gay civil rights groups (Mattachine Society, Daughters of Bilitis), the AIDS crisis, crossdressing laws, and the influence of Wilde and Proust on modern gay identity. *Units: 3.*

### **DECM 215: *9/11 IN CONTEXT: TERRORISM AS A LIVED EXPERIENCE***

This course approaches September 11, 2001 through the perspective of those who experienced the terrorist attacks directly. We will explore the lived experience of 9/11 through news clips, photography, interviews and memoirs, culminating with a walking tour of lower Manhattan and visit to the new 9/11 memorial and museum. Cost for four-day trip to New York is approximately \$1,000. Please contact the instructor for more information. *Units: 3.*

### **DECM 216: *RENAISSANCE MADRIGAL DINNER***

Fascinated by English Renaissance court entertainments? Want to learn more and apply it to a performance? This course will engage the era and its entertainment aesthetics while producing a madrigal dinner complete with music, and theatrical scenes and improvisation. All interested students should speak to Mr. Swan or Ms. Privatt. *Units: 3.*

### **DECM 217: *ISTANBUL***

This course will involve an 8-day trip to Istanbul, Turkey. Students will be introduced to central sites of the Byzantine and Ottoman empires, as well as of modern Turkey. The choice of sites will emphasize cultural exchange and transformation. We will visit Rumi's shrine and burial place in Konya, Turkey. An additional fee will be charged to cover the cost of the trip. *Units: 3.*

### **DECM 218: *DISRUPTED COMMUNITIES***

This course explores African writers' representations of the unsettling effects of colonialism on the structures,

praxis and values of African communities. Through a close analysis of novels from various regions of the continent, the course will explore the role of literature in the articulation of the discourse of African nationhood. *Units: 3.*

### **DECM 219: *START-UP THEATRE***

Open to students from theatre, economics, and other students interested in entrepreneurship in the performing arts. May be repeated when the topic is different. Additional fees may be charged to cover materials.

PREREQUISITES: Sophomore standing *Units: 3.*

*Prerequisite: Sophomore standing*

### **DECM 220: *WHEEL THROWING INTENSIVE***

This course serves as a "boot camp" for those interested in developing skills on the potters wheel. We will place emphasis on process rather than product, and will approach the wheel as a tool appropriate for creating functional pottery as well as sculpture. PREREQUISITES: ART 100 or ART 110 *Units: 3.*

*Prerequisite: ART 100 or ART 110*

### **DECM 221: *GREECE THEN, GREECE NOW***

In this course we will visit prehistoric Mycenae, Classical sanctuaries at Epidauros, Olympia and Delphi, Byzantine monasteries at Meteora, and the major archaeological sites and museums of Athens. Students will learn how to read an archaeological site, do first-hand visual analysis of works of art, contextualize ancient literature and history, and at the same time begin to understand the complexities of modern Greece, including its economy fueled by tourism but also beset by EU-imposed austerity.

Additional fees apply to this course: approximately \$1,400-\$1,800 plus airfare. Registration deadline is June 3. Participants will need to make a 35% non-refundable deposit in early June. PREREQUISITES: Sophomore standing *Units: 3.*

*Prerequisite: Sophomore standing*

### **DECM 222: *TECHNICAL DRAWING***

*Technical Drawing* will build skills in using both traditional hand drafting and CAD. These skills can be applied to architectural drawings, theatrical drafting and prototyping. Projects will include scale drawings, ground plans and isometric views, and can be tailored to the interests and needs of the student. Topics will cover proper tools, techniques and design fundamentals. Additional fees for materials will apply for those students who choose the option to use the Makerspace 3D printers. Will vary by student. *Units: 3.*

### **DECM 223: *ADOBE CREATIVE SUITE***

This workshop is an introduction to the Adobe Creative Suite programs including Photoshop, InDesign, and Illustrator. The class is project centered, allowing each student to explore the multi-faceted and contemporary nature of each program. Methods in image construction, graphic design, typography, application, and output will be explored in detail. *Units: 3.*

### **DECM 224: *INTRODUCTION TO R AND EXCEL FOR DATA ANALYSIS***

Careful data analysis has become central to decision-making in areas from politics to sports to medicine. This introduction to collecting, cleaning, and manipulating messy, real-world data with R and Excel will emphasize reproducible, documented analysis. The course will also introduce graphing and programming concepts that

pertain to data analysis. Familiarity with basic statistics is a plus but not required. *Units: 3.*

### **DECM 225: A GOOD LIFE**

What is a good life? How do I live it? This is an opportunity to engage with these questions by exploring how others have tried to answer them. We will read about different ways of living, experiment with some of those practices ourselves, and reflect on them in writing. We will also talk with invited guests about how they try to answer these questions. *Units: 3.*

### **DECM 226: ANCIENT COIN PUBLICATION PROJECT**

Students will research and publish ancient Greek and Roman coins from the University's collection. The current online version of the catalogue of the collection has been viewed by more than 4.2 million visitors; the goal of the project is to make the rest of the collection available to the public. *Units: 3.*

### **DECM 227: HONG KONG: SUSTAINABILITY, LIVABILITY, AND URBAN DESIGN**

This combined discussion-and-travel course examines sustainable, livable urban design through the lens of contemporary Hong Kong. We will spend one week on campus reading and preparing, followed by five days in Hong Kong for on-the-ground study, including meetings with local NGOs, government officials, and business leaders. Travel expenses (including international flights, lodging, and meals) are covered by a grant from the Henry Luce Foundation. Registration deadline: June 1. *Units: 3.*

### **DECM 228: PLAGUE, WAR, AND FIRE: DISASTERS AND THE MAKING OF LONDON**

Between 1642 and 1666 London experienced war, plague, and fire. This travel study course examines these catastrophes, and explores how the city's responses shaped the future of not merely London, but other cities across the globe. We will visit numerous museums and historical sites, and consider how London responded to crisis, commemorated it, and confronted it again when German bombs fell during the twentieth century. Estimated additional fees beyond tuition are \$2,500. *Units: 3.*

### **DECM 229: BEBOP LANGUAGE AND INNOVATION**

This course will explore how to improvise using bebop language. Study of solo transcriptions of Charlie Parker, Dizzy Gillespie, and Clifford Brown, and analysis of a variety of bebop chord progressions. Application of improvisational concepts such as bebop scales, broken chords, approach notes and resolutions, linear and chromatic connections, accents, rhythmic variations, and phrasing. Learning assessed through active participation, performance assignments, and a final project. All instruments welcome. **PREREQUISITES:** Ability to play over major, minor blues, and II-V-I chord progressions. Good ear, intermediate technique, and basic knowledge of modes of major harmony. *Units: 3.*

*Prerequisite: Ability to play over major, minor blues, and II-V-I chord progressions. Good ear, intermediate technique, and basic knowledge of modes of major harmony.*

### **DECM 230: THE BLUES: ANALYSIS AND APPLICATION**

A study of Blues styles and their evolution. Historical study of the Blues as a complete and complex form, examining basic harmonic movement, chord progression reharmonizations, and rhythmic and melodic construction. Analysis of solo transcriptions from Robert Johnson, Miles Davis, and John Coltrane, and application of improvisational concepts growing out of early blues tradition. Learning assessed through active participation, performing assignments, and a final project. For instrumentalists only. **PREREQUISITES:** Ability to play over major, minor, dominant 7th, and II-V-I chord progressions. Good ear, intermediate technique, and basic knowledge of modes of major harmony. *Units: 3.*

*Prerequisite: Ability to play over major, minor, dominant 7th, and II-V-I chord progressions. Good ear, intermediate technique, and basic knowledge of modes of major harmony.*

### **DECM 231: PERFORMING FROM THE INSIDE OUT**

Musicians in this performance-based workshop explore the mind-body connection through improvisation exercises, acting techniques, strategies from performance psychology, discussion of assigned readings, and in-class performances. Engaged participation will lead to heightened expression, mental focus, musical communication, spontaneity, and self-confidence in solo and group performance. Emphasis will be placed on overcoming barriers to success in performance such as anxiety and muscle tension. PREREQUISITES: Enrolled students must have one short solo piece, etude, or song prepared to present in the first class meeting and be capable of preparing and performing an additional short work late in the course. *Units: 3.*

*Prerequisite: Enrolled students must have one short solo piece, etude, or song prepared to present in the first class meeting and be capable of preparing and performing an additional short work late in the course.*

### **DECM 232: ENTREPRENEURSHIP IN LONDON: FROM THE MAYFLOWER TO BREXIT**

An introduction to entrepreneurship in London. Students will have the opportunity to visit a number of entrepreneurial ventures, both financial and social. Starting with the 'merchant adventurers' who helped to finance the launch of the Mayflower in 1620 and continuing to contemporary financial and social entrepreneurs active in London today, the course will show the political and economic dimensions of entrepreneurial ventures over time. PREREQUISITES: Instructor approval. *Units: 3.*

*Prerequisite: Instructor approval.*

### **DECM 233: SUICIDE RISK ASSESSMENT AND PREVENTION**

This discussion-based seminar will include critical evaluation of the literature exploring risk and prevention factors for suicide as well as evidence-based approaches to addressing suicide risk in clinical psychology (e.g., Dialectical Behavior Therapy). There will be an applied element to the course, including engaging in role-plays of suicide risk assessment and prevention planning. PREREQUISITES: PSYC 100 *Units: 3.*

*Prerequisite: PSYC 100*

### **DECM 234: MEDIEVAL TOLEDO AND THE 13TH-CEN. CANTIGAS DE SANTA MARIA**

The Cantigas de Santa Maria, a 13th-cen. songbook with hundreds of songs and miniatures, was created in Toledo, Spain. This class will travel to Toledo, Spain. As we analyze relationships depicted in the manuscript among Christians, Muslims and Jews, we will visit surviving churches, mosques, synagogues, and museums to deepen our understanding of the complexities of life and culture in medieval Spain. PREREQUISITES: Instructor approval - likely with short meetings in advance *Units: 3.*

*Prerequisite: Instructor approval - likely with short meetings in advance*

### **DECM 411: JORGE LUIS BORGES (IN SPANISH)**

A sustained inquiry on Borges' literary works in historical and cultural context. The course will explore Borges' essays, poems, and short stories, and their multidisciplinary resonances, from film and visual arts to physics and linguistics, among others. Taught in Spanish. PREREQUISITES: One course in Spanish at the 300-level or above, or consent of instructor *Units: 3.*

*Prerequisite: One course in Spanish at the 300-level or above, or consent of instructor*

## **DECM 412: *THE SONATA CYCLE IN THE 19TH CENTURY***

An immersive study of 19th-century masterworks. Through close analytical engagement with sonatas, chamber works, and symphonies by leading composers of the period, students will learn how sonata form movements give rise to larger multi-movement sonata cycles. Students will also observe the evolution of sonata form throughout this period. PREREQUISITES: MUTH 252 *Units: 3.*

*Prerequisite: MUTH 252*

# STUDENT-INITIATED COURSES AND PROGRAMS

## Individualized Learning

Students may customize their learning through student-initiated courses and student-designed majors as described below.

### Student-initiated courses

Students may pursue in-depth learning in areas of interest through tutorials, independent study, or academic internships. Students may also pursue directed study or writing-for-credit under the direction of a Lawrence faculty member. Non-music majors may request private music lessons by audition or interview and with an additional fee.

#### TUTORIAL (390-FOUNDATION/GATEWAY, 590-ADVANCED, 690-CAPSTONE)

A tutorial is a primarily student-driven course of study undertaken by an individual student or small group 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 focus on presentation and critique of student work. 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.

#### INDEPENDENT STUDY (399-FOUNDATION/GATEWAY, 599-ADVANCED, 699-CAPSTONE)

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. Students who continue an independent study 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.

#### ACADEMIC INTERNSHIP (395-FOUNDATION/GATEWAY, 595-ADVANCED, 695-CAPSTONE)

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. Students in academic internships engage in unpaid or paid work or service experiences with intentional learning objectives that relate to their academic interests and promote reflection throughout the experience. The academic component includes readings related to the substance of the internship, discussions with the faculty supervisor, and a written report appropriate to the discipline. For departments that do not offer an academic internship (course number 395, 595, or 695), a student may apply for an academic internship to the Instruction Committee by midterm reading period of the term before the start of the internship. Students may take a maximum of 12 units of academic internship in fulfillment of their degree requirements, and it is recommended that internships not integral to the major be graded S/U only. Application forms for student-designed academic internships may be obtained from the Registrar's Office; the Center for Academic Success; the Center for Career, Life, and Community Engagement; and the Main Hall, Briggs Hall, Conservatory, and Wriston Art Center offices.

### **DIRECTED STUDY (191-INTRODUCTORY, 391-FOUNDATION/GATEWAY, 591-ADVANCED, 691-CAPSTONE)**

Directed study follows a syllabus set by the instructor and may be used to deliver content from an existing course (whether because there are too few students enrolled or because the course is not currently being offered), to develop a possible new course offering, or to direct a student in a defined course of study. The main goal is knowledge or skill acquisition, not research or creative work. Students may meet frequently with the instructor 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.

### **WRITING FOR CREDIT**

Students may write for credit (with permission of the instructor) in any course in the curriculum other than tutorials, independent study, academic internships, directed study, or *First Year Studies*. The student 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.

### **MUSIC LESSONS**

Private instruction for non-music majors is available by permission of the instructor based on audition or interview and faculty schedules. Additional fees apply for lessons and the use of practice facilities. Group piano lessons are also available. Information is available in the Conservatory of Music office.

## **Student-designed major**

A student-designed major provides the opportunity for a student to develop an area of concentration outside

established programs for interdisciplinary or department 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 integration of disparate yet related areas that fall within the proposed major. A student-designed major must align with the liberal arts mission of the university and be based on areas of faculty expertise and regularly offered courses.

A student-designed major should not be proposed in areas better served by existing majors and minors, and usually a maximum of 18 units in any other major, minor, or IA the student is completing may be included in a student-designed major. A student-designed major should not rely heavily on tutorials, independent studies, or a single faculty member, so usually no more than 18 units in student-initiated courses may be included in the major, including the *Senior Experience*. A reduced version of an existing major will not be approved.

The procedure for establishing a student-designed major is relatively simple:

1. The student elects a topic area and identifies a member of the faculty who is willing to act as advisor.
2. With help from the advisor, the student prepares an Application for a Student-Designed Major identifying a title for the major, listing required courses and electives, and proposing a *Senior Experience*. The student also prepares a statement on how the proposed major forms a coherent field of study, how it addresses the student's educational goals, and why these goals cannot be accomplished with existing majors, minors, or interdisciplinary areas. Proposed coursework should include 10 to 12 courses with a *Senior Experience*, and courses should be reasonably distributed across the introductory, intermediate, and advanced levels. The student should confirm with department chairs that proposed courses will be offered in the terms indicated in the student's tentative plan.
3. The advisor and the student invite two other members of the faculty who support the proposed major to serve as the advisory panel for the major. The panel oversees the program and approves minor changes in course selections or topics for the *Senior Experience*. One member of the panel should be designated as an alternate advisor in case the principal advisor goes on leave or is abroad. If the *Senior Experience* will be done as an independent study, the student also needs the commitment of a faculty member for that independent study.
4. The student submits the Application for a Student-Designed Major, endorsed by the faculty advisor and panel, to the Instruction Committee (for the Bachelor of Arts degree) or the Conservatory Administration Committee (for the Bachelor of Music degree) before the end of Term I of the student's junior year. Students seeking an extension to this deadline should contact the chair of the relevant committee. Faculty members who endorse the statement accept responsibility for supervising the major if it receives committee approval.
5. The Instruction Committee or Conservatory Administration Committee reviews the application and the student's academic history, takes action on the proposed major, and communicates its action to the registrar, the student, the faculty advisor, and members of the panel.
6. Once the major has been approved, the student submits a Declaration of Major, Minor, or Interdisciplinary Area form to the registrar's office, checking the box for "student-designed major" along with any other boxes that are applicable (such as for a minor or interdisciplinary area).
7. After the major has been approved and declared, small changes such as a course substitution or change in the Senior Experience topic or advisor can be approved by the three-person faculty panel, whereupon an updated list of major requirements should be provided to the registrar. More significant restructuring of the major or changes in its requirements must be approved by the Instruction Committee.

# HONORS

## Honors projects

Honors projects are coherent programs of independent work carried out by students, usually in their senior year, on subjects or problems of more than ordinary difficulty in areas they have studied in considerable depth, usually in their majors or closely related areas. An honors project may also be a work of creative, visual or performing art. *Senior Experience* projects may be submitted as honors projects if they fulfill all of the requirements for honors. It is up to each individual department to decide whether an honors project will be accepted as satisfying the *Senior Experience* requirement for the major.

Successful honors projects receive Honors in Independent Study at graduation in three levels: *cum laude* (with distinction), *magna cum laude* (with great distinction), and *summa cum laude* (with highest distinction). These levels are awarded by vote of the faculty acting on the recommendation of the university Honors Committee. Honors are indicated in the Commencement program and on official transcripts.

## Planning for an honors project

Since honors projects frequently complement students' work in their majors, students 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 an honors project as they plan their programs, especially in the junior year, or earlier if they will be off campus at that time. If it is agreeable to both the student and advisor, an honors project may be undertaken while a student or advisor is off campus. Students do not have to take an independent study course in order to submit an honors project.

Projects 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 must obtain the consent of their faculty advisor(s) and the Honors Committee well in advance of such endeavors.

## The faculty advisor

Students' project advisors are responsible for providing guidance in regard to format and the conventions of scholarly documentation pertinent to their disciplines. Advisors are also expected to periodically review the progress of their students' research or creative activity.

All voting members of Lawrence University's faculty may serve as advisors of honors projects. If the honors project advisor is a non-voting member of the faculty, the advisor must 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. A voting member of the faculty is a full-time or part-time faculty member with academic rank (instructor, assistant professor, professor, etc.) Emeriti professors are considered voting members of the faculty during those terms in which they are teaching. Fellows may act as honors project advisors. Visiting faculty may act as honors project advisors at the discretion of the Honors Committee.

## Statement of intent

To apply for Honors in Independent Study, a student must send to the Honors Committee a statement of intent to submit a thesis in candidacy for honors. This statement includes the student's contact information, title of the project, department, and both the student's and faculty advisor's signatures. The final date for receipt of such statements of intent is announced at the beginning of each term to all juniors and seniors and is posted on the honors projects website and the honors projects Canvas site. Statements do not obligate students to submit projects, but no project will be considered for honors unless the committee has received a statement of intent.

## The honors thesis

The thesis need not be of any special form or length, provided that its form and length are appropriate to the discipline. Nevertheless, since digital copies of all accepted theses are permanently archived in *Lux*, Lawrence University's institutional repository, the form of honors projects is subject to a few standardized regulations suggested by the librarians and endorsed by the Honors Committee. The chair of the committee may be consulted about these regulations.

Upon completion of the project, all components of the thesis are to be loaded into Canvas by a date and hour designated each term. Students who find themselves unable to meet this deadline may petition the Honors Committee for an extension, 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. These extensions are extremely rare.

Even though the Honors Committee permits candidates to correct minor 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 prior to the oral examination. 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. Candidates are therefore encouraged to work with their advisors and/or tutors from the Center for Academic Success to ensure the quality of their work: clear, well-organized writing; consistent bibliographic citations appropriate to the discipline, and the absence of grammatical or typographical flaws.

## Projects involving testing of hypotheses

One important purpose of honors projects is to provide opportunities 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 a 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.

## Projects in the arts

Students interested in submitting an exhibition, a performance, or a 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. *The artistic work and the accompanying written portion will be evaluated equally by the examining committee according to the criteria for honors.* Here is a list of supplementary guidelines for honors projects in the arts:

- A project in the arts may be undertaken in any discipline (e.g., biology, physics, history, etc.), keeping in mind that Honors in Independent Study are university awards.
- If a project in the arts consists of a performance, audio-visual documentation, along with a performance program, must be included with the final project for archiving. These archived copies may be digital. If the project is an art exhibition, visual documentation and an exhibition catalog in digital format must also be included. If the project is web-based, arrangements must be made to create an archival copy. Materials will be archived in *Lux*, the Lawrence University digital repository.
- The supplementary essay should be six to 10 or more pages in length. A bibliography and appropriate documentation may or may not be necessary, depending on the content of the paper.
- The project will be evaluated on its artistic merits, for which the accompanying essay provides context, and on the subsequent oral examination. The essay must fulfill the criteria for Honors in Independent Study and be clearly organized, well written, and free of error, and its content must display a high quality of thought and presentation and be accurate, meaningful, and appropriate to the project.

## The examining committee

The 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 the work and oral defense in relation to the criteria for Honors in Independent Study.

The project advisor, in consultation with the student and with the assent of the Honors Committee, appoints an examining committee consisting of at least three voting faculty members, one of whom must be from outside the project's department. Faculty within the conservatory may serve as outside members for examination of honors projects in other conservatory departments (for example, a faculty member in the voice department may serve as an outside member on an exam in jazz and improvisation). The project 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, and 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. Fellows may not act as voting members of examining committees. At the discretion of the advisor, after consultation with the student, an additional 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.

The Honors Committee assigns its own representative to act as the non-voting moderator during the oral examination. Sitting members of the Honors Committee and other members of the Lawrence University community may be asked to serve as Honors Committee representatives. The Honors Committee representative reports the results of the examination to the Honors Committee prior to its last meeting. The Honors Committee reviews the recommendations of each examining committee and submits its recommendations for Honors in Independent Study to the faculty for final approval.

The examining committee recommends honors on the basis of the criteria below, not on the criteria a professional journal would use to determine whether to publish a thesis in a given area of research based on the review of professionals in that field. 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 projects submitted for Honors in Independent Study:

### *CUM LAUDE*—HONORS WITH DISTINCTION

To achieve honors, the project must fulfill all of the following criteria:

1. Theoretical understanding: The work demonstrates a substantial knowledge of, and facility with, previous work, underlying principles, and central concepts or theories in areas relevant to the project.
2. Originality: The work clearly shows 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.

3. **Quality:** The work itself is of very high quality and is clear, well-organized, and stylistically sound. The paper appropriately frames the original material in the project within the context of established work or relevant traditions in the discipline.
4. **Format:** The work provides documentation (e.g., bibliographic citations, tables and figures, illustrations) appropriate to the discipline and contains few and relatively minor grammatical or typographical flaws.
5. **Research/Creative Process:** The project has been carried out competently, diligently, independently, and in a manner that fulfills the basic standards of the discipline.
6. **Oral Exam:** The oral examination reaffirms the student's facility with relevant principles, concepts, and background material; the originality of the contribution; and the high quality of the work.

### *MAGNA CUM LAUDE*—HONORS WITH GREAT DISTINCTION

In addition to fulfilling the criteria described above, the project must fulfill all of the following criteria:

1. **Theoretical Understanding:** The work 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.
2. **Originality:** 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.
3. **Quality:** The work itself is of outstanding quality and is particularly well-written, lucid, and compelling. 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.
4. **Format:** The paper contains almost no grammatical or typographical flaws.
5. **Research/Creative Process:** The project has been carried out with a degree of technical competence, diligence, and independence of which few undergraduates are capable.
6. **Oral Exam:** 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 components of the project demonstrate a superlative level of excellence. In addition to fulfilling the criteria described above, the project must fulfill all of the following criteria:

1. **Theoretical Understanding:** The work 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.

2. Originality: 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.
3. Quality: The work itself exceeds all expectations and is exceedingly well-written, compelling, and engaging. 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.
4. Format: The paper is technically flawless.
5. Research/Creative Process: The project has been carried out with a superlative level of technical competence, sophistication, diligence, and independence.
6. Oral Exam: 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.

## PROJECTS IN THE ARTS

The above criteria are used in evaluating all Honors in Independent Study projects, including the brief essay written for a project in the arts. The paper for a project in the arts must fulfill all of the criteria for Honors in Independent study and be clearly organized and well-written, contain appropriate documentation when needed, and display a high quality of thought and presentation. The criteria listed above will be used to evaluate the project itself, the accompanying essay, and the oral examination.

## 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.

### Look into options

A student interested in off-campus study should make an appointment with the Off-Campus Programs office well in advance of the time they wish to pursue such study. This meeting can help the student establish academic goals, explore off-campus options, and discuss logistical issues such as timing of participation and the application process.

An interested student should also discuss their desire to study off-campus with their faculty advisor. The advisor can help the student select a program that matches their academic preparation and interests as well as consider ways that the student may be able to integrate their off-campus study into their curriculum at Lawrence.

Students can also get information about off-campus study options when representatives from affiliated programs visit campus in fall and winter terms, in informational meetings held about specific programs, or from students who have studied off campus in the past.

It is a good idea to gather as much information about the program(s) as possible to get the fullest understanding of the options.

### Study abroad funding

There are many sources of funding for off-campus study.

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, and the Financial Aid office can help students understand the financial implications of off-campus study decisions. Students participating in Lawrence-sponsored or Lawrence-affiliated off-campus programs are able to utilize their financial aid package toward

their off-campus program.

There are also many opportunities for funding in addition to a student's regular Lawrence financial aid package. The [off-campus study funding](#) page will help students identify funding possibilities from program providers, outside scholarships, and other resources.

## Policies and procedures for off-campus study

Participation in an off-campus program requires approval by the Off-Campus Programs Committee and, in the case of affiliated programs, acceptance by the program sponsor. Students must apply using the Lawrence Off-Campus Programs online application system. The application deadline for most affiliated programs for the upcoming summer and following academic year is in late January, and a few programs have earlier application deadlines. Applications for the London Centre and the Francophone Seminar in Dakar, Senegal, have typically been due at the end of winter term.

## Approval

Lawrence approval for off-campus study participation is granted 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.

Students may elect to participate in a non-affiliated off-campus program and seek transfer credit for that experience. Lawrence scholarships and grants may not be applied to the program costs associated with non-affiliated programs. Students interested in participating in a non-affiliated program must work closely with the Off-Campus Programs office in preparing for this and should seek approval for transfer credit prior to committing to the program.

## Eligibility criteria and application evaluation

A student is *ineligible* for off-campus study if any of the following apply:

- the student will not achieve sophomore status prior to participation in the off-campus program;
- the student 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;
- the student 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
- the student has a demonstrated history of behavioral issues inappropriate for off-campus study.

In exceptional circumstances, final determination of eligibility can be made by petitioning the Faculty

Applications for off-campus study are evaluated using the following criteria:

1. 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.
2. The student's record shows evidence of college-level preparation and academic achievement appropriate to the proposed program.
3. In situations where Lawrence limits participation, qualified students proposing their first off-campus program will be given priority over qualified students proposing participation in an additional program.

## **Off-campus study approval wait lists**

In order to budget effectively for the institutional costs associated with off-campus study, Lawrence may establish an annual cap on the number of students who may participate in affiliated programs. If there are more suitable applicants than the annual cap allows the Off-Campus Programs Committee 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 and internship spaces, in particular) can be 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 maybe 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**

To promote equitable access to off-campus study, Lawrence University provides financial assistance to students who wish to participate in one of Lawrence's approved off-campus programs by allowing Lawrence institutional financial aid to apply.

## **Off-campus program charges and financial aid**

Lawrence University students participating in Lawrence-approved off-campus programs will be billed regular Lawrence tuition for programs equal in length to a Lawrence term or the off-campus program's semester tuition for programs longer than 12 weeks. If the program tuition is higher than the applicable Lawrence term or off-campus semester tuition, the student will be billed the differential tuition amount. In addition to tuition and in lieu

of on-campus room and board, Lawrence University students will be billed the program fee assessed by the off-campus program they are attending. The program fee typically covers all or a portion of housing and food expenses and may include costs for local transportation, excursions, etc.

### **ACM tuition remission (TREP) and Lawrence University tuition remission (LUTR)**

Per the Associated Colleges of the Midwest TREP policy document, ACM TREP benefits are applicable only toward the cost of Lawrence-administered programs, which include the London Centre and Francophone Seminar in Dakar, Senegal. For ACM TREP recipients opting to participate in a Lawrence-approved affiliated program, Lawrence will continue to provide the Lawrence University-funded portion of the TREP benefit but will not bill the home college for their portion of the benefit.

Lawrence University Tuition Remission (LUTR) will apply toward the cost of all Lawrence-administered and Lawrence-approved affiliated off-campus programs; however, the benefit will be capped at the payment rate for a regular term of tuition and will not be adjusted for differential or higher tuition.

### **Additional cost information**

The cost for some off-campus study programs may be greater than the cost of studying for the same period of time on campus, and a student should also consider out-of-pocket expenses when selecting a program. Any student considering off-campus study is encouraged to meet with the Financial Aid office, which has comprehensive cost estimates for all Lawrence-approved programs.

Any student who will need financial assistance to fund an off-campus study program should submit the Free Application for Federal Student Aid (FAFSA) as early as possible during the year preceding their proposed program. Even those who do not qualify for need-based aid may wish to investigate ways to offset the expense through either an unsubsidized Stafford Student Loan or a parental PLUS loan. Students considering these options should also submit the FAFSA.

Students are also encouraged to pursue outside scholarship opportunities to assist with the incremental cost of off-campus programs. Additional scholarships (LU-dedicated funding for study abroad, scholarships from program providers, and outside scholarships) are supplemental to the Lawrence financial aid award. See the [off-campus study funding page](#) for more information about scholarships and funding options for off-campus study.

### **Billing, deposits, & refunds**

Students participating in LU-sponsored or affiliated off-campus programs are invoiced through their Lawrence student account for tuition and billable program fees.

Most programs require a confirmation deposit from students to officially accept their offer of admission. For affiliated programs, students 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.

Lawrence honors the refund, cancellation, and withdrawal policies of our partner institutions. Once a student accepts placement in a program, the program provider begins preparation for their participation. If, after a student commits to a program, they withdraw or do not participate for any reason, most program providers hold the individual student accountable for some or all of the costs incurred on their behalf. Students should make themselves aware of the policies of the organization providing their program.

## **Mandatory international health and evacuation insurance**

Students participating on a Lawrence-sponsored or affiliated international off-campus program are required to carry the Lawrence University international health and evacuation insurance policy administered by Cultural Insurance Services International (CISI). The only exception to this requirement is for students on programs provided by IES, who will not be enrolled in the LU group coverage through CISI. It is presumed that this coverage is in addition to whatever medical insurance coverage the student already holds, and it has been factored into the comprehensive cost estimates for the international off-campus study programs.

CISI 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 health emergency.

The Off-Campus Programs office automatically enrolls students in the CISI insurance. The fee (currently \$47 per month of coverage) is charged to the student's Lawrence account along with the program fees.

## **Student travel to countries or areas with heightened risk**

Lawrence University supports international travel as an essential means of providing invaluable learning opportunities for our students. We recognize, though, that international travel involves the potential for risks which may or may not be present within the United States. Lawrence strongly recommends that all students familiarize themselves with the travel information available from the [U.S. State Department](#) and [Centers for Disease Control \(CDC\)](#) 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 advisory levels, which range from 1 to 4.

Lawrence will cancel a Lawrence-sponsored program, will withdraw its approval for study on a Lawrence-affiliated program, and will not provide funding or support for travel to a country or area of a country if a State Department level 4 travel advisory is in place for the host country or area. Any student travel to a country or area with a State Department level 3 travel advisory and/or a CDC level 3 travel warning must be proposed and approved through the exemption petition process outlined below. Lawrence does not support students

participating in off-campus study programs or international travel in countries with these levels of caution. Any student intending to travel to a country with an overall State Department level 1 or 2 travel advisory but with level 3 or 4 areas/regions within the country must provide a separate signed statement declaring that the student will not enter those areas.

Lawrence reserves the right to cancel support of travel based on extenuating circumstances. If cancellation is necessary, the institution will work to provide alternate programming when feasible. Withdrawal of approval for an affiliated program bars a student from receiving Lawrence credit for the program and from applying institutional financial aid or funding to the program costs.

In order to make certain that a student may make an informed decision regarding participation in 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 is feasible. This policy applies to students attending programs where such a warning or advisory level 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).

Students or faculty travel leaders who have a compelling educational reason for student travel to such countries may submit a petition for an individual exemption from this policy through the Off-Campus Programs office. Information about this petition process is available below.

In the event that an advisory or alert of this level is instituted while a student is in-country, Lawrence will consider the situation to determine if program participation should continue, be adapted, or be suspended. Lawrence will be in contact with impacted students and work with the travel assistance service of the international insurance that is required of all students traveling internationally with Lawrence support. Security evacuations are highly unusual, and the travel assistance company determines whether a political, security, natural disaster, or medical evacuation is necessary. If emergency evacuation becomes necessary, Lawrence will work with the evacuation service and impacted students to coordinate this. If a student refuses to comply with an evacuation, the University maintains the right to withdraw financial support and may institute disciplinary action.

The authority to cancel Lawrence support of international travel to particular countries according to this policy can be exercised by the provost or delegate, director of off-campus programs, or vice president for student life or delegate. When possible, these parties will confer and come to a decision in consultation with each other. In circumstances necessitating a quick response, this decision may be made by one or two of these parties.

## **Exemption petition process**

Lawrence considers the health and safety of student participants to be the highest priority. Petitions for exemption to the Policy on Student Travel to Countries with Heightened Risk will be thoroughly considered. Petitions will be reviewed by a committee that includes the director of off-campus programs, the provost or delegate, the vice president for student life or delegate, and university counsel when necessary. The committee will (1) review plans to ensure individual safety while traveling in a country with this level of warning, and (2) determine whether Lawrence will support travel to this area in light of the risks of the location.

Student travel to a country or area of a country with a State Department level 3 travel advisory and/or CDC level 3 travel warning is allowed only with an approved exemption granted through this exemption process. A petition for an exemption for travel to a country or area of a country with a State Department level 4 travel advisory will be considered only in instances of an international student seeking support to travel to their home country and should follow the exemption proposal process.

The petition for exemption should be submitted to the Off-Campus Programs office along with all supporting materials as far in advance as possible and no later than six weeks before the proposed travel. Standard practice is that the committee will make a decision within two weeks of submission. If an exemption is granted, all paperwork to register international travel and make arrangements for insurance enrollment will follow the regular timelines. If an exemption is granted, each participant will be required to review, sign, and return an additional 'Assumption of Risk for Travel to Countries with Heightened Risk' form.

If the petition for an exemption is not approved, the student or group will not be allowed to travel to the country with Lawrence advice, support, credit, or funding. Permission for travel with Lawrence sponsorship or support may be denied at any time, and decisions may be reversed if the political climate or security situation changes after a petition for exemption is initially granted.

## 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.

<https://www.studiesabroad.com/destinations/latin-america/argentina/buenos-aires>

## Austria

Vienna - European Society and Culture

IES Vienna - European Society and Culture offers a broad curriculum in the humanities and social sciences. Students participating on this program take one required German language course and then choose from English-taught or German-taught area studies courses in a range of subjects, including art history, business, history, political science, psychology, and more! Students with advanced German proficiency may also choose to pursue integrated study at the Universität Wien.

Duration: Year, Semester

No previous language study is required.

<https://www.iesabroad.org/programs/vienna-european-society-culture>

## Austria

Vienna - Music

IES Vienna - Music offers a comprehensive music curriculum featuring individual music instruction, history, and theory, as well as a Music Performance Workshop (audition required) and music-related internship options. Along with music, students take German language instruction and can choose additional electives from a broad range of area studies courses in the humanities and social studies. Most area studies courses are taught in English, but students with advanced German proficiency may also choose to pursue integrated study at the Universität Wien.

Duration: Year, Semester

No language pre-requisite. Students registering for the Music Performance Workshop must audition on-site.

<https://www.iesabroad.org/programs/vienna-music>

## Botswana

Botswana

Programs Offered: Arts and Sciences; Community Public Health. The CIEE program in Botswana provides experience in Sub-Saharan Africa for students from a range of backgrounds, offering direct university enrollment options at the University of Botswana. Students can choose from two tracks of this program: Arts and Sciences or Community Public Health. Students in the Arts and Sciences track take courses at the University of Botswana from a broad range of disciplinary backgrounds. There is also an internship option for students in a wide array of fields. Community Public Health students take some courses at the local university in addition to CIEE courses focused on public health and a community health practicum.

Duration: Semester

No previous language study required. Minimum GPA of 2.75.

<https://www.ciee.org/go-abroad/college-study-abroad/locations/africa/botswana>

## Chile

Santiago Chile

Program Focus: Politics, Social Justice, and Language. 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

Completion of Spanish 202 or equivalent.

<https://www.iesabroad.org/programs/santiago-politics-social-justice-language>

## China

Associated Colleges in China

Based at Minzu University of China 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

Minimum of one year of college-level Chinese is required. Two years preferred. Minimum of 2.7 GPA.

This program may have an early application deadline. If interested in pursuing this program, please contact the Off-Campus Programs office early for more information.

<http://my.hamilton.edu/china/intensive-language>

## China

Shanghai

Focus: Perspectives on Contemporary China. The CET Shanghai program gives students without previous Chinese language background an opportunity to explore a range of topics in Shanghai, with particular strength in the Social Sciences. The program includes housing in dormitories with local roommates, an internship in a wide array of fields, and elective classes. The program is located at Donghua University's downtown Shanghai campus.

Duration: Summer, Year, Semester

No previous language study required. Minimum GPA of 3.0

<https://cetacademicprograms.com/programs/china/chinese-studies-internship-shanghai/>

## 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 includes 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: Summer, Semester

No previous language study required. At least one college-level course in ecology, biology, or environmental studies/science required.

<https://fieldstudies.org/program/costarica-semester>

## 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 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 in addition to program coursework. Students are placed in homestays to facilitate language development and community integration.

Duration: Year, Semester

Spanish 202 or the equivalent required. Applicants must have junior or senior status during the program.

<https://umabroad.umn.edu/programs/americas/msid-ecuador-nonuofm>

## Ecuador

### 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. Note: Lawrence is not affiliated with the Galapagos program.

Duration: Year, Semester

Minimum of Spanish 202 or equivalent. For Direct Enrollment track of the program, students will need to have completed two to three classes beyond Spanish 202.

<https://www.iesabroad.org/programs/quito-area-studies-language>

## Egypt

AU Cairo Egypt

The American University in Cairo (AUC) is a liberal arts institution and a premier English-language university in the Arab world. This direct enrollment study abroad program offers content courses in English in a range of disciplines while also offering high-quality Arabic instruction. While it is suggested that students have some experience with Arabic before attending this program, this is not required and students with an interest in the Middle East from a variety of academic backgrounds will find courses from AUC's course offerings. Courses are available for Anthropology, Arabic, Art History, Government, and Religious Studies students.

Duration: Summer, Year, Semester

No previous language study required. Minimum GPA of 3.0. Most participants are juniors or seniors but applications for sophomore year are considered.

As of Summer 2018, the United States Department of State lists Egypt as a Level 2 Travel Advisory overall; however, there are Level 4 Travel Advisories within the country in various regions. Please contact the Off-Campus Programs Office for more information.

<https://www.aucegypt.edu/academics/undergraduate-studies>

## 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

French 202 or equivalent required.

<https://www.iesabroad.org/programs/nantes-french-language-immersion-area-studies>

## France

## 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

French 202 or equivalent required.

<https://www.iesabroad.org/programs/paris-french-studies>

## Germany

### Berlin Germany - Language and 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

German 202 or equivalent required.

<https://www.iesabroad.org/programs/berlin-language-area-studies>

## Germany

### 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. Students travel approximately 22 days to gain exposure to the European Union and beyond. Each new country allows you to develop an understanding of the European Union, its history, and its institutions. In addition, students participate in a weekend-long model EU simulation. Internship opportunities are also available.

Duration: Semester

No previous language study is required.

<https://www.iesabroad.org/programs/freiburg-european-union>

## Germany

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

German 202 or equivalent required.

<https://www.iesabroad.org/programs/freiburg-language-area-studies>

## Ghana

Ghana: Arts & Sciences

The CIEE program in Ghana gives students from a broad range of disciplinary backgrounds an opportunity to study in a Sub-Saharan African, urban setting at the University of Ghana which is the oldest and largest university in the country. CIEE Ghana offers a variety of opportunities for students who wish to study and engage with their location through an internship or conducting an independent study.

Duration: Semester

No previous language study required. Minimum GPA of 2.5 required. It is recommended that students have taken college-level courses related to African Studies.

<https://www.ciee.org/go-abroad/college-study-abroad/programs/ghana/legon/arts-sciences>

## 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

No previous language study required.

<http://www.cyathens.org/>

## Hungary

### Budapest Semesters in Mathematics & Mathematics Education

This program allows students to study mathematics and mathematics education with eminent Hungarian instructors in Budapest. Hungary has a long tradition of excellence in mathematics education. The Budapest Semester in Mathematics track provides advanced mathematics coursework. The Budapest Semester in Mathematics Education track of this program allows students to combine mathematics courses from the BSM track with education methods classes and observation opportunities. 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. See <https://bsmeducation.com/> as well as the main program URL.

Duration: Summer

No previous language study required. Applicants in the Mathematics track must have completed at least one semester of Abstract Algebra or Real Analysis (a first course in the Theory of Analysis) prior to attending the program.

<http://www.budapestsemesters.com/>

## India

### Buddhist Studies in Bodh Gaya, India

Explore and study Buddhism in India through interdisciplinary courses and Buddhist meditation traditions. At the heart of the Buddhist Studies in India program is the desire to allow students to explore this subject from as many different points of view as possible. Western academic models are systematically used in the core courses, while Buddhist philosophies are tested in the Meditation Traditions course. Students take courses in philosophy, Buddhist culture, and language. All students conduct rigorous independent research in the field. The program is located in Bodh Gaya which is a unique pilgrimage center in northern India.

Duration: Semester

No previous language study required.

<https://apps.carleton.edu/global-engagement/buddhist-studies-india/>

## India

### Contemporary India

The IFSA-Butler Contemporary India program gives students from a broad range of disciplinary backgrounds an opportunity to explore unique issues facing the world's largest democracy as a multi-cultural society and rising superpower. Elective courses include topics on social justice, development economics, social entrepreneurship, and public health. All students complete an intensive field-based component by doing either an internship, directed research project, or film project. Students live in a homestay to become part of an Indian family's life and traditions.

Duration: Year, Semester

Minimum GPA of 2.5 required.

<https://www.ifsa-butler.org/program/contemporary-india/>

## 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.

<https://www.iesabroad.org/programs/dublin-direct-enrollment-national-theatre-school-ireland-gaiety-school-acting>

## Italy

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

No previous language study required. 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://globaled.duke.edu/programs/rome\\_ICCS](http://globaled.duke.edu/programs/rome_ICCS)

## Italy

Milan - Music: Voice, Composition, and Instrumental

The IES Milan - Music: Voice, Composition, and Instrumental program 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. Approved only for B.Mus. and B.A. Music students to pursue music study.

<https://www.iesabroad.org/programs/milan-music-voice-composition-instrumental>

## Italy

Rome Italy

ISA Rome offers students the opportunity to enroll at the American University of Rome. 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. 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. Students are housed in shared apartments in neighborhoods close to the university campus.

Duration: Summer, Year, Semester

Previous language study is encouraged but not required.

<https://www.studiesabroad.com/destinations/europe/italy/rome/business-communications-international-relations--liberal-arts>

## 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 and a month-long cultural internship provides an invaluable education in Japanese culture.

Duration: Year, Semester

At least one term of Japanese study is required, and preference is given to applicants who will be participating during their junior year. Selection is competitive and a minimum GPA of 3.0 strictly required.

This program has an early application deadline of November 8, 2022, for any term during the 2023-2024 academic year.

<https://japanstudy.earlham.edu/>

## Japan

Tokyo Japan - Language & Culture program

IES Tokyo offers an opportunity to study Japanese language 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.

Duration: Year, Semester

Previous language study is not required though it is strongly recommended.

<https://www.iesabroad.org/programs/tokyo-language-culture>

## Jordan

Area & Arabic Language Studies in Jordan

The AMIDEAST Area & Arabic Language Studies program in Amman, Jordan provides students with an immersive cultural and academic experience in Jordan as well as opportunities to explore a variety of topics related to the Middle East. Students take Arabic language classes available at all proficiency levels and elective classes in a variety of subject areas. This program offers content courses taught in English from a range of disciplines while also offering high-quality Arabic instruction. Students can opt to take the community-based learning course which places students in local organizations and workplace settings.

Duration: Semester

No previous language study required.

<https://www.amideast.org/our-work/education-abroad-in-the-mena/abroad-programs/semester-programs/area-and-arabic-language-studies/jordan>

## Kyrgyzstan

Bishkek: Central Asian Studies

Bishkek: Central Asian Studies provides an intensive study of the fascinating region of Central Asia, combining intensive Russian as a Second Language with a range of language, linguistics, and regional studies courses. If you have at least four semesters of Russian language, you may be able to replace some language credits with Russian language electives or other Central Asian language electives, such as Kyrgyz, Kazakh, or Arabic. The semester program addresses geopolitics, history, and culture and includes a two-week travel program to Kazakhstan and Uzbekistan.

Duration: Semester

[https://sras.heiapply.com/course.php?id=1295&back\\_link=filter|level\\*search|\\*level\\_id|106](https://sras.heiapply.com/course.php?id=1295&back_link=filter|level*search|*level_id|106)

## Madagascar

SUNY Madagascar Semester

The Madagascar Semester through Stony Brook University offers students interested in anthropology, tropical biology, primatology, or ecology an option for field study in biodiverse Ranomafana National Park at the Centre ValBio research station. During the program, students enroll in courses that allow for the study of primatology, the comparison of ecosystems in Madagascar, culture and language of Madagascar, and an Independent Study. Further information about Centre ValBio and the program is available:

<https://www.stonybrook.edu/commcms/studyabroad/outgoing/programs/current-year/academic-year/madagascar/madagascar-in-fall>.

Duration: Semester

No previous language study is required. This program is open to juniors and seniors, though, well qualified sophomores may be considered.

<https://www.stonybrook.edu/commcms/studyabroad/outgoing/programs/current-year/academic-year/madagascar/madagascar-in-fall#DetailsandCost>

## Morocco

Area & Arabic Language Studies in Morocco

The AMIDEAST Area & Arabic Language Studies program in Rabat, Morocco provides students with an immersive cultural and academic experience in Morocco as well as opportunities to explore a variety of topics related to the Middle East. Students take Arabic language classes available at all proficiency levels and elective classes in a variety of subject areas. This program offers content courses taught in English from a range of disciplines while also offering high-quality Arabic instruction. Students live in a homestay.

Duration: Semester

No previous language study is required. Most participants will be juniors or seniors, though, applications for sophomore year are considered as well.

<https://www.amideast.org/our-work/education-abroad-in-the-mena/abroad-programs/semester-programs/area-and-arabic-language-studies/morocco>

## Netherlands

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

No previous language study required. Applicants must be music majors and have junior or senior standing by the beginning of the program. Audition and additional application material required. Final admission decisions rest with the Amsterdam School of Music. Admission to this program is competitive.

<https://www.iesabroad.org/programs/amsterdam-direct-enrollment-conservatorium-van-amsterdam>

## Netherlands

Amsterdam: Psychology and Sciences

Students take courses at the Vrije Universiteit Amsterdam (VU Amsterdam) which is known for its strong science programs, particularly global health, biomedicine, and neuroscience, as well as offering courses in psychology, earth sciences, and other areas. Students have the option of taking elective courses taught through IES's Study Abroad center. VU courses are taught in English.

Duration: Year, Semester

No previous language study required. Minimum GPA of 3.0 preferred. GPA of 2.9 or lower will not be considered. Students with a cumulative GPA between 2.9 and 3.0 will be asked to supply additional application materials.

<https://www.iesabroad.org/programs/amsterdam-psychology-sciences>

## Netherlands

### Amsterdam: Social Sciences and Humanities

The IES Amsterdam: Social Sciences and Humanities program combines coursework at the prestigious Universiteit van Amsterdam (UvA) with courses taken at the IES Abroad Center. With a strong focus on internationalism, the UvA offers a wide range of courses in many areas of study, including Conflict & Cultural Diversity, Globalization & International Relations, Migration Studies, and Sociology. At the IES Abroad Center, you will choose from offerings in Art History, Studio Art, Gender Studies, Dutch language, and other subjects taught by international faculty from diverse backgrounds and disciplines.

Duration: Year, Semester

No previous language study is required. Minimum GPA of 3.0 preferred. GPA of 2.9 considered with additional application materials. 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.

<https://www.iesabroad.org/programs/amsterdam-social-sciences-humanities>

## Netherlands

### University of Twente Exchange

This program is designed for students in Physics and the sciences who wish to pursue courses and research through directly enrolling in a host university. The University of Twente in Enschede, Netherlands is a research university which focuses on the development of technology and its impact on people and society and offers degree programs in the fields of technology and behavioral and social sciences.

Duration: Semester

Lawrence applicants must be juniors or seniors by the time of the exchange and have a minimum GPA of 3.0.

Students interested in applying to this program should contact the Off-Campus Programs office and the Physics department.

<https://www.utwente.nl/en/education/international-students/exchange-students/>

## 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

<https://www.iesabroad.org/programs/auckland-direct-enrollment-university-auckland>

## Republic of Korea

Seoul, South Korea

In the Seoul, South Korea program you will direct enroll in Yonsei University, one of South Korea's leading universities, which offers over 500 classes taught in English. As a student at Yonsei you will have the opportunity to continue courses in the Liberal Arts; pursue Korean language and culture classes; and even study business, science, and much more.

Duration: Year, Semester

<https://www.iesabroad.org/programs/seoul-direct-enrollment-yonsei-university>

## 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

Completion of French 202 or the equivalent. The course Destination Dakar is required in the term preceding the seminar term.

Application deadline in Winter Term the year preceding the seminar term.

<https://www.lawrence.edu/offices/campus-programs/senegal>

## 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

Completion of Spanish 202 or equivalent 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.

<https://www.studiesabroad.com/destinations/europe/spain/granada>

## Spain

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. Students may take courses in Spanish or English, depending on their abilities.

Duration: Summer, Year, Semester

Two semesters of college-level Spanish are required.

<https://www.iesabroad.org/programs/salamanca-advanced-spanish-immersion-language-area-studies>

## Taiwan

Taiwan

CET Taiwan combines intensive Chinese language classes with either an English-taught elective or a customized internship opportunity. Internships are offered in both Chinese and English-speaking environments. Students will live with Taiwanese roommates in Taipei for a fully immersive experience that balances life in the city with quick access to nature.

Duration: Semester

<https://cetacademicprograms.com/college-study-abroad/programs/china/cet-taiwan/>

## Tanzania

Ecology and Anthropology in Tanzania

Ecology and Anthropology in Tanzania combines field research with cultural immersion in East Africa and is designed to help students learn about the centrality, the methods, and the rewards of field work in both the

social and natural sciences. Over the course of the program, students will live with local host families in the Usa River community near Arusha and take classes in ecology, cultural anthropology, and Swahili. Excursions and field trips to sites such as local Maasai villages and national parks (Serengeti, Tarangire, and Mount Kilimanjaro) provide unique opportunities to learn about and interact with the people, wildlife, and landscape of Northern Tanzania. The culmination of the program is research conducted under the guidance of regional experts, with the goal of serving student scholarship and contributing to a larger community benefit in Tanzania.

Duration: Semester

No previous language study required.

<https://apps.carleton.edu/global-engagement/ecology-tanzania/>

## United Kingdom

London Centre

The Lawrence London Centre, established in 1970, plays a vital role in enhancing a student's liberal arts education. By spending one term or longer at the London Centre, students gain a more global perspective and take what they learn in the classroom and apply it to a larger, world stage. London, as a cosmopolitan center of artistic, historical, political, and economic interest, becomes the classroom for students ready to take experiential learning to the next level. Students of any major can learn something at the London Centre. Although courses vary each term, topics typically can include offerings in theatre arts, music history, anthropology, history, government, art history, literature, and more. London Centre courses do not have prerequisites and are open to all London Centre participants. Internships, music lessons, and independent study options are also available.

Duration: Term

<https://www.lawrence.edu/offices/campus-programs/london-centre>

## United Kingdom

Northern Ireland - Conflict, Peace, and Transition

In this program, students will critically examine the work of justice, reconciliation, and repair while studying the historical, political and religious roots of the conflict in Northern Ireland, the prospects for peace, and the progress being made. While living in Derry-Londonderry, students will take classes and participate on a seven-week-long internship. This program is offered in partnership with Augsburg University.

Duration: Semester

<https://studyabroad.arcadia.edu/find-a-program/programs-by-country/northern-ireland/conflict-peace-and-transition/>

## United Kingdom

### 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 six Oxford colleges: Hertford College, Lady Margaret Hall, Mansfield College (academic year only), St. Anne's College, St. Catherine's College, and St. Edmund 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

Minimum GPA of 3.7 (3.8 for Hertford College). Applicants must have junior or senior standing at the beginning of the program. This program is competitive; the final admission decision lies with the host university.

This program has an early application deadline of November 8, 2022, for any term during the 2023-2024 academic year.

<http://studyabroad.arcadia.edu/find-a-program/programs-by-country/england/university-of-oxford/>

## United States

### 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

<https://www.coe.edu/academics/coe-difference-centers-and-programs/off-campus-study/wilderness-field-station>

## United States

### SEA Semester

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 variety 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. This is a unique opportunity for Lawrence students, scientists and non-scientists alike, to learn about 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.

Duration: Term

Some tracks of the program require past science coursework but many tracks do not -- students should check for prerequisites for their track of interest

<http://www.sea.edu>

## United States

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

Applicants should have background in one Biology course, one Chemistry course, and one Math course. Students who are lacking in a given area may still qualify for admission to the program at the discretion of the on-campus faculty advisor and selection committee.

<https://www.mbl.edu/ses/>

## United States

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.

This program has an early application deadline. Be in touch with the education department to discuss the early deadline in fall term of the year prior to your proposed participation in this program.

<https://www.chicagocenter.org/student-teaching-program>

## United States

## Washington Semester

The Washington Semester enables students to participate in a thematic program of study at the American University in Washington, D.C. In addition to the core seminar, students pursue an internship related to the program topic and an independent study project. The Lawrence-approved program tracks are: American Politics, International Environment and Development, International Law and Organizations, Justice and Law, Peace and Conflict Resolution, Islam and World Affairs Foreign Policy, and Global Economics and Business.

Duration: Semester

<https://www.american.edu/provost/ogis/washington-semester-program/>

# ACADEMIC PROCEDURES AND REGULATIONS

## Academic responsibilities

### OPPORTUNITIES, OBLIGATIONS, AND RESPONSIBILITIES

Academic procedures and regulations, together with degree, program, and course requirements and the honor system 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 degree requirements and maintaining satisfactory academic progress. Students are expected to be thoroughly familiar with the contents of the course catalog, the student handbook, and other contracts and official notices of the university. Degree requirements and requirements for majors, minors, or interdisciplinary areas are set by specific catalog year, while academic regulations and procedures are effective as of the date they are approved by the university unless otherwise noted.

### CONFIDENTIALITY OF STUDENT 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 student handbook.

### CATALOG OF RECORD

Students complete degree requirements using the course catalog in effect at the time they matriculate as degree-seeking students. Students have the option of choosing a different year's course catalog as their catalog of record. The catalog of record must be from the student's period of enrollment as a degree-seeking student. The catalog of record is used to certify all degree requirements, including majors, minors, interdisciplinary areas, and general education. Students may not satisfy requirements from more than one catalog. Students should consult with their academic advisors and with department chairs and program directors regarding the applicability of current course offerings to the requirements they intend to complete.

## Academic expectations

### ACADEMIC SUCCESS

Most Lawrence students do fine most of the time. Nevertheless, on occasion some students find themselves out of sync not only with the expectations of their instructors but also with their own expectations of themselves. Attendance may trail off, coursework may be avoided, and assignments may be turned in late or not at all.

Despite students' best efforts, pressures and anxieties build, course performance suffers, and it becomes hard to see a pathway to academic success. At these times, it is essential that students recognize what is expected of them and how to take the steps needed to put themselves back on track.

Through institutional resources and the efforts of its faculty, Lawrence strives to assist students who find themselves in academic difficulty. Mudd Library, the Center for Academic Success, and Wellness Services are among the most prominent resources that Lawrence offers to help students succeed. Likewise, faculty members seek to foster academic success among their students not only in the classroom but also during office hours, at study or review sessions, and through online tools and resources.

When a misunderstanding or discrepancy emerges between what faculty members and students expect from each other, this gap can adversely affect the learning that takes place in the classroom, laboratory, or studio. The notes that follow seek to reduce this sort of gap by making expectations clear.

## RECOGNIZING EXPECTATIONS AS A KEY TO SUCCESS

**Communication.** Regular communication with faculty, administrators, and staff may be the single most important element in student success at Lawrence. Students are urged to communicate with instructors right away if they are experiencing academic difficulty and to seek help from the many resources made available by the university.

**Engagement and respect.** Students should see it as their responsibility to engage fully in all class activities and to demonstrate respect for fellow students, instructors, and course materials. Respect is demonstrated by encouraging and supporting others and never demeaning or degrading fellow Lawrentians; by adhering to the honor code and university rules and regulations; and by caring for our facilities, grounds, and equipment. Students can expect instructors, administrators, and staff to treat them with respect at all times, especially with regard to issues of race or ethnicity, class, gender, sexual orientation, and disability. Furthermore, they can expect their instructors to hold them to clear and consistent academic standards and to assess their work in a fair and timely manner with an indication of how it might be improved.

**Attendance.** Although different instructors spell out attendance requirements for their courses in different ways, students should consider it their responsibility to attend all class sessions and lessons and to be on time and well prepared. Missing class or arriving late can result in unexcused absences or a lowered grade for class participation. If students must miss class or arrive late, they should make every effort to inform their instructors beforehand. Faculty can be very understanding of student difficulties, and unforeseen conflicts, unexpected crises, and even the rare case of forgetfulness may be excused in light of normally good attendance and class preparation.

**Deadlines.** Students should consider it their responsibility to turn in all assigned work by the specified deadlines and to abide by the policies for assignments established by each individual instructor. When it is impossible for students to meet their deadlines, prompt and direct communication with the instructor, or with a staff member or administrator when communication with the instructor is not possible, is crucially important. Likewise, students can expect that instructors will clearly announce all deadlines and policies for assignments, including penalties for late or missing work.

**Academic, extracurricular, and professional conflicts.** Students should request permission in advance to

miss class for academic, extracurricular, or professional activities that conflict with regular classes or lessons. While they may be sympathetic to such conflicts, instructors are under no obligation to grant permission and may do so at their own discretion. Instructors who schedule curricular activities (such as field trips, rehearsals, conferences, or competitions) outside of regular class time should remind students to request permission to miss any regularly scheduled classes or lessons that might conflict with those activities.

**Illness or injury.** Students who miss class for illness or injury should contact their instructors for guidance in making up missed work. If they miss more than two consecutive class sessions or a major assignment or examination, they should see a nurse, doctor, or counselor for a medical excuse (with permission, Wellness Services can e-mail notice to the instructors). If a student misses the equivalent of two weeks of classes or a similar number of assignments, then the student and the instructor should meet with the Dean of Academic Success to discuss whether the student will be able to complete the course or, especially late in the term, needs to withdraw or arrange for an incomplete.

Students with known health conditions that could affect their course work should meet with their instructors at the start of term to plan how to deal with problems that might arise. They should notify instructors in advance if they will be absent for medical testing or treatment and should alert instructors right away if they are too ill to come to class or to complete an assignment. If students are unable to meet their course requirements, they should contact the Dean of Academic Success to arrange a withdrawal or incomplete.

**Personal crisis.** Personal crises, such as accidents, trauma, or family emergencies, are handled with empathy by staff and faculty. Adjustments to course requirements or deadlines are granted at the discretion of instructors in consultation with appropriate staff or administrators. Communication on the part of students is paramount. Unless they alert their instructors or a staff member from Wellness, Student Life, or the Center for Academic Success, students can expect no adjustments in requirements. Faculty and staff are committed to serving students in moments of crisis, but they can act only on the basis of what they know.

**If difficulties arise.** Faculty expect students to be fully engaged in the classes for which they are registered: to attend regularly, to be well prepared, to participate in discussion, to complete assignments, and to communicate with instructors as outlined above. Students who are not meeting these expectations will be referred to the Center for Academic Success for help.

In those rare cases where a student who has not been attending classes also does not respond to requests from the Center for Academic Success, the student may be withdrawn from the term and placed on administrative leave. The university reserves the right to determine when an administrative withdrawal is appropriate and what conditions must be met before the student is allowed to return. Academic implications (credit and grades) and financial implications (tuition, fees, and financial aid) will vary depending on the circumstances.

In general, students are strongly urged to seek help from the Center as soon as difficulties arise so they can stay on track for academic success. That is why the Center exists, and it is in the interest of everyone to put these resources to their best use.

## 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 Academic Advisor Form available online. The online form will route to the new advisor for final approval.

Students are encouraged to consult with other faculty members, department chairs and program directors, the Director of Academic Advising, or the Center for Academic Success for further advice.

## Honor system

### HONOR CODE

To maintain the atmosphere of mutual trust and confidence among students and faculty and to ensure that students are judged according to their own merits, the Lawrence University community has established the following Honor Code:

*No Lawrence student will unfairly advance their own academic performance or in any way limit or impede the academic pursuits of other students of the Lawrence community.*

The Lawrence community firmly believes in the value of the academic atmosphere that 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, particularly as the Honor Council provides extensive information to all students. The council does not consider ignorance or negligence as an excuse

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 hereby reaffirm the Lawrence University Honor Code" (or "IHRTLUHC") followed by their signature on all submitted work or by providing an equivalent indication on work submitted electronically.

## HONOR COUNCIL

The Honor system is administered by the Honor Council, which consists of up to thirteen 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. Every member of the Lawrence community is responsible for upholding the Honor System.

If a member of the community suspects a violation, the member has two options:

- contact the faculty member involved, a faculty member on the Academic Integrity Committee, or a member of the Honor Council; or
- discuss the concern 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 Honor System Charter and related information on the Honor System webpage.

## Accommodations for students with disabilities

### NONDISCRIMINATION ON THE BASIS OF DISABILITY

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.

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

In compliance with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990 (amended in 2008), Lawrence recognizes that qualified students who have diagnosed disabilities, 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 ACADEMIC ACCOMMODATIONS

Students who have a disability covered by the Americans with Disabilities Act are entitled to academic accommodations. In keeping with the university's educational philosophy emphasizing student independence and responsibility, requests for accommodations must be initiated by the student. No notification of instructors occurs without a student request, and no student is required to tell instructors about a disability or to request accommodations. If a student does choose to request accommodations, the request should be made as early as possible and no later than the start of the term in which the course is offered.

To request academic accommodations, a student should meet with the accessibility services and academic skills specialist in the Center for Academic Success. The student will be asked to provide appropriate documentation of the disability, including its impact on the student and recommended accommodations to ameliorate that impact. Once the disability is documented, the student may request accommodations for specific courses through the director. Accommodations are not retroactive, so they should be arranged during the first week of the term to ensure they are in place when needed. Any testing accommodations must be requested at least one week prior to the test or examination. More information can be found on the Center for Academic Success website.

## Term system and course loads

### THREE-TERM SYSTEM AND COURSE LOADS

Lawrence University has a three-term schedule--fall, winter, and spring--plus an optional December term (described in the catalog under "December Term"). Each regular term consists of ten weeks of classes followed by three days of examinations, which are considered an integral part of the term. The term ends with the completion of final exams. A standard course load is three courses per term (6 units each) or the equivalent, with additional credit (1 unit each) for music ensembles. Students may register for up to 22 units (exclusive of music ensembles) without overload approval or fees.

### STANDARD CLASS PERIODS

The normal class periods are three 70-minute sessions per week on Monday, Wednesday and Friday (MWF) or two 105-minute sessions per week on Tuesday and Thursday (TR) as follows:

- 8:30–9:40 a.m. MWF
  - 9:50–11:00 a.m. MWF
  - 11:10 a.m.–12:20 p.m. MWF
  - 1:50–3:00 p.m. MWF
  - 3:10–4:20 p.m. MWF
- 
- 8:30-10:15 a.m. TR
  - 10:25 a.m.-12:10 p.m. TR
  - 12:40-2:25 p.m. TR
  - 2:35-4:20 p.m. TR

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

A per-unit fee is assessed for 23 or more units in a single term, exclusive of music ensembles, up to the maximum load of 27 units. Every student who qualifies to overload may take a single term at 23-24 units during their time at Lawrence with no additional charge, and during that term the per-unit fee will be charged for 25 units or more. Overload fees are not refunded if a student withdraws from a course after the class change period, in which case the course counts as attempted units and remains on the transcript with a W.

To qualify to overload, a student must be in good academic standing, have a "B" average for the preceding three terms, and have permission from their academic advisor. To register for an overload, a student submits a Request to Overload form with the advisor's signature to the Registrar's Office, and once the approval has been entered into the system, the student adds the extra course(s) in Voyager. A petition is required to register for an overload after the class change period.

Fewer than 15 units in a term (including music ensembles) is considered an underload. At times a student might find it educationally advantageous to reduce their course load for one or more terms. A student considering a reduced load should consult with their academic advisor 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, additional tuition charges, insurance, loan deferments, immigration status, and eligibility for participation in athletics. A student with less than a full course load may be charged tuition on the incremental fee plan (see Tuition, Fees, and Financial Assistance).

## Registration

The schedule of classes for current and future terms is published online at <http://www.lawrence.edu/s/registrar/catalog>, and announcements about registration and course offerings are sent to students at their Lawrence e-mail address. Registration is conducted through the Voyager system, which is accessible both on and off campus. Instructions can be found at <http://www.lawrence.edu/s/registrar/registration>. Students can view their registration status and assigned registration time in Voyager.

Before registering for classes, students must meet with their academic advisor and obtain any required course approvals from instructors. They must also clear any other registration holds (Registrar's Office, Financial Services, Wellness Services, or deans). Students with a registration hold should contact the appropriate office directly.

Students are responsible for checking their registration at the start of each term and maintaining 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 fee to correct registration errors (see "Petitions and Fees for Late Registration" below).

### ADVANCE REGISTRATION FOR DEGREE-SEEKING STUDENTS

Advance registration for the next academic year begins in the Spring Term. All continuing, degree-seeking students are eligible to register at this time and should consult with their academic advisor about their plans before the registration period opens. Continuing students must have advance-registered for classes in order to participate in the housing selection process.

Advance registration for new first-year students, transfer students, visiting-exchange students, and Waseda Program students occurs in the summer. Course planning and registration information is sent to new students, who are invited to schedule an online meeting with an academic advisor to select courses for the fall term. During Welcome Week, new students meet with their academic advisor and complete their course registration using the Voyager system. Students entering Lawrence in the middle of the academic year register at the beginning of the term in which they first enroll.

### TERM REGISTRATION FOR DEGREE-SEEKING STUDENTS

All students are expected to be properly registered for the current term by the end of the class change period, which is the first five days of classes. To add or drop classes, a student must first clear all registration holds. To add a limited-enrollment class, a student must wait for the instructor to enter approval in Voyager, and then the student may register for the class. Special registration forms for student-initiated courses, supervised accompanying, or the S/U option must also be submitted before the end of the class change period. After this period, a class may be added or dropped only by petition to the Faculty Subcommittee on Administration, and late fees and overload restrictions apply.

After the class change period, the registration system remains open for future terms so that students may make

class changes or add their name to class waitlists for the upcoming term. Registration for continuing students is closed during the summer, when there are advance registration periods for incoming first-year and transfer students.

## 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 high school students in the Early College Credit Program (ECCP), college graduates seeking teacher certification, and members of the local community taking courses for personal growth. Non-degree students must meet with their academic advisor and obtain the approval of each instructor before they can register through the Voyager system. Priority is given to degree-seeking students when classes are over-subscribed.

## PETITIONS AND FEES FOR LATE REGISTRATION

Students who need to correct a registration error after the start-of-term class change period has ended must petition the Faculty Subcommittee on Administration. Students may submit a petition within one year of the conclusion of the term of enrollment in question. To discourage unapproved overloads, no petition to add a course as an overload will be accepted after the class withdrawal deadline for the term in which the course is taken (see "Overloads/Underloads"). When the Faculty Subcommittee on Administration approves a late correction to class registration, the following fees apply:

- \$25 per late class cancellation or addition approved from the sixth day of classes through the class withdrawal deadline (the second Friday after midterm reading period), up to a maximum of \$200 for the term.
- \$50 per late class cancellation or addition approved after the class withdrawal deadline 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, or a delay in placement due to an audition, placement test, or similar requirement. The student is responsible for documenting the exceptional circumstance as part of the petition.

## Courses and exams

### LIMITED-ENROLLMENT CLASSES

When a limited-enrollment class is filled, students may request to be added to the waiting list. Waiting list requests can be made through the Voyager registration system during the term just prior to the one in which the class is offered (for example, in winter a student may waitlist for spring). Students may remove themselves from waiting lists using the "add/drop classes" option in the Voyager registration 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 cancel the registration of 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 registration system to add the class after the instructor has entered approval to register.

## PREREQUISITE CHECKING

Prerequisites provide important information to students constructing their academic program plans. A course prerequisite may be composed of class standing, a list of specific courses to have been completed, a description of skill level previously achieved, or some combination of these. 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 is expected that 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 approval. Students who believe transfer credit or credit from advanced-placement examinations should be applied to the prerequisites also *must* contact the instructor for approval 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.

## 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.

## FINAL EXAMINATIONS

All final examinations are given and taken during the examination period, and no examinations or tests may be given in class or as take-home exercises during the last week of classes. It is a faculty member's prerogative to establish the conditions for their particular exam. If no specifications are given, the exam will be taken in class without books, notes, or discussion among the students, and without the aid of technology.

An examination schedule is published by the registrar before the fifth week of the term. 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. 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. Students who have three examinations on the same day may request a change of time for one of them. Students may also petition for a change of exam times for reasons of health, family

considerations, or summer academic programs. Petitions to change final exams for travel purposes will not be approved.

Students should be aware that faculty may not accept final assignments or other work for credit after the end of the last scheduled final examination of the term, unless a student has been granted an incomplete.

## WITHDRAWING FROM A COURSE

Students are permitted to withdraw from a course after the class change period through the second Friday after midterm reading period (about two weeks before the last day of classes). The course instructor and the student's faculty advisor must approve the Withdraw from Course webform. A grade of W is recorded on the student's record and has no effect on grade-point averages. A course withdrawal does not reduce the number of units used for billing purposes.

A student must petition the Faculty Subcommittee on Administration to withdraw if any of the following apply:

- the student is withdrawing from more than one class in the term, or
- the student has already withdrawn from three classes during their career at Lawrence, or
- the student is on probation, or
- the student has been referred to or sanctioned by the Honor Council for a matter related to the course, or
- the student is requesting to withdraw after the withdrawal deadline.

Withdrawing from a course reduces a student's active course load for the term. Changing the active course load to less than full time (fewer than 15 units for a single term) can affect the status of a student visa, eligibility for financial aid and scholarships, eligibility for veteran's benefits, athletic eligibility, insurance, and other matters that require full-time student status. Students should investigate the possible consequences before submitting a course withdrawal form. International students should consult international student services. Students receiving scholarships, financial aid, or veteran's benefits should consult the financial aid office. Athletes should contact their coaches. All students should check their insurance requirements.

## REQUESTING AN INCOMPLETE

Students are expected to complete the work in each course by the deadlines established by the instructor, and the final deadline for any work is the scheduled exam time. However, a grade of incomplete may be awarded at the discretion of the dean of academic success, working in partnership with the instructor, if requested by the student, under the following guidelines:

1. approximately 70% or more of all course requirements have been completed (even if not yet graded); and
2. unforeseen circumstances beyond the student's control (usually restricted to serious and sudden physical or mental illness, family emergency, or unpreventable lab or practicum issues) impede completion of the remaining work for the course by the term deadline.

Poor planning, having a significant amount of work to complete at the end of the term, desiring extra time to do higher quality work, or failing to back up work are not, in fairness to other students, considered circumstances beyond a student's control. Instructors and students with questions about whether the conditions for an

incomplete are met should consult with the dean of academic success.

Incompletes are normally granted at or near the end of the term. Students must initiate the process to request an incomplete by meeting with the dean of academic success before the scheduled final exam time. If the course does not have a scheduled exam time, the student must meet with the dean before the last exam time of the term. If the conditions for an incomplete are met, the dean of academic success will send the instructor an Incomplete Information Form to specify the work to be completed.

For fall, winter, spring and summer terms, students have four weeks after the last day of classes to complete an incomplete. For December term, students have one week after the last day of classes to complete an incomplete. Extensions are granted only in rare cases with extraordinary extenuating circumstances such as significant medical issues or family emergencies. Documentation must be provided to the dean of academic success before a decision is made. Extensions require the approval of both the course instructor and the dean of academic success.

If the student does not submit the remaining work by the incomplete deadline, the student will receive a course grade based on completed work with zero credit for any missing work.

Exceptions to the above guidelines are at the discretion of the dean of academic success.

## Grading system

### GRADING SCALE AND GRADE SYMBOLS

Grade	Description	Computation of grade points
A	Excellent	4 x value of the course
A–	Excellent	3.75 x value of the course
B+	Good	3.25 x value of the course
B	Good	3 x value of the course
B–	Good	2.75 x value of the course
C+	Satisfactory	2.25 x value of the course
C	Satisfactory	2 x value of the course
C–	Satisfactory	1.75 x value of the course
D+	Passing, but unsatisfactory	1.25 x value of the course
D	Passing, but unsatisfactory	1 x value of the course
D–	Passing, but unsatisfactory	0.75 x value of the course
F	Failing	0 x value of the course
W	Withdrew	No course credit. Does not affect grade-point averages.

S	Satisfactory	Equivalent to a C– or better. Course credit. Does not affect grade-point averages.
U	Unsatisfactory	Equivalent to D+ or below. No course credit. Does not affect grade-point averages.
I	Incomplete	Course work remains to be completed by a set deadline after the end of term. An incomplete is granted by the dean of academic success for extenuating circumstances (severe illness or emergency) where most of a course has been completed. The incomplete grade (I) is replaced by the earned course grade after the work is completed or the deadline has lapsed.
IP	In Progress	Designates a tutorial or independent study that will continue in the subsequent term (the student must register in the next term for the same course number and title). The IP is 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 taken on an S/U basis) if a valid grade is not reported shortly after the end of the term.
*	Withdrawal From Term	No course credit. Grade does not affect grade-point averages.
R or #	Repeated Course	Credit is not applied to degree. Grade is not used in computation of degree GPA and major or minor GPA. Original course grade does remain in composite GPA.

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 than 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 Satisfactory/Unsatisfactory (S/U) grading option is provided to encourage students to explore new academic disciplines. A student must designate the S/U option for a course by the end of the class change period at the start of the term. At any time during the term or after the course has been completed, the student may change the basis of grading from S/U to letter grade (A-F) to have the letter grade recorded on the transcript and included in grade-point averages. Students may not change from a letter grade to S/U.

Instructors submit letter grades (A-F) for all courses that are not offered S/U only, and the registrar then converts the letter grade to S or U for any student who has elected the S/U option. A grade of A- to C- becomes Satisfactory (S); a grade of D+ or below becomes Unsatisfactory (U). A Satisfactory grade provides course credit, while an Unsatisfactory grade does not. Neither grade affects grade-point averages. If a student earns a grade of A in a course with the S/U option applied, the S/U mask will not apply and the A grade will remain on the transcript and calculate into the GPA.

Students who have completed 54 units may elect to take one class per term on an S/U basis. The class must be outside the major/minor department or program and other major/minor required courses except as noted below:

- Students with a minor in Chinese may take a course in Japanese on an S/U basis, and students with a

minor in Japanese may take a course in Chinese on an S/U basis.

- Students with a minor in Latin may take a course in Greek on an S/U basis, and students with a minor in Greek may take a course in Latin on an S/U basis.

Additionally, students who take 24 or more units in a term 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.

## REPEATING COURSES

Students are permitted to repeat courses in which a grade of F is received. When a course is repeated, the second grade is recorded on the academic record and the original F is replaced by R. Only the second grade is counted in the degree GPA and major or minor GPA, while both the original F and repeat grade are counted in the composite GPA (see "Grade Point Averages").

If a student receives a second F in a repeated course, the second F will replace the first F so that only the second F will count in the degree GPA and major or minor GPA. The student may then elect to repeat the course again for another replacement grade, if desired.

A student who withdraws from a class (W) has not completed the course and is free to take it again. Only grades for completed courses count in grade-point averages.

## GRADE REPORTING AND TRANSCRIPTS

Grades become visible to students, academic advisors, and administrative staff in the Voyager Information System once all end-of-term processing has been completed. 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.

To obtain an official transcript, a student must make a request through their Voyager account, giving permission to release the transcript to a third party. Charges for an official transcript vary according to delivery method; specific fees are explained in the Voyager transcript ordering process on the registrar's office website. Students should be aware that official transcripts will not be sent after the last day of classes until grades for the term have been posted and academic progress review is complete. Official transcript requests are usually fulfilled within 1-3 work days. Students are free to use their Voyager list of courses and grades as an unofficial document in cases where an official transcript is not required.

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 (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.

## Declaration of a major and optional minor or interdisciplinary area

### DECLARATION OF A MAJOR

Students are strongly urged to declare a major by the end of winter term of the sophomore year (or once they have 90 earned units) and to find an academic advisor in the major department who can help the student plan a program of studies for the junior and senior years. Advising and registration for the upcoming year take place in spring term.

Students are required to declare a major no later than the beginning of the junior year (or once they have 108 earned units) and may do so at any time by completing a Declaration of Major, Minor, or Interdisciplinary Area

webform. Students must also have an academic advisor in their major department no later than the beginning of the junior year. Neither declaring a major nor changing advisors should preclude a student from seeking additional counsel about their course of study from any member of the faculty, especially from the chair or director of a department or program in which the student is completing a minor, interdisciplinary area, or teacher certification.

If a student-designed major has been approved by the Instruction Committee, the registrar's office will update the student's major. The approved major requirements are kept on file in the registrar's office and viewable in Degree Works.

### DECLARATION OF A MINOR OR INTERDISCIPLINARY AREA (IF DESIRED)

In addition to a major, a student may choose to complete the requirements for a minor or interdisciplinary area. A student may indicate the intent to pursue a minor or interdisciplinary area on the Declaration of Major, Minor, or Interdisciplinary Area form available in the registrar's office. An advisor in the minor or IA is not required, and students are encouraged to consult with the appropriate department chair or program director about their course selections.

### TEACHER CERTIFICATION (IF DESIRED)

A student who wishes to pursue teacher certification must apply for admission to the teacher education program. See the Education section of the catalog for more information.

## Credit for AP, IB, and transfer courses

### CREDIT FOR ADVANCED PLACEMENT EXAMINATIONS

The Advanced Placement program of the College Board offers high school students the opportunity to study prescribed courses and take nationally administered examinations in many subject areas. Lawrence awards 6 units in the appropriate area 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 total. Individual departments may decide to award additional credit.

Credit awarded for advanced-placement examinations may be used to fulfill general education competency and diversity requirements as appropriate, though not distribution requirements, which require courses to be taken at a college or university. Individual departments or programs will determine whether advanced-placement credit fulfills major or minor requirements and where to place students who wish to undertake further work in the discipline or field.

### 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 for each IB higher-level examination and 3 units for each subsidiary-level examination. Students who have not earned an IB diploma but have completed individual IB examinations may receive 6 units for each higher-level examination. A maximum of 48 units 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.

Credit awarded for IB examinations may be used to fulfill general education competency and diversity requirements as appropriate, though not distribution requirements, which require courses to be taken at a college or university. Individual departments or programs will determine whether IB credit fulfills major or minor requirements and where to place students who wish to undertake further work in the discipline or field.

### 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, in the case of foreign institutions, World Education Services (WES) or Educational Credential Evaluators, Inc. (ECE). Grade reports or transcripts submitted by students are not accepted. Students may be asked to provide course descriptions, syllabi, or other information if a determination cannot be made from the transcript or report information alone.

Coursework from other institutions may be used to satisfy general education distribution, diversity, and foreign language and quantitative reasoning competency requirements where appropriate, though not the writing or speaking competency requirement, which must be completed at Lawrence. 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.

Only courses applicable to the programs and degrees offered by Lawrence and graded at a C- or better will be transferred. Credit is granted on the basis of 6 Lawrence units for three-and-one-third semester hours or five quarter hours, so a three-credit semester course is normally credited as 5 units at Lawrence. Transfer credit and transfer grades are used only in the computation of the composite GPA, not in the degree GPA or major or minor GPA (see "Grade Point Averages").

### *Transfer of credit for new students*

Incoming students with transfer work 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 units 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 composite grade-point average; a notation of courses that may be transferred pending completion of work, review of course descriptions and syllabi, and/or review by a Lawrence department; a notation of courses denied for transfer credit due to unsatisfactory grades or because the content is not applicable to a Lawrence degree; a statement of the work required for graduation;

and a statement of the student's academic class standing on entry. Depending on work transferred and the major selected at Lawrence, a transfer student may need to complete additional units beyond the minimum required for a Lawrence degree in order to fulfill all degree requirements.

### *Transfer of credit for continuing students*

A Lawrence student who wishes to attend summer school or undertake a period of study at another institution must complete the transfer course approval form. The form must include the title and description of each course; the length of the session or term and, for summer work, the number of hours of participation in class, laboratory, field, or studio; and approval from the student's academic advisor and from the chair of the department or director of the program that would offer the course were it part of the Lawrence curriculum. A syllabus may be requested if needed to determine whether a course can be approved for transfer credit.

Transfer credit will be applied to degree requirements as appropriate based on the subject of the course. If the student would like the transfer credit to fulfill a particular general education requirement, this should be stated in the transfer course approval form, and a syllabus may be needed to make this determination. It is expected that the student and academic advisor will have reviewed the implications of transfer credit for degree and residence requirements. Transfer credit is used only in computing the student's composite GPA and will not affect the degree GPA or major or minor GPA.

The registrar's office will notify the student of courses approved for transfer. 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 official documentation to be sent to Lawrence upon completion of the work as described under "Transfer Credit" above.

## **Completion of the language competency requirement**

Lawrence's general education requirements include competency in a language other than English. The language must be a natural language that is natively spoken or signed by one or more linguistic communities. Students demonstrate proficiency in listening, speaking, reading, and writing. For non-written languages, students demonstrate proficiency in listening and speaking only. For classical languages (Latin and Ancient Greek), students demonstrate proficiency in reading and writing only. Students may demonstrate proficiency through coursework, examination, or documentation as described below.

Approval of transfer credit, arrangement of testing, review of documentation, and certification of satisfying the language competency requirement are under the purview of the language coalition, a coalition of the language departments at Lawrence. Ask any language department faculty member for the name of the current language coalition chair.

### **COURSEWORK**

- Completing a Lawrence University language course at the level of 200 or above (for the Bachelor of Arts degree or B.A./B.Mus. double degree) or 102 or above (for the Bachelor of Music degree and the Bachelor of Musical Arts Degree).

- Completing a course at the appropriate level in a Lawrence-affiliated off-campus program with a language component. A list of programs with qualifying courses is available through the off-campus programs office.
- Receiving transfer credit for a course at the appropriate level completed at another college or university (see "Transfer Credit"). The petition for transfer credit should request that the course satisfy the language competency requirement. The Faculty Subcommittee on Administration will request approval from the language coalition chair.

## EXAMINATION

- Passing the Lawrence University proficiency examination in a language other than English at the appropriate level. The language department will determine placement and whether the language competency requirement is satisfied. Degree credit is not awarded for these examinations.
- Passing a proficiency examination in a language not taught at Lawrence. The testing may be facilitated locally by the chair of the language coalition. Where a suitable option is not available, a student may petition the Faculty Subcommittee on Administration to use an evaluation administered and certified by an outside authority who will (a) identify the authority's expertise in the language, (b) describe the methods by which the authority assessed the proficiency of the student, and (c) provide a diagnostic report on the level of proficiency the student has obtained in listening, speaking, reading, and writing (or listening and speaking for a non-written language). The student should contact the chair of the language coalition for help preparing the petition and confirming the acceptability of the outside authority.
- With the exception of French, 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 a language other than English at the high level. This option carries six units of credit.
- For Spanish only: Obtaining a score of 630 or higher on the SAT II Spanish or Spanish with Listening exam or by presenting documentation for CLEP credits in Spanish: four CLEP semesters (B.A. or B.A./B.Mus.) or two CLEP semesters (B.Mus.). This option carries no academic credit.

## DOCUMENTATION

- Presenting a diploma or letter from a principal or headmaster (not related to the student) certifying that the student graduated from a high school where instruction was primarily conducted in a language other than English. The student should request the registrar's office to review the documentation in consultation with the chair of the language coalition to determine if it satisfies the language requirement. The student is encouraged to contact the chair of the language coalition for help confirming the acceptability of the documentation.

Native speakers whose high school program was conducted primarily in English will need to demonstrate proficiency through examination or, where examination is not possible, documentation attesting to the student's language skill from an authority (not related to the student) approved by the chair of the language coalition.

## Academic progress

### EXPECTATIONS FOR 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. double-degree program). At the time of matriculation, the university determines the classification 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 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 45 units and have a minimum degree GPA of 1.75. Students who do not meet these guidelines or who receive failing grades or other indications of unsatisfactory progress may be placed on Notice, placed on Academic Probation, placed on Academic Suspension, or Required to Withdraw from the university. Students should review the Academic Standing Policy for specific gpa requirements. Academic performance in December Term does not change a student's academic standing, though the December Term course grade will be included in a student's grade point average, which could affect academic standing in subsequent terms.

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.

Additional information on policies governing academic progress and standing is contained in "Academic Standing Policy," which may be obtained from the Registrar.

## LEAVES OF ABSENCE AND WITHDRAWAL

A student who wishes to leave the university for any reason should request a leave of absence or withdrawal by completing the request form available from the Center for Academic Success. The dean of academic success, using faculty legislation, will review the request and, upon its approval, will notify all appropriate university offices. A student who has not been attending classes and has not responded to communications from university offices may be placed on leave by the university.

A student granted a leave is expected to return at the end of the leave (and may return earlier) or to request an extension before the leave expires. Any student who does not do so is withdrawn from the university. Any student who, without a leave of absence, terminates enrollment at Lawrence or in a Lawrence-sponsored program is withdrawn from the university. A student who has been withdrawn must petition to be readmitted. A student placed on leave by the university will be expected to address the problems that led to the leave before returning to continue a course of study.

Petitions for readmission are reviewed by the Faculty Subcommittee on Administration. The petition should include a clear and detailed explanation of why the student terminated enrollment or overstayed a leave of absence, what academic or other worthwhile activities occupied the student while 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.

## TRANSFER BETWEEN DEGREE PROGRAMS

Students who find that their interests have changed may apply to transfer to a different degree program within the university. The Degree Change Form should be submitted for admission to the intended program. A B.A. student who wishes to transfer to the B.Mus. or B.M.A. degree program will require approval from the Conservatory Committee on Administration.

Any student considering transferring to a different degree program should consult with their academic advisor, the dean or associate dean of the conservatory, and the dean of academic success in order to assess the consequences of such a move. The Degree Change Form must include the reasons for the change and 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. A student who transfers to a different program after the second year of study will usually need to extend the time required to complete the degree.

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 completing the Degree Change Form.

## CONFERRING OF DEGREES AND GRADUATION

Lawrence confers degrees at the end of fall and spring terms but holds its Commencement once a year in June. Degrees are not conferred automatically. A student must indicate their intent to graduate by completing a form distributed by the registrar's office. Once a student submits an Intent to Graduate form, a process will begin to audit the student's record to be sure all degree requirements are met prior to the degree being conferred. All grades, official transcripts, and other certifying documents, such as the major/minor/interdisciplinary area completion form(s), 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, and a student may participate in Commencement only once. A student who expects to finish requirements and receive the degree after the subsequent fall term may complete the Request to Participate in Commencement Form the June before the degree is conferred. A student enrolled in an affiliated cooperative degree program who has completed the required units at Lawrence and the first year at the professional school may also complete the Request to Participate in Commencement Form with the matriculation class, as may a student entering Lawrence's year-long elementary teaching apprenticeship who has completed all degree requirements and is deferring conferral of the degree. The Request to Participate in Commencement Form must be submitted 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 is included in all transcripts requested after the degree date. Diplomas are distributed following Commencement in June. Transcripts and diplomas are released only for students whose accounts with Financial Services are clear.

## Academic honors

### THE 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 the academic year once all grades have been recorded. For a student to be included on the Dean's List, the student's record must meet the following qualifications:

1. The student must have earned at least 36 units in Lawrence courses during the academic year. Lawrence courses include courses taken on the Appleton campus or in a Lawrence-sponsored or affiliated off-campus program.
2. The student must have earned a GPA of at least 3.500 in those courses, with no unsatisfactory grades (D+, D, D-, F, or U).

For students with pending grades due to incompletes or off-campus study, inclusion on the Dean's List will be determined once all grades for Lawrence courses are received.

### 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 on the basis of their 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 transcript for students that have met all degree requirements and have their degree conferred. Honors are granted at three levels—*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*

A student's eligibility to receive Honors in Course is based on performance in courses taken at Lawrence or as part of Lawrence-approved off-campus programs (degree GPA) and on the student's entire academic record including courses taken at other colleges or universities (composite GPA). The committee uses as guidelines the following grade-point averages:

- 3.500 to 3.749 for *cum laude*
- 3.750 to 3.899 for *magna cum laude*
- 3.900 to 4.000 for *summa cum laude*

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 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

A student may earn Honors in Independent Study through the successful completion and defense of an honors project. Honors in Independent Study are awarded at the levels of *cum laude*, *magna cum laude*, and *summa cum laude* based on criteria listed under "Honors Projects" in the *Course Catalog*.

## Petitions and grievances

### PETITIONS FOR EXCEPTIONS TO UNIVERSITY 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 academic success. Note that petitions for late registration changes or overloads have deadlines described under "Registration."
- Petitions for exceptions to conservatory requirements should be directed to the dean of the conservatory.
- Petitions concerning business affairs should be directed to the vice president for finance and administration.

Petitions will be reviewed by the appropriate entity and decisions communicated to the petitioning students.

A petition should contain a clear and detailed statement of what is being requested and the reasons for the request, including extenuating circumstances (accident, illness, family emergency, etc.). An academic petition should be prepared with assistance from the academic advisor and/or the dean of academic success and others who may be involved, such as a course instructor, department chair or program director, registrar, or dean, whose signatures may be required. For guidance on what to include in a petition, students are encouraged to read the academic petition form available on the registrar's website and to consult with the dean of academic success.

Any academic matters that remain in dispute will be decided by the provost, who is the chief academic officer of the university.

### GRIEVANCE PROCEDURE

The grievance procedure is a way to address concerns that are not covered by other university processes (academic petitions, honor council or judicial board hearings, or complaints of sexual misconduct or employee discrimination). If you have a concern about the actions or lack of action of another member of the Lawrence community, you should follow the procedure below.

#### 1. Discussion

Where possible, discuss the concern with the other person to seek a mutually acceptable resolution. If you feel uncomfortable or unsafe doing so, proceed to #2 or 3.

## **2. Consultation/mediation**

Seek counsel from a supervisor, advisor, residence hall director or community advisor, counselor, dean, colleague, etc., who may suggest possible solutions, refer you to a university procedure for addressing this type of concern, or act as an informal mediator to help resolve the dispute.

## **3. Formal review**

If the matter remains unresolved, request a formal review by the appropriate university authority:

- vice president for student life for a concern about a student's actions;
- provost and dean of the faculty for a concern about a faculty member's actions; or
- vice president for finance and administration for a concern about a staff member's actions.

To call for a formal review, send the university authority a written statement of the concern and any action taken to resolve it. The preferred way to receive a grievance is by email with "grievance" in the subject line.

The authority will acknowledge receipt of the grievance within two weeks and will work to resolve the matter as quickly as possible. The authority may guide the party to an applicable university procedure or investigate the matter by:

- a. sharing the statement with the other party and asking for a written response;
- b. seeking additional information from one or both parties or from others who have knowledge of the dispute; and
- c. consulting sources on university procedures and regulations or seeking advice from appropriate counsel.

On the basis of this information, the authority will determine whether either party acted inappropriately and what corrective action needs to be taken. If the authority determines that the situation is not a matter for university governance, the authority may recommend actions, but neither party is bound to act on those recommendations. The authority's written decision and directives or recommendations will be sent to both parties, preferably by email.

## **4. Appeal**

If the authority's decision does not resolve the matter, you or the other party may request that a panel hear the grievance. To call for a panel, send the authority a written statement of your reason for the appeal and your willingness to abide by the panel's decision. The preferred way to receive an appeal is by email with "appeal" in the subject line.

The authority will acknowledge receipt of the appeal within two weeks and will compose a panel to hear the grievance. The university authority will ask you and the other party each to submit the names of three faculty or staff members. The authority will select one person from each list and name a third person to the

panel. If either party to the grievance is a student, the third person will be a student member of the judicial board who has no involvement with the dispute; otherwise, the third person will be a member of the faculty or staff. The authority will designate one panel member as chair.

The panel will be given all written statements related to the grievance, including the university authority's decision and directives or recommendations. The panel may interview any or all parties and others with knowledge related to the dispute. On the basis of this information, the panel will render its decision, preferably by consensus but otherwise by majority vote. The panel's written decision will be sent to both parties and the university authority, preferably by email. All parties are expected to abide by that decision.

While the grievance procedure is meant to resolve disagreements that affect members of the Lawrence community, it may not be possible to solve a problem to everyone's satisfaction. The university expressly forbids any retaliation or threat of retaliation for filing a grievance, and any party that fails to follow the directives of the university authority or grievance panel will be subject to disciplinary action. This ensures that the process can lead to a genuine resolution.

# ADMISSION

## Admission to the university

Lawrence admits students whose talents and aspirations match well with what the university has to offer and who will contribute to our academic and residential community. Strong candidates for admission have taken 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 and have performed well in their academic work, who express themselves well both verbally and in writing, who understand the value of a liberal arts and sciences 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. First-year candidates are required to submit secondary school transcripts and a teacher's recommendation along with the application and secondary school report. 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), the TOEFL (Test of English as a Foreign Language), or Duolingo language exams.

Candidates for any music major at Lawrence are evaluated additionally on musicianship, musical background, performance potential, and music teachers' recommendations. Along with the regular application forms listed above, music degree applicants must submit a music resume and a recommendation from a private music teacher and must audition on their primary instrument. They may audition on additional instruments if they choose.

We enthusiastically encourage 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 and final high school transcript. Lawrence accepts, but does not require, SAT or ACT scores for transfer admission. Transfer candidates for music majors 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.

Lawrence also accepts qualified applicants for early admission who are prepared to graduate from high school at the end of their junior year.

For information on residence requirements for each degree program, please see [Residence Requirements](#) under Degree Requirements in the course catalog.

## Application deadlines

There are four application deadlines for first-year students planning to enroll in September.

Early Decision: November 1 (notification by December 1)

Early Action I: November 1 (notification by December 15)

Early Action II: December 1 (notification by January 25)

Regular Decision: January 15 (notification by April 1)

Students admitted through Early Decision are expected to enroll at Lawrence and to submit their enrollment deposit by December 15. All other admitted students have until the May 1 National Candidates Reply Date to choose to accept or decline Lawrence's offer of admission.

Transfer admission is competitive and offered on a space-available basis. We consider transfer students for admission to any of our three terms, though we generally discourage mid-year transfers from students who are currently enrolled in their first term at another college.

Fall Term: Rolling admission with a July 1 priority deadline

Winter Term: November 1 (notification November 15)

Spring Term: February 1 (notification February 15)

# TUITION, FEES AND FINANCIAL ASSISTANCE

## Overload fees

Students who are degree-seeking and are registered for more than 22 units (excluding music ensembles) in an academic term will be charged additional tuition. \$1,491 per unit is the fee charged for academic year 2022-23. The per-unit fee is waived for 23-24 units for the first overload only (the fee is still charged for 25 units or more) so that every eligible student may overload once up to 24 units at no additional cost.

Students who are non-degree seeking and are registered for more than 22 units in an academic term will be charged additional tuition. \$1,491 per unit is the fee charged for academic year 2022-23. Music ensembles will *not* be excluded from the unit calculation as they are for degree-seeking students. Non-degree-seeking students are not eligible for a fee waiver for any overload.

Tuition is charged for courses in which the student is officially registered, regardless of attendance or final grade. Overload fees will be charged based on a student's official registration for the term (attempted units). If a student withdraws from a course after the class change period has ended and then adds a directed study or tutorial to maintain full-time student status, the added course will count as additional units and may result in overload fees. **Failure to successfully complete and earn credit for all registered courses will not cancel or modify any overload fees that have been assessed.**

For information on eligibility to overload, see "overloads/underloads" under Academic Procedures and Regulations.

## Other fees and costs

- 13th-term student teaching fee: \$2,065 for Lawrence undergraduates who have met all other graduation requirements (see Education)
- Elementary apprenticeship fee (full school year): \$4,560 for Lawrence graduates (see Education)
- Music lesson fee for non-music majors: \$330 per term for a half-hour of instruction per week
- Textbook cost: Approximately \$300 per term

A 12% annual-percentage-rate late charge will be assessed on all accounts 30 days past due. A \$20 non-refundable charge will be incurred if charges billed directly to students by a department are not paid to that department by their deadline; such charges are then added to a student's account along with the non-refundable fee (this includes overdue library items).

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 Dean of Students office.

## December Term

December Term courses have separate tuition and fees for room and board. For December 2022, tuition is \$1,985, and room and board for on-campus courses is \$650. On-campus courses may charge additional fees for travel or supplies. Travel courses charge a program fee for lodging, meals, museums/tours and insurance, and students are responsible for their own airfare to the course location. Lawrence need-based scholarships are available for December term; eligibility will be determined by the Financial Aid Office.

## 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 dean of students. Housing charges will be canceled 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, \$5,988 per three-term year; single occupancy, \$6,789 per three-term year. Changes of occupancy will be reflected on student accounts as they occur. Residence hall rooms are provided with essential furniture, and students must provide their own linens.

All residential students are required to have a board plan. The board plans vary in price, number of meals per week, and culinary cash values per term. Students choose the plan that best meets their individual needs and schedules.

Residence halls open for new students on the first day of Welcome Week. Rooms for returning students will be available on the Saturday prior to registration. The first board meal is served on Sunday evening.

The obligation of the university to provide room and board to resident students ceases after breakfast on the day following the last examination at the end of each 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. Separate fees are charged for room and board during the optional December Term and for campus housing in the summer. 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.

## Bills and payments

Student account balances reflect adjustments for merit awards and financial aid awards based upon receipt of signed Lawrence financial aid awards that have been accepted by a student. Additional charges incurred for course-related items, extracurricular activities, or miscellaneous purchases are due as incurred. Students are expected to pay these obligations when due.

Student account statements are generated electronically via Transact the first business day following the 15th of every month. Students can access their account statements through Voyager and can also grant access to others, who will receive login information once they are set up by the student. Transact also offers a “dynamic billing” function, which allows students and authorized users to see live student account balance information and activity. Students are responsible for accessing their billing information in Transact, and email notifications are sent as a courtesy when billing statements are generated. Not receiving an email notification does not excuse late payments.

At the 7th week of each term, students who have not paid their term fees in full, have not paid term fees as agreed under a payment plan with Transact, or have not made other payment arrangements will be put on administrative leave for the next term, and all future registration will be removed. They will not be allowed to return until all outstanding fees are 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.

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.

## PAYMENT DUE DATES

Fall Term: August 15  
Winter Term: December 15  
Spring Term: March 15

## 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). Under the law, a Return of Title IV (R2T4) calculation must be completed for students who withdraw from the university or who fail to earn a grade during the term.

- "Leave of absence" is a term used to identify a situation in which a student intends to take one or more terms off with the intent of returning to Lawrence after a specified time. This is a temporary status with a firm and stated intention of returning.
- "Withdrawal" is a term used to identify a situation in which a student is leaving the university with no intention of returning.

Refunds due to a student who has taken a leave or withdrawn will be processed within 30 days of the date the university determined the student withdrew. Refunds will only be issued if all allowable tuition, fees, room, and board due to the university have been paid in full.

#### LEAVE OF ABSENCE OR WITHDRAWAL BEFORE THE FIRST DAY OF CLASSES

Full room, board, tuition, activity fee, and environmental fee will be refunded upon proper notification of leave of absence or withdrawal 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 academic success. 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.

#### LEAVE OF ABSENCE OR WITHDRAWAL ON OR AFTER THE FIRST DAY OF CLASSES

A non-refundable \$200 fee will be assessed each time a student takes a leave of absence or withdraws from the university on or after the first day of classes for the term; however, 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 leave of absence or withdrawal from the dean of academic success. Students who wish to request this change of status or to discuss it as an option should make an appointment with the dean of academic success before completing the required form. If granted permission for a leave or withdrawal, a student may qualify for a reduction in charges that are due the university.

For students who withdraw without notifying the university, the withdrawal date is determined as follows: The Center for Academic Success contacts the student's instructors in an attempt to identify the student's last date of attendance or academic activity. If this information is not obtained, the midpoint of the term is used as the withdrawal date.

#### LEAVE OF ABSENCE OR WITHDRAWAL BEFORE THE 60-PERCENT POINT OF THE TERM

If a student takes a leave of absence or withdraws prior to or at the 60-percent point of the term, a refund for tuition, room, and board charges will be pro-rated 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. If a student takes a leave of absence or withdraws after the 60-percent point of the term, there will be no refund of tuition, room, or board. Students who cease attending their scheduled classes without completing the official process for a leave or withdrawal are subject to the same refund policy as students who follow the policy.

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 2022-23 academic year, the 60-percent dates are:

Term I: October 24, 2022

Term II: February 14, 2023

Term III: May 8, 2023

For students who notify the university of their intent to take a leave or withdraw, the student's official withdrawal date is the earliest of:

- the date of last academic activity;
- the date the student began the withdrawal or leave process; or
- the date the student notified the Center for Academic Success of their intent to withdraw.

## FINANCIAL AID ADJUSTMENTS

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. Students attending beyond the 60-percent point of the term will be considered to have earned 100% of their aid and, as a result, their financial aid will not be adjusted. Further details and examples can be obtained at the Financial Aid Office.

Title IV funds (i.e. federal aid) will be returned within 45 days from the date the university determined that a student withdrew in the order prescribed by federal regulations as outlined below:

1. Federal Direct Unsubsidized Loan
2. Federal Direct Subsidized Loan
3. Federal Direct PLUS Loan
4. Federal Pell Grant
5. Federal Supplemental Educational Opportunity Grant
6. Iraq and Afghanistan Service Grant

If the total Title IV grant and/or loan funds earned by the student is less than the amount disbursed to the student, the difference between the disbursed amount and earned funds will be returned to the appropriate Title IV aid program.

If the aid that has already been disbursed is less than the earned aid that could have been disbursed for the term, Lawrence will calculate a post-withdrawal disbursement. If the post-withdrawal disbursement includes loan funds, the student may elect to decline those funds. Students eligible for post-withdrawal disbursements will be notified of any additional disbursements via email and will have 14 days to respond. If the student does not respond within 14 days, Lawrence will assume the student does not want the loan funds and will cancel the post-withdrawal disbursement.

## Credit balances

A credit balance on a student account is created when the student has funds remaining (either financial aid or personal) after all eligible charges to the student account are paid in full. All credit balances remain on a

student's account and will be applied to future terms within the same academic year unless a student specifically requests a refund or unless the credit is a result of a Federal Direct Parent PLUS Loan. Refund requests should be made by contacting the Student Accounts Office. Students who have requested a refund of credit balances can expect to receive their refund approximately three weeks after the start of the term.

Credit balances due to overpayments made by wire transfer will remain on the student billing account for future charges or returned to the sending institution. Lawrence University will not act as an intermediary for transfer of funds through the credit balance refund process.

We encourage students to enroll online in Transact for electronic refunds (eRefund). Refunds will be processed and automatically deposited into a checking or savings account. If a student does not enroll in eRefund and thereby chooses to receive their refund via check, a \$20 processing fee will be charged to the student's account. This \$20 fee does not apply to refunds as a result of a Federal Direct Parent PLUS Loan.

At the end of the academic year, graduating students receive a refund of any credit balance about three weeks after graduation. For continuing students, credit balances of less than \$200 are carried forward and applied to the next academic year, while credit balances of more than \$200 are refunded approximately three weeks after the last day of final exams. If a student is enrolled in eRefund, the entire credit is refunded. If a student chooses to receive the refund via check, only the amount greater than \$200 is refunded, minus a \$20 check-processing fee. Continuing students with a credit balance of more than \$200 may submit a request in writing to Student Accounts to have the full credit balance carried forward to the next academic year.

## DIRECTORY

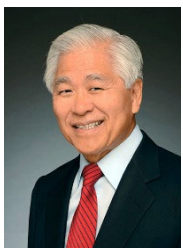
- **Cory L. Nettles**, chair
- **Sarah E. Schott**, vice chair
- **William J. Baer**, secretary
- **Christyn Abaray**, assistant secretary
- **Samir Datta**, treasurer
- **Amy Friedel**, assistant treasurer
- **Eric Schacht**, assistant secretary

## TRUSTEES



**Christopher R. Anzalone '91**

President/CEO, Arrowhead Pharmaceuticals, Inc.  
Pasadena, California



**Sidney K. Ayabe '67**

Owner, Ayabe Resolution  
Honolulu, Hawaii



**William J. Baer '72**

Visiting Fellow in Governance Studies, The Brookings Institution  
Bethesda, Maryland



**David C. Blowers '82**

Vice Chairman, Northern Trust  
Chicago, Illinois



**Evan Bravos '10**

Opera Singer  
Chicago, Illinois



**Daniel T. Busiel '84**

Senior Vice President and Chief Investment Officer, Trustmark Life Insurance Company  
Glenview, Illinois



**Louis B. Butler, Jr. '73**

Attorney (Retired), Dewitt LLP  
Milwaukee, Wisconsin



**Laurie Carter (ex-officio)**

President  
Appleton, Wisconsin



**Shelley A. Davis '92**

President and CEO, The Coleman Foundation, Inc.  
Chicago, Illinois



**Dean G. DuMonthier '88**

Nuveen a TIAA Company  
Riverwoods, Illinois



**Richard G. Fessler '74**

Lake Forest, Illinois



**Frederick Fisher**

Architect, Frederick Fisher & Partners Architects  
Los Angeles, California



**Tamika Watson Franklin '05**

Senior Director, Southern California Major Gifts, University of California-Berkeley  
San Diego, California



**Susan Long Hall '76**

President and Founder, 95 Percent Group, Inc.  
Mukwonago, Wisconsin



**William O. Hochkammer '66**

Attorney/Partner, Honigman LLP  
Detroit, Michigan



**Lydia A. Howarth '75**

Community Volunteer  
Nashville, Tennessee



**Dennis L. Klaeser '80**

Glenview, Illinois



**David N. Knapp '89**

Senior VP/Senior Managing Director, Wealth Management, Northern Trust  
Chicago, Illinois



**Cheryl Wilson Kopecky '72**

Administrator and Teacher, Kindergarten - Graduate School  
Elmhurst, Illinois



**Barbara Smith Lawton '87**

Former Lieutenant Governor of Wisconsin (2003-2011)  
Madison, Wisconsin



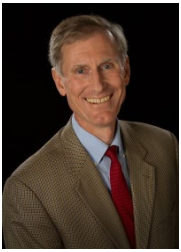
**Christopher W. Murray '75**

Retired Officer, Department of State, U.S. Foreign Service  
Ixelles, Belgium



**Peter M. Musser '78**

Manager, Angeline Properties, LLC  
Seattle, Washington



**Scott D. Myers '79**

Managing Partner, Accenture (Retired)  
Winnetka, Illinois



**Cory L. Nettles '92**

Founder and Managing Director, Generation Growth Capital, Inc.  
Milwaukee, Wisconsin



**Martha J. Olson '77**

Former Corporate Officer and Group President, The Warnaco Group, Inc.  
Park City, Utah



**Robert F. Perille '80**

Managing Member, Calvello Investments, LLC  
Santa Monica, California



**Mansco Perry III**

Executive Director and Chief Investment Officer, MN State Board of Investment  
Eagan, Minnesota



**Sara A. Quandt '73**

Professor/Epidemiology & Prevention, Wake Forest University  
Winston Salem, North Carolina



**Francesca P. Romero Siekman '11**

Project Developer, Pimienta Films  
Mexico City, Mexico



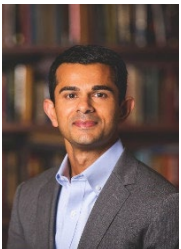
**Sarah E. Schott '97**

Chief Compliance Officer and General Counsel, Gravie  
Fox Point, Wisconsin



**Katy Schwartz Strei '84**

Rockville, Maryland



**Sachin Shivaram**

CEO, Wisconsin Aluminum Foundry Company, Inc.  
De Pere, Wisconsin



**Breanna A. Skeets '12**

Community Relations Manager, Bank of America  
Commerce City, Colorado



**Jon Stellmacher**

Senior VP and Chief of Staff and Administration (Retired), Thrivent  
Appleton, Wisconsin



**Irene Strohbeen '78**  
Entrepreneur-in-Residence  
Menasha, Wisconsin



**Anton R. Valukas '65**  
Attorney, Jenner & Block  
Evanston, Illinois

## EMERITI TRUSTEES

**Edith G. Andrew**  
Naples, Florida

**Robert A. Anker '64**  
Retired  
Carmel, Indiana

**Peter R. Betzer '64**  
CEO Business Development Group  
St. Petersburg Downtown Partnership, Inc.

Retired Professor of Marine Science  
University of South Florida  
Saint Petersburg, Florida

**Renee Goral Boldt '85**  
Community Volunteer  
Appleton, Wisconsin

**Robert C. Buchanan '62**  
Retired  
Appleton, Wisconsin

**Michael P. Cisler '78**  
Former CEO of JanSport, Inc.  
Neenah, Wisconsin

**James D. Ericson**

Chairman, Northwestern Mutual  
Longboat Key, Florida

**Richard L. Gunderson**

Retired  
Scottsdale, Arizona

**Catheryn E. Hoehn '64**

Counseling Consultant, Troy High School  
Newport Beach, California

**J. Thomas Hurvis '60**

President/CEO, Old World Industries, LLC  
Northbrook, Illinois

**Harold E. Jordan '72**

Greenwood, Virginia

**Kim Hiatt Jordan '58**

Santa Fe, New Mexico

**Susan Stillman Kane '72**

Community Volunteer  
Swampscott, Massachusetts

**Harry M. Jansen Kraemer, Jr. '77**

Clinical Professor of Leadership-Kellogg School Management, Northwestern University  
Wilmette, Illinois

**John A. Luke, Jr. '71**

Non-executive chairman, WestRock Company  
Richmond, Virginia

**Overton B. Parrish, Jr. '55**

President and Chief Executive Officer, Phoenix Health Care, Inc.  
Chicago, Illinois

**Dwight A. Peterson '55**

Retired Vice President and Treasurer, 3M Company  
North Oaks, Minnesota

**Jeffrey D. Riester '70**

Attorney-Of Counsel, Godfrey & Kahn, S.C.  
Appleton, Wisconsin

**Nancy Scarff**

Trustee, Stephen Edward Scarff Memorial Foundation  
Los Altos, California

**Robert J. Schaupp '51**

President, P & S Investment Company, Inc.  
Green Bay, Wisconsin

**Dale R. Schuh '70**

Chairman of the Board of Directors, Sentry Insurance  
Egg Harbor, Wisconsin

**Charlot Nelson Singleton '67**

Educator, Menlo Park City School District  
Atherton, California

**Cynthia Stiehl '89**

Singer  
Ephraim, Wisconsin

**Stephanie H. Vrabec '80**

Educator (Retired)  
Menasha, Wisconsin

**Priscilla Weaver '69**

Retired, Mayer Brown  
Jacksonville, Oregon

**Acacia Ackles (2022)**

Visiting Assistant Professor of Computer Science  
PhD in Integrative Biology & Ecology, Evolution, and Behavior, Michigan State University, 2022 BS in Biology,  
George Washington University, 2018 BS in Mathematics, George Washington University, 2018  
Interest(s): I'm broadly interested in building computational tools to study the evolution of genomes and the  
complexity of the genotype-phenotype mapping. I'm also passionate about higher ed pedagogy and developi

**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

**Akimi Adler**

Visiting Assistant Professor of Japanese

**I Dewa Ketut Alit Adnyana (2009)**

Lecturer of Music & Director of Gamelan  
Conservatory of Indonesian Musical Arts (Sekolah Menengah Karawitan Indonesia), Batubulan, Bali, Indonesia  
Interest(s): Traditional and contemporary Balinese music and dance

**Nani Agbeli**

Lecturer of Music

**Ingrid V. Albrecht (2013)**

Associate Professor of Philosophy

Wake Forest University, B.A.; University of Illinois at Urbana-Champaign, M.A., Ph.D.

Interest(s): Ethics (with an emphasis on Kant), Moral Psychology

**Tim Albright (2016)**

Associate Professor of Music-Trombone

Bachelor of Music, Eastman School of Music

**Madera Allan (2008)**

Associate Professor of Spanish

Reed College, B.A.; University of Pennsylvania, M.A., Ph.D.

Interest(s): Medieval and early modern Spanish and Latin American cultural production, theater, literary theory, ethics

**Matt L. Ambrosio**

Visiting Assistant Professor of Music

**Matthew E. Ansfield (2000)**

Associate Professor of Psychology

University of Wisconsin-Madison, B.S.; University of Virginia, Ph.D.

Interest(s): social psychology

**Matthew R. Arau (2014 -)**

Associate Professor of Music Education and Associate Director of Bands

University of Colorado Boulder DMA in Instrumental Conducting and Literature, May 2015 Southern Oregon

University MS in Arts and Letters in Music Education, August 2003 Lawrence University BM in Mus

Interest(s): Leadership, Potential, Learning Theory, Talent Research, Music Education, Motivation, Stravinsky, Engagement in Rehearsals, Paul Taffanel Chamber Wind Society in Paris 1879-1893, Jazz, Wind Ensembles,

**Chloe Armstrong (2015)**

Associate Professor of Philosophy

University of Victoria, B.A.; University of Western Ontario, M.A.; University of Michigan, Ph.D.

Interest(s): history of philosophy (17th and 18th centuries, ancient Greek philosophy); science fiction and philosophy; logic.

**Ameya S. Balsekar (2009)**

Associate Professor of Government

Brown University, B.A.; Cornell University, M.A., Ph.D.

Interest(s): Comparative Politics, Identity Politics and Ethnic Conflict, politics in developing countries, political rhetoric.

**Celia B. Barnes**

Associate Professor of English

College of William and Mary, B.A.; Indiana University, M.A., Ph.D.

Interest(s): Eighteenth-century British literature; women's writing, letters, and diaries

**Ian Bates (2011)**

Associate Professor of Music Theory

The University of Western Ontario, B.Mus.; Yale University, M.A., M.Phil., Ph.D.

Interest(s): Post-common-practice tonality and modality, music of Ralph Vaughan Williams, theories of harmonic function, music theory pedagogy, performance as analysis, music of Alberto Ginastera, analysis of tran

**Loren PQ. Baybrook**

Visiting Professor of Film Studies

University of Virginia, PhD

**Elizabeth A. Becker (2011)**

Associate Professor of Psychology and Special Assistant to the Provost

Lawrence University, B.A., B.Mus.; University of Wisconsin-Madison, Ph.D. exp 2012

Interest(s): Neural and endocrine correlates of social behavior

**David Bell (2005)**

Associate Professor of Music

Oberlin College, B.Mus.; Northwestern University, M.Mus.

Interest(s): Marathon running

**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

**Nathan Paul Birkholz**

Staff Accompanist

**Marcia Bjornerud (1995)**

Walter Schober Professor of Environmental Studies and Professor of Geosciences

University of Minnesota-Minneapolis, B.S.; University of Wisconsin-Madison, M.S., Ph.D.

Interest(s): structural geology, tectonics, rock mechanics, earth history

**Peter A. Blitstein (2001)**

Provost and Dean of the Faculty and 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, History of Intelligence and Espionage

**Ann K. 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

**Austin J. Boncher**

Lecturer of Music

**Garth Bond (2004)**

Associate 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)**

Affinity Group Coordinator and Instructor of First-Year Studies

City College of New York, B.A. (English) City College of New York, M.A. (Writing)

Interest(s): transgender issues

**Jason Brozek (2008)**

Stephen Edward Scarff Professor of International Affairs and Associate Professor of Government

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 Early Childhood Music and Lecturer of Music

Meredith College, B. Mus; University of Oklahoma, M.M.

Interest(s): piano

**Erin Buenzli**

Assistant Dean of Wellness Services

**Stephanie Burdick-Shepherd (2015)**

Director of the Center for Teaching Excellence and Associate Professor of Education

PhD Philosophy and Education; M.A.; Columbia University M.Ed Philosophy for Children; Montclair State

University B.A. Philosophy; Transylvania University

**Karen Bussone**

Professor of Practice in Entrepreneurship

**Claire Cannell**

University Archivist and Assistant Professor

**Rosie Cannizzo**

Director of Conservatory Operations

**Elizabeth Carlson (2006)**

Associate Professor of Art History

University of Cincinnati, B.A.; University of Minnesota, M.A., Ph.D.  
Interest(s): Modern and Contemporary Art History and Visual Culture

**Maria G. Carone (2015)**

Visiting Assistant Professor of German

UW Madison: Double PhD (German, Italian). U Bonn: M.A. (German, Italian, English Language&Culture). U Cologne: M.A. (Translator&Interpreter), B.A. (Spanish Linguistics). U Bari: B.A. (Classics).

Interest(s): Migrant literature, German and Italian female authors, theory of language and power, minority languages, linguistic diversity and hybrid transfer, second language acquisition, translation practice.

**Kelley K. Carpenter**

Lecturer of Music and Teacher of Saxophone and Saxophone Quartet Coach

**Karen L. Carr (1987)**

McNaughton Rosebush Professor of Liberal Studies and Professor of Religious Studies

Oberlin College, B.A.; Stanford University, A.M., Ph.D.

Interest(s): 19th- and 20th-century religious thought, philosophy of religion, comparative religion

**Bill Carrothers**

Lecturer of Music

**Hillary Caruthers (2014)**

Assistant Professor of Economics

Brigham Young University, B.A.; University of Wisconsin at Madison, M.A., Ph.D.

Interest(s): Economic Development, Labor Migration, Global Nutrition and Health, Natural Resource and Environmental Economics, East and Southeast Asian Studies

**Sara Gross Ceballos (2008)**

Associate Professor of Music

Colby College, B.A.; University of California, M.A., Ph.D.

Interest(s): musicology

**Abhishek Chakraborty (2019)**

Assistant Professor of Statistics

St. Xavier's College (Kolkata), B.Sc.; IIT Kanpur, M.Sc.; Iowa State University, Ph.D.

Interest(s): Statistical Learning, Statistics Pedagogy

**Dominica Chang (2007)**

Margaret Banta Humleker Professor of French Cultural Studies and Associate 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

**Adrian Chapman**

Literary London

**Cory Chisel**

Lecturer of Music

**Jeffrey J. Clark (1998)**

Professor of Geosciences and Special Assistant to the President

Middlebury College, B.A.; Johns Hopkins University, Ph.D.

Interest(s): geomorphology, earth surface processes, human influences on the environment

**Michael Clayville (2017-present)**

Visiting Assistant Professor of Music in Entrepreneurial Studies and Social Engagement

Cornell University Certificate, Marketing Strategy 2016-17 Rice University Master of Music, Trombone

Performance 2003-2005 Eastman School of Music Bachelor of Music, Trombone Performance 1

**Mike Clement (2017)**

Instructor of Chemistry

Marquette University, B.S.

**Donna L. Clementi (2003)**

Lecturer of Education

St. Olaf College, B.A.; University of Wisconsin-Milwaukee, M.S.

Interest(s): foreign language instruction

**Paul M. Cohen (1985)**

Patricia Hamar Boldt Professor of Liberal Studies and Professor Emeritus of History

Clark University, B.A.; University of Chicago, M.A., Ph.D.

Interest(s): modern European intellectual history

**Sigma Colon (2017)**

Assistant Professor of Environmental and Ethnic Studies

Ph.D. in American Studies, Yale University M.Phil in American Studies, Yale University M.A. in American

Studies, Yale University M.A. in U.S. History, University of Arizona B.A. in English Literature

**Katherine Connelly**

Lecturer

**Tony Gerald Conrad (2012)**

Visiting Assistant Professor of Art

University of Wisconsin-Milwaukee, M.F.A.

**Scott Corry (2007)**

Professor of Mathematics

Reed College, B.A.; University of Pennsylvania, Ph.D.

Interest(s): Number theory, algebraic geometry, combinatorics, and mathematical physics

**Kelly J. Culhane**

Assistant Professor of Chemistry

**Wenhao Dai**

Visiting Professor of Psychology

**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

**Patricia A. Darling (2007)**

Instructor of Music

Lawrence University, B.Mus.

Interest(s): jazz, composition

**Carla Daughtry (2000)**

Associate Professor of Anthropology

Mount Holyoke College, B.A.; University of Michigan, M.A., Ph.D.

Interest(s): Middle East and North Africa, new immigrants in Italy, migrants and refugees, food and culture, cultural research methods, race and ethnicity across cultures, sex/gender/sexuality systems.

**Shaun Davis**

Visiting Assistant Professor of Biology

**Bart T. De Stasio (1988-89, 1992)**

Dennis and Charlot Nelson Singleton Professor of Biological Sciences and Professor of Biology

Lawrence University, B.A.; University of Rhode Island; Cornell University, Ph.D., University of Wisconsin-Madison, Postdoctoral Researcher

Interest(s): evolutionary ecology, aquatic biology, predator-prey interactions

**Elizabeth Ann De Stasio (1988-89; 1992)**

Raymond H. Herzog Professor of Science and Professor of Biology

Lawrence University, B.A.; Brown University, Ph.D.; University of Wisconsin Madison, postdoctoral fellow

Interest(s): interactions of biological molecules, evolution

**Stefan Debbert (2007)**

Professor of Chemistry

University of Minnesota-Twin Cities, B.S.; Cornell University, Ph.D.

Interest(s): Organic and organometallic chemistry, synthesis, medicinal chemistry

**Israel Del Toro (2016)**

Assistant Professor of Biology

University of Massachusetts Amherst, 2009-2014, M.Sc., Ph.D. University of Copenhagen, Denmark- 2014-2016, Postdoctoral Research Fellow

Interest(s): Community Ecology, Biodiversity Science, Biogeography, Urban Ecology, Pollinator Biology

**Loren Dempster (2016)**

Lecturer of Music

MM in Cello Performance from San Francisco Conservatory BA/BM in Cello Performance from University of Washington

Interest(s): Performance, Education, Improvisation, Composition, Electronic Music, Recording, Music For Dance

**Cecile C. Despres-Berry (2002)**

Instructor 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

**Sara Devine**

Teacher of Music for Special Needs

**Donna DiBella (1996)**

Instructor of Music

Rutgers University, B.A.; Westminster Choir College; Suzuki Institute, University of Maine-Orono

Interest(s): theory, sight-singing, organ

**Kimberly Dickson (2007)**

Associate Professor of Biology

Smith College, B.A.; Johns Hopkins University. M.S.; University of Wisconsin-Madison, Ph.D.

Interest(s): protein structure and function

**Scott Dixon (2021)**

Assistant Professor of Philosophy

I received my Ph.D. in philosophy from the University of California, Davis in September 2015. I was a visiting Ph.D. student in the School of Philosophy at The Australian National University from Jun

**Lerryn Schaefer Donatelle**

Lecturer of Music

**Mauriah Donegan Kraker (2021-)**

Lecturer of Dance

MFA - Dance, University of Illinois at Urbana-Champaign

Interest(s): Improvisation. Outdoor Practices. Place-based Choreographies. Creative Dance for Children.

Memory Care + Intergenerational Movement

**Deanna L. Donohoue (2013)**

Associate Professor of Chemistry

Augustana College: B.A. in Chemistry, University of Miami: Ph.D. in Marine and Atmospheric Chemistry

**Sonja Lynn Downing (2008)**

Associate Professor of Ethnomusicology

Swarthmore College, B.A.; University of California-Santa Barbara, M.M., Ph.D.

Interest(s): ethnomusicology, musicology, global studies, gender studies, Balinese music, gamelan music,

childhood studies, children's music, music pedagogy, dance and movement, ecomusicology

**Amanda A. Draheim (2021)**

Assistant Professor of Psychology

B.A. in Psychology from Trinity University; M.A. and Ph.D. in Clinical Psychology from Georgia State University;

Pre-doctoral internship completed at the Medical College of Georgia/Charlie Norwood Vet

**Christopher D. Draheim (2021)**

Visiting Assistant Professor of Psychology

University of Michigan-Dearborn, B.A.; Georgia Institute of Technology, M.S., Ph.D.

Interest(s): Cognitive psychology, individual differences in executive functioning, measurement and testing

**Dale L. Duesing (1992)**

Artist-in-Residence

Lawrence University, B.Mus.; Hochschule für Musik, Munich, Artist Diploma

Interest(s): voice, opera

**Emily J. Dupere**

Lecturer of Music

**Mark Dupere (2016)**

Associate Professor of Music and Director of Orchestral Studies

Michigan State University, DMA; Royal Conservatory of the Hague, NL, BMus, MA; University of Texas at

Austin, BMus

Interest(s): orchestra, music education, chamber music, cello, musicology

**Aaron P. Elliott**

Uihlein Fellow of Ethics and Postdoctoral Fellow of Philosophy

**Ann Ellsworth**

Assistant Professor of Music: Horn

**Jose L. Encarnacion (2011)**

Associate Professor of Music and Director of Jazz Studies

Berkeley School of Music - BM, Music Performance Eastman School of Music - Masters of Music - Jazz

Studies and Contemporary Media

Interest(s): Improvisation, Music Theory, Arranging/Composition and World Music

**Margaret Engman (2001)**

Lecturer of Education

University of Wisconsin-Madison, B.S.

Interest(s): teacher education

**Marty D. Erickson (2002)**

Instructor of Music and Teacher of Tuba

Michigan State University

Interest(s): tuba, chamber music

**Charles W Evans**

Instructor of Music

**Gustavo C. Fares (2000)**

Professor of Spanish

Colegio Nacional de Buenos Aires, B.A.; Universidad de Buenos Aires, J.D.; West Virginia University, M.A. in Languages and Literature, M.A. in Visual Arts; University of Pittsburgh, Ph.D. in Latin Ame

Interest(s): Latin American Cultural Studies, literature and visual arts. Border Studies. Latin@ Studies.

**Shannon Featherstone**

Off-Campus Programs Associate

**Francisco Javier Fernandez Morales**

Lecturer of Music

**Dylan B. Fitz (2017-)**

Associate Professor of Economics

Princeton University, A.B.; University of Wisconsin, Madison, M.A., Ph.D.

Interest(s): Development Economics; Social Policy; Effective Altruism; Political Economy; Risk, Learning, and Technology Adoption; Latin America; Brazil

**Brigit Fitzgerald**

Instructor of Music

**Allison M. M. Fleshman (2013)**

Associate Professor of Chemistry

University of Oklahoma: B.S. in Physics, University of Oklahoma: Ph.D. in Chemistry

Interest(s): Fundamental transport phenomena of ions and molecules in liquids (primarily conductivity, diffusion, and viscosity). Also investigating pigments and inks in art objects using confocal Raman microscopy

**Jake Frederick (2006)**

Professor of History

University of Massachusetts-Amherst, B.A; Pennsylvania State University, Ph.D.

Interest(s): Mexican history, Afro-Latino history, environmental history

**Kaitlin Fyfe**

Instructor of Film Studies

**Adam Galambos (2006)**

Dwight and Marjorie Peterson Professor of Innovation and Associate Professor of Economics

University of Northern Iowa, B.A.; University of Minnesota, M.S., Ph.D.

Interest(s): microeconomic theory, game theory, social choice theory, innovation and entrepreneurship

**Alexandra Galambosh**

Visiting Assistant Professor of French  
University of Wisconsin-Madison, PhD (Linguistics); University of Northern Iowa, MA (French); UNI, MA (TESOL); Moscow State Linguistic University, BA (Linguistics, English and French, summa cum laude)

**Sarah Gamalinda**

Assistant Professor of French and Francophone Studies

**John T. Gates** (2006)

Visiting Assistant Professor of Music and Teacher of Voice  
University of South Carolina, B. Mus, M.M.; Florida State University, D.M.  
Interest(s): voice

**Samantha George** (2008-)

Associate Professor of Music and Teacher of Violin  
Bachelor of Music, Eastman School of Music (1992) Performer's Certificate, Eastman School of Music (1993)  
Master of Music, Eastman School of Music (1993) Doctor of Musical Arts, University of Conne

**David Gerard** (2009)

John R. Kimberly Distinguished Professor of the American Economic System and Associate Professor of Economics  
Grinnell College, B.A.; University of Illinois, M.S., Ph.D.  
Interest(s): Institutional & Organizational Economics, Energy & the Environment, Regulation & Public Policy

**Mike Gesinski**

Associate Professor of Chemistry

**Peter Glick** (1985)

Henry Merritt Wriston Professor of the Social Sciences and Professor of Psychology  
Oberlin College, A.B.; University of Minnesota, Ph.D.  
Interest(s): stereotyping, discrimination, prejudice

**Esteli Gomez** (2019)

Assistant Professor of Music

**Terry L. Gottfried** (1986)

Professor Emeritus of Psychology and Adjunct Faculty Advisor  
University of Minnesota, B.A., Ph.D.  
Interest(s): perception of speech and singing, psychology of cognition and perception

**Shannon Gravelle**

Lecturer of Music

**Joseph N. Gregg** (1991)

Associate Professor of Computer Science  
Texas A&M University, B.S.; Princeton University, Ph.D.  
Interest(s): Software development in C++

**Elijah E. Grover**

Lecturer of Music

**Wen-Lei Gu (2006)**

Associate 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)**

Associate Professor of German

University of California at Santa Cruz, B.A.; University of Minnesota, M.A., Ph.D.

Interest(s): German cinema; 20th century German cultural studies; critical identity studies; radical pedagogies; film theory; equity, inclusion, and social justice in higher education

**Beth A. Haines (1992)**

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

**Alyssa S. Hakes (2012)**

Associate Professor of Biology

Ph.D. Louisiana State University B.S. University of Illinois Urbana-Champaign

Interest(s): spatial ecology, herbivory, plant defense

**Michael J. Harrigan**

London Centre

**Brent T. Hauer**

Director of Recording and Technology and Lecturer in Recording Arts

**Anne Haydock (2014)**

Assistant Professor of Film Studies

University of Wisconsin-Madison, B.A.; The University of Iowa, M.F.A.

**Alexander Michael Heaton**

Assistant Professor of Mathematics.

**James R. Heiks (Faculty since 2011)**

Lecturer of Music and Conductor of Young Men's Chorus

BA Music Education - Bluffton College, Bluffton, Ohio 1972 MM Music Education - Northwestern University, Evanston, IL 1973

Interest(s): Choral Music, music education, wildlife, native prairie restoration

**Cecilia Herrera (2009)**

Instructor of Spanish

Universidad de Playa Ancha, Chile, B.A., M.A.

Interest(s): Latin American literature, Film, Spanish civilizations and culture

**Lori Michelle Hilt** (2011)

Professor of Psychology

Lawrence University, B.A.; Viterbo University, M.A.; Yale University, M.S., M.Phil., Ph.D.

Interest(s): Clinical psychology, developmental psychopathology, rumination, mindfulness, adolescent depression, emotion regulation

**Gregory Joel Hitch**

Jill Beck NEH Postdoctoral Fellow in the Humanities

**Jaclyn K Hittner**

Artistic Director, Girl Choir Program

**William Hixon** (2000, 2003)

Gordon R. Clapp Chair of American Studies and Associate Professor of Government

Washington University, B.A.; University of Rochester, M.A., Ph.D.

Interest(s): public policy, environmental public policy, Congressional politics

**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

**John T. Holiday, Jr.** (Faculty Since 2017)

Associate Professor of Music - Voice

The Juilliard School - Artist Diploma in Opera Studies, 2014 The University of Cincinnati College-Conservatory of Music - Master Degree in Vocal Performance, 2012 Southern Methodist University Meado

**Andy Hudson**

Associate Professor of Music

**Judith Humphries** (2007)

Associate Professor of Biology

The Queen's University of Belfast, B.S., Ph.D.

Interest(s): parasitology, invertebrate immunology, gene regulation, snail neurobiology

**Christopher D. Ice**

Instructor of French

**Nicholas James** (1997)

Lecturer

Oxford University, B.A.; University of London, M.A.; University of Michigan, M.A.; University of Birmingham, Ph.D.

Interest(s): archaeology, Native American studies, cultural heritage management

**Brenda Jenike (2004)**

Edward F. Mielke Professor of Medicine, Health and Society and Associate Professor of Anthropology  
Pomona College, B.A.; University of California-Los Angeles, M.A., Ph.D.

Interest(s): medical anthropology, disability and culture, culture and aging, family, gender, Japan and East Asia

**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

**Jessica A. Jensen**

Lecturer of Music

**Thelma B. Jimenez-Anglada**

Assistant Professor of Spanish

**Jillian L. Johnson**

Director of Conservatory Programs and Community Outreach

**Michelle Gibson Johnson**

Lecturer of 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

**Danielle B. Joyner (Faculty Member since)**

Associate Professor of Art History

Doctorate, Medieval Art History, Harvard University (2007) Masters, Medieval Studies, University of Toronto (2000) Masters, Art History, University of Utah (1998) Honors Bachelors of Arts, Art Hist

Interest(s): After working at other universities, Danielle Joyner, now an Associate Professor of Medieval Art History, is both deeply happy and very content to be settled in at Lawrence University. Joyner's first

**Constance Kassor (2016)**

Associate Professor of Religious Studies

Smith College, B.A.; Emory University, Ph.D.

Interest(s): Asian Religions, Buddhist Philosophy, Tibetan Buddhism

**Catherine C. Kautsky** (1987-2002, 2008)

George and Marjorie Olsen Chandler Professor of Music

New England Conservatory, B.M.; Juilliard School, M.M.; State University of New York-Stony Brook, D.M.A.

Interest(s): chamber music, music and social history, music and literature

**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

**Claire E. Kervin** (2016)

Assistant Professor of English and Director of Fellowships Advising

PhD--Boston University (English Literature) BA--University of Wisconsin-Madison (English Literature; Spanish Language and Culture)

Interest(s): modern and contemporary American literature; ecocriticism and environmental humanities; narrative theory and econarratology; multiethnic literature; pedagogy

**Lena L. Khor** (2009)

Associate 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

**Jane M. Klein**

Lecturer of Music

**Andrew Knudsen** (2003)

Professor of Geosciences

Hamilton College, B.A., University of Idaho, Ph.D.

Interest(s): environmental mineralogy, low-temperature geochemistry

**Margaret Koker** (2018-)

Assistant Professor of Physics

Boston University, B.S.; University of Illinois, M.S.; Universitaet Stuttgart & Max Planck Institute, Dr. rer. nat.

Interest(s): synchrotron x-ray measurement techniques; mechanically induced material behavior; data analysis methods

**Victoria Kononova** (2015-)

Associate Professor of Russian

Lomonosov Moscow State University, "specialist" diploma (B.A. and M.A. equivalent); University of Wisconsin-Madison, M.A. and Ph.D.

Interest(s): 19th-century Russian literature, theater, folklore, cultural history, nationalism, Russian and Soviet music

**Karin Simonson Kopischke** (2011)

Instructor of Theatre Arts and Costume Shop Supervisor

Lawrence University, B.A., B.Mus.

Interest(s): Historical renderings of real women forgotten and lost in time

**Ryan M. Korb**

Lecturer of Music

**Kurt Krebsbach (2002)**

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, translation and interpreting, Russian and Soviet Republic culinary history and cooking

**Daniel Lange**

Visiting Assistant Professor of German Studies

**Karen Leigh-Post (1996)**

Professor of Music and Teacher of Voice

Lawrence University, B.Mus.; University of Arizona, M.Mus.; Rutgers University, D.M.A.

Interest(s): Vocal performance, cognitive neuroscience for the performing musician, mind-body awareness, and optimal performance.

**Mary-Jannet N.C. Leith**

Lecturer

**Erin Lesser (2011)**

Associate Professor of Flute

D.M.A., Manhattan School of Music, 2015 M.Mus, Manhattan School of Music, 2001 B. Mus, University of Ottawa, 1999

**Nora A. Lewis (2018)**

Associate Dean of Faculty and Associate Professor of Music: Oboe

Doctor of Music, Bienen School of Music, Northwestern University, 2007 Master of Music, Yale School of Music, 2001 Bachelor of Arts, philosophy, Lawrence University, 1999 Bachelor of Music, perform

Interest(s): Oboe, Oboe Pedagogy, Reed Making, Chamber Music, Aesthetics of Music

**Jonathan Lhost (2014-)**

Associate Professor of Economics

Amherst College, B.A.; University of Texas, M.S., Ph.D.

Interest(s): Industrial Organization, Game Theory, Microeconomics, Econometrics, Data Science

**Nancy Lin (2016)**

Assistant Professor of Art History

Bryn Mawr College, B.A.; Columbia University, M.A.; University of Chicago, Ph.D.

Interest(s): East Asian Art History and Visual Culture

**Debbie Lind**

Lecturer of Music

**Elyse C. Lucas (March 2015-Present)**

Lecturer in Education

Bachelor of Arts - Lawrence University Class of 2010

**Colette Lunday Brautigam**

Digital Collections Librarian and Assistant Professor

University of Minnesota, B.A.; College of Saint Catherine, MLIS

**Yangtian Luo**

Lecturer of Chinese

**Yoshiaki Makita**

Instructor of Japanese

**Douglas S. Martin (2007)**

Associate Professor of Physics

Pomona College, B.A.; University of Texas, Ph.D.

Interest(s): biological physics, molecular motors, cytoskeleton

**Andrew Mast (2004)**

Associate Dean of the Conservatory, Kimberly-Clark 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

**Susan Lawrence McCardell (2000)**

Lecturer of Music and Teacher of Bassoon

Lawrence University, B.Mus.

Interest(s): bassoon

**David E. McGlynn (2006)**

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

**Randall McNeill (1999)**

Otilia Buerger Professor of Classical Studies and Associate Professor of Classics

Harvard University, A.B.; Yale University, M.A., Ph.D.

Interest(s): Latin poetry, language and social interaction, 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

**Sue Melcher**

Lecturer in Psychology

**Joanne Metcalf (2001)**

Associate Professor of Music

University of California-Santa Barbara, B.A.; Duke University, M.A., Ph.D.

Interest(s): music composition

**Megan Mey**

Visiting Assistant Professor of Biology

**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.M.

Interest(s): viola, chamber music, theory

**Gregory D. Milano (2020-)**

Visiting Assistant Professor of History

New York University, B.A.; University of California, M.A.; University of Chicago, M.A., Ph.D.

Interest(s): Modern European History, World History, Fascism and Nazism, Political Economy, Social Theory

**Brigetta F. Miller (1996)**

Associate Professor of Music

Lawrence University, B.Mus.; Silver Lake College, M.Mus.

Interest(s): Her research interests focus on contemporary issues facing Native American communities today, with an emphasis on Indigenizing learning spaces through the lens of Indigenous knowledge and pedagogy in

**Gemma A. Miller**

Lecturer at the Lawrence University London Centre for Spring Term 2022 to teach Shakespear in London (ENGL/THAR 170)

**Michael D. Mizrahi (2009)**

Frank C. Shattuck 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

**Linda J. Morgan-Clement**

Julie Esch Hurvis Dean of Spiritual and Religious Life and Chaplain to the University

**Kat P. Mueller**

Lecturer of Biology

**Maeghan k Murie**

Instructor of Biology

**Rob Neilson (2003)**

Frederick R. Layton Professor of Studio Art and Professor of Art

College of Creative Studies, B.F.A.; University of North Carolina, Chapel Hill, M.F.A.

Interest(s): sculpture, public art, drawing

**Linnea Ng**

J. Thomas Hurvis Professor of Organizational Psychology and Collaboration and Instructor of Psychology

**Van Nguyen (Fall 2022)**

Assistant Professor of Economics

University of Kansas, Ph.D

Interest(s): Monetary Policy, Open Macroeconomics, Inflation and Welfare.

**Amy Nottingham (2011)**

Student Success Specialist

MA, Children's Literature Simmons College BA, Theatre Pomona College

**Audrey Nowak**

Lecturer of Music

**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

**Margaret S. Paek (2015)**

Visiting Assistant Professor of Dance

MFA in Dance from Hollins University/American Dance Festival BA in Psychology with minor in Theatre Dance from University of California, San Diego

**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): archaeology, geophysical methods, statistical analysis, cross-cultural research, cultural evolution, resilience theory, museum curation and exhibition

**Rebecca A. Perry (2017)**

Assistant Professor of Music-Music Theory

Brigham Young University, B.A.; Yale University, M.A., M.Phil., Ph.D.

Interest(s): sonata form, Russian art music, Prokofiev

**Brian G. Pertl (2008)**

Dean of the Conservatory of Music

Lawrence University, B.A., B.M.; Wesleyan University, M.A.

Interest(s): Ethnomusicology

**Mark Phelan (2011)**

Associate Professor of Philosophy

Ouachita Baptist University, B.A.; The University of Utah, M.S.; The University of North Carolina-Chapel Hill, Ph.D.

Interest(s): Philosophies of mind, language, and cognitive science; figurative language; theory of mind; linguistic pragmatics

**Kathryn R. Phillippi-Immel**

Visiting Volunteer

**Brian P. Piasecki (2011 -)**

Associate Professor of Biology

University of North Texas, B.S.; University of Texas at Austin, M.A.; University of Minnesota, Ph.D.; Karolinska Institute, Postdoctoral Fellow

Interest(s): cell & molecular biology, evolutionary biology, and microbiology

**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

**Orlando Pimentel**

Lecturer of Music

**Janet Planet (2007)**

Lecturer of Music

Interest(s): Interests: vocal jazz

**Antoinette Powell (2002)**

Music Librarian and Associate Professor  
St. Norbert College, B.Mus.; University of Wisconsin-Milwaukee; University of Pittsburgh, M.L.S.  
Interest(s): music library

**Taide Prieto**  
Visiting Professor of Music

**Kathy Privatt** (1999)  
James G. and Ethel M. Barber Professor of Theatre and Drama and Associate Professor of Theatre Arts  
Central Missouri State University, B.S.E.; Southwest Missouri State University, M.A.; University of Nebraska, Ph.D.  
Interest(s): American theatre

**Daniel J. Proctor** (2011)  
Visiting Assistant Professor of Anthropology  
Eastern Washington University, B.A.; Florida Atlantic University, M.A.; University of Iowa, Ph.D.  
Interest(s): Origins of bipedalism, paleoanthropology, forensic anthropology, functional anatomy

**Jessica Pruett**  
Visiting Assistant Professor of Gender Studies

**Stewart C. Purkey** (1985)  
Bee Connell Mielke Professor of Education and Associate Professor of Education  
Stanford University, A.B.; Reed College, M.A.T.; University of Wisconsin-Madison, Ph.D.  
Interest(s): educational reform, professional development, community- and place-based education, sociology of education, environmental education, film studies, ethnic studies

**Marcy Quiason**  
Assistant Professor of Gender Studies

**Timothy Quincy**  
Instructor of Chemistry

**Leila A. Ramagopal Pertl**  
Music Education Instructor, Lawrence University & Performing Arts Director, Appleton Public Montessori & Harp Instructor, Lawrence Academy of Music & Music Education Curator, Mile of Music

**Julie F. Rana** (2017)  
Assistant Professor of Mathematics  
Undergraduate: Marlboro College, Graduate: University of Massachusetts, Amherst

**Melissa H. Range** (2014)  
Associate Professor of English  
B.A. University of Tennessee, M.F.A. Old Dominion University, M.T.S. Candler School of Theology, Ph.D. University of Missouri  
Interest(s): Contemporary American poetry, 19th century poetry, abolitionist literature, African American poetry,

political poetry, religious poetry, rhyme

**Carl A. Rath** (1978-1981; 2012 - pr)

Instructor

Lawrence University, 1971-75 B.M. with Distinction in Performance University of Denver Lamont School of Music: M.A. in Music Performance

**Louise Raw**

London Centre

**Anna R. Reiser**

Teacher of Piano and Lecturer of Music

**Kate Rennebohm**

Jill Beck Assistant Professor of Film Studies

**Gretchen M. Revie** (1997)

Acting Director of the Seeley G. Mudd Library

Carleton College, B.A.; University of Wisconsin-Madison, M.A.

Interest(s): reference, information literacy

**Relena R. Ribbons** (2016-)

Assistant Professor of Geosciences

University of Copenhagen, joint Ph.D. Forestry, Geosciences, and Natural Resources Conservation (2017)

University of Bangor, joint Ph.D. Forestry, Geosciences, and Natural Resources Management(2017)

Interest(s): Biogeochemistry, Soil biology, Forest ecology, Ecosystem and Community ecology, Dendrochronology

**Dane M. Richeson** (1984)

Professor of Music

Ohio State University, B.Mus.; Ithaca College, M.Mus.

Interest(s): percussion

**Monica Rico** (2001)

Robert S. French Professor of American Studies and 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)

Professor of Art

Herron School of Art/Indiana University, B.F.A.; Louisiana State University, M.F.A.

Interest(s): I specialize in socially charged images with an emphasis on printmaking, book arts, pop-ups, and movables. I love how pop-ups and movables keep the viewer physically engaged by providing a tactile and

**Gregory A. Riss**

Lecturer of Music

**Kristin L. Roach** (2020-present)

Assistant Professor of Music

Bachelor of Music in Applied Music (Piano), Eastman School of Music Master of Music in Piano Performance/Literature and Piano Accompanying/Chamber Music with the Performer's Certificate, Eastman School of Music

Interest(s): Opera, Star Wars, Star Trek, podcasting about LOTR

**Kailey Rocker**

Visiting Assistant Professor of Anthropology

**Miriam Rodriguez Guerra** (2020 -)

Assistant Professor of Spanish

Universidad de Las Palmas de Gran Canaria, B.A.; Consejo Superior de Investigación Científica, M.A in Phonetics and Phonology; University of Arizona M.A. and Ph.D in Hispanic Linguistics.

Interest(s): Phonology, Speech Sciences, Bilingualism, Minority languages, Early Language Acquisition (L2 and Heritage Languages).

**Austin R. Rose**

Technical Director & Lecturer of Theatre Arts

**Mike Ross**

Wind Ensemble Conductor

**Andrew J. Sage** (2018)

Assistant Professor of Statistics

College of Wooster, B.A.; Miami University, M.S.; Iowa State University, M.S., Ph.D.

Interest(s): applied statistics, statistical machine learning, statistics education

**Elizabeth K. Sattler** (2018-)

Assistant Professor of Mathematics

North Dakota State University, B.S., Ph.D.

Interest(s): fractal geometry, symbolic dynamics, ergodic theory

**Graham T. Sazama** (2016)

Assistant Professor of Chemistry

University of Wisconsin-Madison, B.S.; Harvard University, Ph.D.

Interest(s): Synthesis of coordination organometallic compounds; Small-molecule reactivity; Open-shell compounds (molecules with unpaired electrons); Magnetic properties; Luminescence; Molecular materials

**Erica J. Scheinberg** (2009)

Visiting Assistant Professor of Music

A.B. with Honors in Music, University of California, Berkeley (2000) M.A. in Musicology, University of California, Los Angeles (2003) Ph.D in Musicology, University of California, Los Angeles (2007)

Interest(s): Music in the United States, Popular Music, History of Recorded Sound

**Betsy Schlabach** (September 2021)

Associate Professor of History

Saint Louis University PhD Lehigh University MA Valparaiso University BA

**Daniel E. Schwandt** (2020-present)

Lecturer of Music

BM, Church Music, Organ - St. Olaf College MSM, Organ - University of Notre Dame DMA, Organ Performance - University of Notre Dame

Interest(s): Organ, hymnody, continuo, organ building

**Jodi Sedlock** (2002)

Professor of Biology

Loyola University, B.A. (Fine Arts), B.S. (Biology); University of Illinois-Chicago, Ph.D. (Ecology & Evolution)

Interest(s): tropical diversity, conservation biology, acoustic environments, sensory ecology, bat-insect interactions

**Charles Austin Segrest** (2014)

Assistant Professor of English

Emory University, B.A. Classics (2002); Georgia State University, M.F.A (2009); The University of Missouri, PhD (2014)

**Elizabeth Shackelford**

Stephen Edward Scarff Memorial Visiting Professor

**Aaron M. Sherkow** (Spring 2013)

Visiting Assistant Professor of Theatre Arts

MFA in Theatre Design from Boston University '11, BA Theatre with a Minor in Music from Lawrence University '04

Interest(s): Drama, Opera, Improvisation, Dance, Color, Form, Composition, Interactive Performance and Design, Carpentry, Welding, Electronics, Projections, Photography

**John A. Shimon** (2000)

Associate 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

**Arnold Shoher** (2006)

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)

Associate Professor and Co-director of Choral Studies

A.B. (Music), University of Chicago M.M. and D.M.A. (Choral Conducting and Literature), University of Illinois at

Urbana-Champaign

Interest(s): Inclusive pedagogy for choirs, diction pedagogy, vocal pedagogy

**Brittany Sievers**

Visiting Assistant Professor of Art

**Garrett J. Singer**

Special Assistant to the President

**Claudena Skran** (1990)

Edwin & Ruth West Professor of Economics and Social Science and Professor of Government

Michigan State University, B.A.; Oxford University, M.Phil., Ph.D.

Interest(s): international relations, international organizations, refugees, social entrepreneurship, sustainable development, African politics, European politics

**Jesus G. Smith** (2017-)

Assistant Professor of Ethnic Studies

University of Texas at El Paso B.A.; Ph.D. Texas A&M University

Interest(s): Race, Racism, Gender, Sexuality, Computer and Information Technology, Health

**Martyn Smith** (2006)

Associate Professor of Religious Studies

Prairie Bible College, Alberta, Canada, B.Th.; Fuller Seminary, M.A.; Emory University, Ph.D.

Interest(s): sacred space, religion and the environment, digital mapping, medieval Islam, Islam in America, global culture, travel narratives, close reading

**Jessica Anne Sommer** (2020)

Visiting Assistant Professor of Music

**Steven Paul Spears** (2004)

Associate Professor of Music

University of Louisville School of Music, B.Mus.; The Juilliard School, M.Mus.

Interest(s): voice

**Timothy A. Spurgin** (1990)

Bonnie Glidden Buchanan Professor of English Literature and Associate 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)

Associate Professor of Music

Goucher College, B.A.; Peabody Conservatory of music-John Hopkins University, M.M. University of Maryland, D.M.A.

Interest(s): Acoustic, electronic, and multi-media composition; collaboration with other arts

**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.

**Irene Strohbeen**  
Entrepreneur-in-Residence

**Meghan C. Sullivan** (2015)  
Tenure-Track Assistant Professor of Ceramics and Expanded Media  
University of Nebraska -Lincoln, MFA in Studio Arts, University of Florida - Gainesville, Post baccalaureate in Ceramics, Massachusetts College of Art, BFA in Ceramics  
Interest(s): Ceramics, Drawing, Figurative Sculpture

**Kuo-ming Sung** (1994)  
Wendy and K.K. Tse Professor of East Asian Studies and 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.; University of Miami, D.M.A.  
Interest(s): choral conducting, musical theatre, music education, jazz vocal

**Rosa Tapia** (2002)  
Professor of Spanish  
Universidad de Granada, B.A.; University of Delaware, M.A.; Pennsylvania State University, Ph.D.  
Interest(s): Spanish and Latin American literature and film studies.

**Chunyue Teng**  
Dennis and Charlot Singleton Assistant Professor in Cognitive Neuroscience

**Rose Theisen**  
Lecturer in Biology and First Year Studies and Curricular Director of the Summer Institute

**Craig L. Thomas** (2016)  
Systems and Data Services Librarian and Assistant Professor  
Washington State University, B.A.; Harvard University, A.M.; University of Illinois Urbana-Champaign, M.L.I.S;  
Interest(s): Library systems and services, scholarly communication, data management; literature and history of the English Renaissance

**Jill G. Thomas** (2010)  
Director of Technical Services and Assistant Professor  
Washington State University, B.A.; Simmons College, M.S.  
Interest(s): Special Collections, metadata, physical and digital preservation, Early modern Europe

**Peter John Thomas** (2006)

Associate Professor of Russian Studies  
Northwestern University, B.A., M.A., Ph.D.  
Interest(s): Russia, poetry, translation, philosophy, contemporary composers

**Susie Thomas**

Lecturer

**Jacque Troy** (2012-present)

Lecturer in Theatre Arts

Masters of Arts in Education--Mount Mary University Bachelor of Arts--University of Iowa; Majors in Theater Arts and Communication Studies; Secondary Education Teacher Certification

Interest(s): Live theatre, travel, young adult literature, do-it-yourself projects of all kinds, bowling

**Timothy X. Troy** (1997)

J. Thomas and Julie E. Hurvis Professor of Theatre and Drama and Professor of Theatre Arts

Lawrence University, B.A.; University of Iowa, M.F.A.

Interest(s): directing, musical theatre

**Matthew L. Turner** (2010)

Instructor

B.M. Lawrence University, 1989 M.M. New England Conservatory of Music, 1991

Interest(s): Improvisation, Jazz, Composition, Music Education, New Music, Avant-Garde, Experimental Music

**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** (1993)

Director of the Lawrence Community Music School

Lawrence University, B.Mus.; University of Oklahoma, M.Mus.

Interest(s): piano, piano pedagogy

**Brigid E. Vance** (2015)

Associate Professor of History

Carleton College, B.A.; Stanford University, M.A.; Princeton University, Ph.D.

Interest(s): East Asian history (especially early modern China and Japan), history of science and medicine, and dreams

**Angela M. Vanden Elzen** (2013 (at Lawrence si)

Reference and Learning Technologies Librarian and Assistant Professor

University of Wisconsin-Green Bay, B.S.; University of Wisconsin-Milwaukee, M.L.I.S.

Interest(s): Video games, video game history, game culture & identity; makerspace instruction and inclusion; library access and equity

**Gary T. Vaughan** (2009)

Lecturer in Innovation and Entrepreneurship and Coordinator, Innovation and Entrepreneurship program  
University Wisconsin - Oshkosh Bachelor of Liberal Studies Silver Lake College of the Holy Family Masters of Science

Interest(s): Hiking the Ice Age Trail

**Massimiliano Verita'** (2005)

Instructor of Arabic, Italian and Religious Studies

University of Bologna, B.A., M.A.

Interest(s): Arabic/African/Italian language and literature

**Catherine S. Walby** (2000)

Teacher of Piano and Lecturer of Music

Lawrence University, B.A., B.Mus.; University of Oklahoma, M.M.

Interest(s): piano

**Nancy A. Wall** (1995)

Associate Provost and Associate Professor of Biology

Presbyterian College, B.S.; University of South Carolina, M.A.; Vanderbilt University, Ph.D.

Interest(s): neural development, pattern formation, differentiation,

**Helen M. Walter**

Lecturer

**Petra Watzke**

Assistant Professor of German Studies

**Matty Wegehaupt** (2008)

Instructor of East Asian Studies

University of Wisconsin, B.A.; University of California, M.A.; University of Michigan, M.A.

Interest(s): East Asian ancient and contemporary history, literature, and religion - with a focus on China and the Koreas. Ruism, Buddhism, Daoism, and other thought/practice in ancient East Asia. Anti-imperialism

**Mason Wheelock-Johnson** (Since 2022)

Visiting Instructor of Latin

PhD: University of Wisconsin - Madison, 2021; MA: University of Wisconsin - Madison, 2017; BA: Rhodes College, 2015

Interest(s): Latin Philosophy; Neronian Literature; Metaphor; Classical Reception; Phenomenology

**Lee White**

London Centre Resident Director

**Bob Williams** (2004)

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): gesture studies, distributed cognition, cognitive linguistics, instructional discourse

**Copeland Woodruff**

Director of Opera Studies and Associate Professor of Music

**Steven Wulf** (2002)

Associate Professor of Government

Cornell University, B.A.; Yale University, M.A., M.Phil., Ph.D.

Interest(s): political philosophy, history of ideas, constitutional law

**Nathan Wysock** (2003)

Lecturer of Music

Illinois State University, B.Mus.; Eastman School of Music, M.Mus., D.M.A.

Interest(s): classical guitar

**Beth A. Zinsli** (2013-)

Assistant Professor of Art History, Curator of the Wriston Art Center Galleries and Museum Studies

Interdisciplinary Area Program Director

PhD: University of Wisconsin-Madison, 2014 MA: University of Wisconsin-Madison, 2007 BA: Lawrence University, 2002

Interest(s): History and Theory of Photography, Visual Culture Studies, Contemporary Art History, Museum Studies

**Minoo Adenwalla** (1959)

Professor Emeritus of Government

University of Bombay, B.A.; Northwestern University, M.S., Ph.D.

**Janet Anthony** (1984)

George and Marjorie Olsen Chandler Professor Emerita 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.

**Jill Beck**

President Emerita

**David E. Becker** (2004)

Professor of Music and Director of Orchestral Studies

University of Chicago, B.A., M.A., Ph.D.

**Mary Blackwell** (1989)

Associate Professor of Chemistry

University of Illinois-Urbana, B.A.; University of California-Berkeley, Ph.D.

**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

**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.

**David John Burrows** (2005)

Professor of Psychology and Director of Inclusive Pedagogy  
Columbia University, B.A.; University of Toronto, M.A., Ph.D.

**Paul M. Cohen** (1985)

Patricia Hamar Boldt Professor of Liberal Studies and Professor Emeritus of History  
Clark University, B.A.; University of Chicago, M.A., Ph.D.

**Jeffrey A. Collett** (1995)

Associate Professor of Physics  
St. Olaf College, B.A.; Harvard University, A.M., Ph.D.

**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

**James H. DeCorsey** (1990)

Associate Professor of Music and Teacher of Horn  
Stanford University, B.A.; Yale University, M.A., M.M.A., D.M.A.

**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.

**John P. Dreher** (1963)

Lee Claflin-Robert S. Ingraham Professor Emeritus of Philosophy and Professor of Philosophy  
St. Peter's College, B.A.; Fordham University, M.A.; University of Cologne; University of Chicago, Ph.D.

**Merton D. Finkler** (1979)

John R. Kimberly Distinguished Professor Emeritus of the American Economic System and Professor of

Economics

University of California-San Diego, B.A.; London School of Economics, M.Sc.; University of Minnesota, Ph.D.

**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.

**Terry L. Gottfried** (1986)

Professor Emeritus of Psychology and Adjunct Faculty Advisor

University of Minnesota, B.A., Ph.D.

**Chong-do Hah** (1961)

Professor Emeritus of Government

Indiana University, B.A., Ph.D.; University of Virginia, M.A

**Bruce E. Hetzler** (1976)

Professor of Psychology

DePauw University, B.A.; Northwestern University, M.A., Ph.D.

**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.

**Eilene Hoft-March** (1988)

Milwaukee-Downer College and College Endowment Association Professor of Liberal Studies and Professor of French

Carroll College, B.A.; University of California-Berkeley, M.A., Ph.D.

**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

**Kathleen Isaacson** (1977)

Library

University of Wisconsin-Madison, B.A.; University of Wisconsin-Oshkosh, M.A.L.S.

**Nick Keelan** (1985)

Associate Professor Emeritus of Music

Henderson State University, B.M.E.; University of Northern Colorado, M.Mus.

**Bonnie Koestner** (2001)

Associate Professor Emerita of Music

Lawrence University, B.Mus.; University of Wisconsin-Madison, M.Mus.

**Carol L. Lawton** (1980)

Otilia Buerger Professor Emerita of Classical Studies  
Vassar College, B.A.; University of Pittsburgh, M.A.; Princeton University, M.F.A., Ph.D.

**Robert Levy** (1979-2005)  
Trumpet Teacher  
Ithaca College, B.S.; North Texas State University, M.M.E.

**Jerrold P. Lokensgard** (1967)  
Robert McMillen Professor of Chemistry  
Luther College, B.A.; University of Wisconsin-Madison, M.A., Ph.D.

**Ruth M. Lunt** (1992)  
Associate Professor of German  
Millersville State University, B.A.; University of Pittsburgh, M.A.; Princeton University, Ph.D.

**Nicholas C. Maravolo** (1966)  
Professor of Biology  
University of Chicago, B.S., M.S., 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.

**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.

**Howard Niblock** (1981)  
Professor of Music and Teacher of Oboe  
University of Michigan, B.A.; Michigan State University, M.M.; University of Wisconsin-Madison

**John C. Palmquist** (1968-96)  
Professor Emeritus of Geology  
Augustana College, B.A.; University of Iowa, M.S., Ph.D.

**Alan Parks** (1985)  
Professor of Mathematics  
University of Wisconsin-Madison, B.A., M.A., Ph.D.

**Brent Peterson** (2002)  
Professor of German

Johns Hopkins University, B.A.; University of Iowa, M.A.; University of Minnesota, Ph.D.

**Jerald Podair (1998)**

Robert S. French Professor of American Studies and Professor of History

New York University, B.A.; Columbia University School of Law, J.D.; Princeton University, M.A., Ph.D

**Mary H. Poulson (1964-93)**

Professor Emerita of Physical Education

Valparaiso University, B.A.; Miami University, M.Ed.; Colorado State College

**Bruce H. Pourciau (1976)**

Professor of Mathematics

Brown University, B.A.; University of California--San Diego, Ph.D.

**Bradford G. Rence (1979)**

Professor of Biology

University of Iowa, B.A.; University of California-Berkeley, Ph.D.

**Sumner Richman (1957-95)**

Professor Emeritus of Biology

Hartwick College, B.A.; University of Massachusetts, M.A.; University of Michigan, Ph.D.

**Theodore W. Ross (1966-99)**

Associate Professor Emeritus of Geology

Indiana University, B.S., M.A.; Washington State University, Ph.D.

**Thomas C. Ryckman (1984)**

Professor Emeritus of Philosophy

University of Michigan, Flint, B.A.; University of Massachusetts, M.A., Ph.D.

**Richard A. Sanerib, Jr. (1976)**

Associate Professor of Mathematics

St. Anselm College, B.A.; University of Colorado, M.A., Ph.D.

**Judith H. Sarnecki (1985-87; 1990)**

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.

**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.

**Nancy M. Stowe**

Assistant to the Dean of the Conservatory

**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.

**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

**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.

**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

**Patricia Vilches** (2000)

Professor of Spanish and Italian

University of Illinois-Chicago, B.A.; University of Chicago, M.A., Ph.D.

**Dirck Vorenkamp** (1997)

Associate Professor Emeritus of Religious Studies

University of Tulsa, B.S.; University of Kansas, M.A.; University of Wisconsin-Madison, Ph.D.

**Allen C. West** (1966-93)

Professor Emeritus of Chemistry

Princeton University, B.A.; Cornell University, Ph.D.

**Ernestine Whitman** (1978)

Professor Emerita of Music

Emory University, B.A.; New England Conservatory, M.Mus.; University of Wisconsin-Madison, D.M.A.

**Jane Parish Yang** (1991)

Associate Professor of Chinese

Grinnell College, B.A.; University of Iowa, M.A.; University of Wisconsin-Madison, Ph.D.

**Dominique-Rene S. de Lerma**

Visiting Adjunct Professor of Music

# ACADEMIC CALENDAR

## Current Academic Year

### Fall Term (Term I) - 2022

September 5	Monday	Welcome Week commences Residence halls open for new students (8 a.m.)
September 9	Friday	Winter and Spring Advance Registration for new students
September 10	Saturday	Residence halls open for returning students
September 12	Monday	First day of fall term classes
September 9-16	Monday-Friday	Fall Registration & class change period reopens for returning students 2:00 pm September 9 through September 16 (fall registration remains open for new students- July 7 through September 16)
September 16	Friday	Last day to make class changes or select the S/U option for fall term classes
October 20-23	Thursday-Sunday	Midterm reading period
November 4	Friday	Last day to withdraw from a fall term class
November 17	Thursday	Last day of fall term classes
November 18-19	Friday-Saturday	Reading period
November 20-22	Sunday-Tuesday	Final examinations
November 23	Wednesday	Residence halls close (noon)

### December Term (D-Term) - 2022

November 27	Sunday	Residence halls open (9 am)
November 28	Monday	First day of D-Term classes
November 28	Monday	Last day to make class changes or select S/U for D-Term
December 7	Wednesday	Last day to withdraw from a D-Term class

December 9	Friday	Last day of D-Term classes and final examinations
December 10-11	Saturday-Sunday	Closing event, if one is scheduled for the class
December 11	Sunday	Residence halls close (6 pm)

## Winter Term (Term II) - 2023

January 2	Monday	Residence halls open (9 a.m.)
January 3	Tuesday	First day of winter term classes
January 3-9	Tuesday-Monday	Registration & class change period
January 9	Monday	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	Thursday-Sunday	Midterm reading period
February 24	Friday	Last day to withdraw from a winter term class
March 10	Friday	Last day of winter term classes
March 11-12	Saturday-Sunday	Reading period
March 13-15	Monday-Wednesday	Final examinations
March 16	Thursday	Residence halls close (noon)

## Spring Term (Term III) - 2023

March 26	Sunday	Residence halls open (9 a.m.)
March 27	Monday	First day of spring term classes
March 27-31	Monday-Friday	Registration & class change period
March 31	Friday	Last day to make class changes or select the S/U option for spring term classes
May 4-7	Thursday-Sunday	Midterm reading period
May 19	Friday	Last day to withdraw from a spring term class
May 29	Monday	Memorial Day (no classes)
June 2	Friday	Last day of spring term classes
June 3-4	Saturday-Sunday	Reading period
June 5-7	Monday-Wednesday	Final examinations
June 8	Thursday	Residence halls close for underclassmen (noon)
June 11	Sunday	Commencement

June 11	Sunday	Residence halls close for seniors (6 p.m.)
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## Next Academic Year

### Fall Term (Term I) - 2023

September 4	Monday	Welcome Week commences Residence halls open for new students (8 a.m.)
September 8	Friday	Winter/Spring Advance Registration opens for new students 8:00 am
September 8	Friday	Winter/Spring Advance Registration reopens for returning students 2:00 pm
September 9	Saturday	Residence halls open for returning students
September 11	Monday	First day of fall term classes
September 11-15	Monday-Friday	Registration & class change period
September 15	Friday	Last day to make class changes or select the S/U option for fall term classes
October 19-22	Thursday-Sunday	Mid-term reading period
November 3	Friday	Last day to withdraw from a fall term class
November 16	Thursday	Last day of fall term classes
November 17-18	Friday-Saturday	Reading period
November 19-21	Sunday-Tuesday	Final examinations
November 22	Wednesday	Residence halls close (noon)

### December Term (D-Term) - 2023

November 26	Sunday	Residence halls open (9 a.m.)
November 27	Monday	First day of D-Term classes
November 27	Monday	Last day to make class changes or select the S/U option for D-Term classes
December 6	Wednesday	Last day to withdraw from a D-Term class
December 8	Friday	Last day of D-Term classes and final examinations
December 9-10	Saturday-Sunday	Closing event, if one is scheduled for the class

December 10	Sunday	Residence halls close (6 p.m.)
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### Winter Term (Term II) - 2024

January 2	Tuesday	Residence halls open (9 a.m.)
January 3	Wednesday	First day of winter term classes
January 3-9	Wednesday-Tuesday	Registration & class change period
January 9	Tuesday	Last day to make class changes or select the S/U option for winter term classes
January 15	Monday	Martin Luther King, Jr., Day (no classes)
February 8-11	Thursday-Sunday	Mid-term reading period
February 23	Friday	Last day to withdraw from a winter term class
March 8	Friday	Last day of winter term classes
March 9-10	Saturday-Sunday	Reading period
March 11-13	Monday-Wednesday	Final examinations
March 14	Thursday	Residence halls close (noon)

### Spring Term (Term III) - 2024

March 24	Sunday	Residence halls open (9 a.m.)
March 25	Monday	First day of spring term classes
March 25-29	Monday-Friday	Registration & class change period
March 29	Friday	Last day to make class changes or select the S/U option for spring term classes
May 2-5	Thursday-Sunday	Mid-term reading period
May 17	Friday	Last day to withdraw from a spring term class
May 27	Monday	Memorial Day (no classes)
May 31	Friday	Last day of spring term classes
June 1-2	Saturday-Sunday	Reading period
June 3-5	Monday-Wednesday	Final examinations
June 6	Thursday	Residence halls close for underclassmen (noon)
June 9	Sunday	Commencement
June 9	Sunday	Residence halls close for seniors (6 p.m.)



# ERRATA

## Catalog Errata