

University of Michigan College of  
Literature, Science, and the Arts

# **LSA Bulletin, 2020-21**

## **Requirements & Programs**

This document is an unofficial representation of the information available on the LSA website. For official and updated information, please view the LSA website: <http://lsa.umich.edu/lsa/academics/>

# LSA Degrees

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# LSA Degrees

## Degrees and Selection of a Degree Program

The College awards three basic degrees: the Bachelor of Arts (A.B.), the Bachelor of Science (B.S.), and the Bachelor in General Studies (B.G.S.). The Bachelor of Science in Chemistry (B.S. Chem.) is also granted. The Bachelor of Arts and Bachelor of Science degrees require a general understanding of the [humanities, natural sciences, and social sciences](#), as well as [in-depth study of at least one subject area](#). Students are also required to achieve competency in the [use of the English language](#) and to acquire [proficiency in a language other than English](#). They must elect one or two courses designed to [develop skills in quantitative reasoning](#) and one course [addressing issues involving race and ethnicity](#).

Beyond these general requirements, students may choose elective courses to complete a minimum of 120 credits.

The Bachelor of Science degree requires 60 credits in physical and natural science and mathematics. Students pursuing a [secondary teaching certificate](#) are required to earn additional credits through the School of Education.

The [Bachelor in General Studies degree](#) encourages students to take responsibility for structuring their own multidisciplinary academic programs. This degree requires a minimum of 120 credits and includes [First-Year Writing](#), [Upper-Level Writing](#), [Race and Ethnicity](#), and [Quantitative Reasoning](#) requirements. At least 60 credits of courses numbered 300 or above must be completed with no more than 20 of these 60 credits from one subject.

[Residential College \(RC\)](#) students doing a B.G.S. must include in their academic plan the completion of the RC arts practicum, the live-in requirement, the RC language requirement, requirement for four RC courses.

Honors students must consult the [Honors Program](#) about special degree requirements, courses, policies, and procedures. RC students should consult advisors in the [Residential College](#) to plan their degrees.

## Bachelor of Arts (A.B.) or Bachelor of Science (B.S.)

The **Bachelor of Arts** and **Bachelor of Science** degrees require competency in each major area of knowledge and a deep understanding of at least one subject area. Each student is required also to [achieve competency in the use of the English language](#), to acquire second-year college-level [proficiency in a language other than English](#), to receive credit for an approved course addressing questions on [race and ethnicity](#), and to fulfill the [quantitative reasoning requirement](#).

Beyond these general requirements, students are free to choose elective courses to complete a minimum of 120 credits.

### Credits and Grade Point Average

A student must complete a minimum 120 credits with a cumulative grade point average (GPA) of 2.0 (C) or better (124 for B.S.Chem.). The overall GPA of courses included in the field of the major for an A.B. or B.S. degree or counted toward the 60 credits of upper-level courses required for a B.G.S. degree must be at least 2.0.

### [Bachelor of Science Eligibility](#)

The difference between the A.B. and B.S. degree is that the B.S. degree requires 60 credits of approved courses in the physical and natural sciences and/or mathematics.

### College Writing Requirements (A.B., B.S., B.G.S., B.S.Chem.)

- **[First-Year Writing Requirement](#)**

The goal of the First-Year Writing Requirement (FYWR) is to prepare students for the type of writing most often assigned and valued in University courses. Students cannot fulfill the requirement through Advanced Placement (AP) scores. Students should complete their first-year writing course in their first year, and must earn a C- or higher to meet the requirement. This requirement should be satisfied before attempting a course to meet the Upper-Level Writing Requirement. The majority of students fulfill the first-year writing requirement through English 125 (Writing and Academic Inquiry) and English 124 (Academic Writing and Literature), but there are a few other courses around the University that also fulfill the requirement. Engineering 100 does not fulfill the FYWR in LSA.

- **[Upper-Level Writing Requirement](#)**

The goal of the Upper-Level Writing Requirement (ULWR) is to teach students to recognize and practice the range of writing activities and forms typical of academic and professional contexts. Students should satisfy the First-Year Writing Requirement before electing one of the courses approved to satisfy the ULWR. A minimum course grade of C- is required in order to satisfy the ULWR. Over the course of the term, students will complete several writing assignments that are related to course content and intended to help students practice the rhetoric of their specific discipline. Possible assignments may include journals, research papers, critical analyses, and/or lab reports. Students will receive feedback on their writing from their ULWR instructor and are expected to revise much of their work throughout the term. Upper-Level Writing Requirement courses offered for a particular term can be found in the LSA Course Guide.

### [Race & Ethnicity Requirement](#) (A.B., B.S., B.G.S., B.S.Chem.)

Students choose one course from a list of approved courses that cover issues relating to race and ethnicity, racial and ethnic intolerance, and inequality. The goal is to prepare students to live and work in a multiethnic, multiracial environment.



### [Quantitative Reasoning Requirement](#) (A.B., B.S., B.G.S., B.S.Chem.)

Students are required to take one or two courses from an approved list that focus on the methodology of quantitative analysis. The goal is to ensure that students achieve a level of proficiency in using and analyzing quantitative information.

### [Non-LSA Coursework](#) (A.B., B.S., B.G.S., B.S.Chem.)

To qualify for a degree, a student must complete a program of study that includes primarily coursework from the College of Literature, Science, and the Arts or equivalent LSA transfer credit.

Candidates for the A.B., B.S., or B.G.S. degree must complete a minimum of 100 credits of LSA courses, thus allowing 20 credits of non-LSA coursework in the 120 required for the degree.

### [Language Requirement](#) (A.B., B.S., B.S.Chem.)

Students are required to complete fourth-term proficiency in a language other than English, most often by earning credit for the fourth term of a University of Michigan language course. The goal is to offer a means of access to the cultural and intellectual heritage of the world's non-English speaking majority, as well as to provide reflective understanding of the structure and complexity of English itself. LSA offers over 30 different languages that meet this requirement.

### [Area Distribution](#) (A.B., B.S., B.S.Chem.)

Students must complete 30 credits outside of their major distributed over the following five categories: Natural Sciences, Social Sciences, Humanities, Mathematical and Symbolic Analysis, and Creative Expression. Through this requirement, students gain an understanding and appreciation of the major areas of learning and a coherent view of the essential concepts, structures, and intellectual methods that typify these disciplines.

### [Major](#) (A.B., B.S., B.S.Chem.)

The major provides the option for a student to pursue a thorough investigation of a particular subject or discipline. Course requirements of majors offered vary from 24 to 48 credits.

### [Option for Minors](#) (A.B., B.S., B.S.Chem.)

A.B. and B.S. students have the opportunity to complete a minor as part of the degree program. Departments have the option of whether or not to offer a minor, and many develop several. As departmental minors are created and approved, students may choose to add a minor to their academic plan.

## **Bachelor of Science Eligibility**

BS eligibility courses offer students the opportunity for substantial engagement with the theories or applications of one or more of the following: subject content in the physical, life, and cognitive and computational sciences; natural science methodologies; mathematical content and reasoning; quantitative approaches and methodologies; formal reasoning; technology.

## Bachelor of Science in Chemistry (B.S.Chem.)

The curriculum leading to the degree of Bachelor of Science in Chemistry has been planned for students preparing for professional work in chemistry, biochemistry, or related fields. The [major in chemical sciences](#) entails a lesser degree of specialization than that leading to the B.S.Chem.

The B.S.Chem. is the most rigorous degree in pure chemistry offered by the [department](#), and it should be the degree of choice for students who plan to pursue Ph.D. studies in one of the traditional sub-areas of the field (organic chemistry, inorganic chemistry, physical chemistry, and analytical chemistry) or students who plan to seek careers in the chemical industry. Students are required to take several lecture and lab courses in all of these core areas and are also required to complete four credits (two semesters) of undergraduate research.

The program leading to Honors in chemistry is available to qualified students.

In addition, there is a [five-year joint degree program](#) with the College of Engineering that leads to a B.S.Chem. and a [Bachelor of Science in Engineering \(Chemical Engineering\)](#).

It is strongly recommended that students who are thinking of degrees in chemistry should arrange an appointment with a chemistry advisor via the [online appointment scheduling system](#) as soon as possible, preferably before the end of their freshman year but certainly before the end of their sophomore year.

### Degree Program

A minimum program leading to this degree is given in the following list of courses and requirements.

**Exclusions:** *Students who elect the B.S.Chem. may not elect the following majors: Interdisciplinary Chemical Sciences or Chemical Science. They may also not elect any of the Chemistry minors.*

A Bachelor of Science in Chemistry degree requires competency in each major area of knowledge and a deep understanding of chemistry. Each student is required also to [achieve competency in the use of the English language](#), to acquire second-year college-level [proficiency in a language other than English](#), to receive credit for an approved course addressing questions on [race and ethnicity](#), and to fulfill the [quantitative reasoning requirement](#). The B.S.Chem.

degree requires 60 credits of approved courses in the physical and natural sciences and/or mathematics.

### Chemistry Degree Credit and GPA Requirements

A student must complete a minimum of 124 credits with a cumulative GPA of 2.0 (C) or better. This includes chemistry courses, mathematics and physics prerequisites, and advanced electives that are part of the degree program.

### Special Departmental Policies (effective Fall 2015)

The department strongly recommends that a student earn a grade of at least C– in all CHEM courses and mathematics, physics, and biology courses that are prerequisite for subsequent elections. A major program grade point average of at least 2.0 is required; this includes chemistry courses, mathematics, physics, and biology prerequisites, and advanced electives that are part of a major plan. Prerequisites must be taken for a grade. Students must request any change in a chemistry course grade within the first 15 University business days of the first full term following the term in which the disputed grade was issued.

### Prerequisites to the Program (*Must be taken for a grade*)

- CHEM courses through 215, 216, CHEM 241/242, and CHEM 260 or 370
- PHYSICS [135/136 or 140/141] and [235/236 or 240/241]
- MATH 115 (or 120), and MATH 116 (or 121)
- CHEM 262 (or MATH 215, and MATH 216 or 217)

PHYSICS 240 or 235 and MATH 215 are prerequisites for CHEM 461, and students should, whenever possible, complete both of these before their junior year.

### Chemistry Degree Course Requirements

CHEM 302 or 303, 402, 447, 461, 462, 463, 482, and 483, plus four credits of CHEM 399 taken over at least two terms, as well as one advanced lecture course in chemistry.

### Honors Plan in Chemistry

The B.S.Chem. degree is the basis of the Honors degree in chemistry. Maintenance of a satisfactory GPA (3.4) in the courses required for the degree program, including prerequisites, and satisfactory completion of an Honors thesis (CHEM 499) based on the research done in CHEM 399 are required for Honors. All students, whatever their program, who are interested in an Honors degree should see the chemistry Honors advisor (Room 1500 Chemistry) for approval for participation in the Honors Program in chemistry.

# Bachelor in General Studies (B.G.S.)

Students seeking a vigorously student-centered curriculum might consider the [Bachelor in General Studies](#) (B.G.S.), a highly interdisciplinary degree that allows students to combine and explore multiple subjects. Students who choose to pursue a B.G.S. work closely with their Newnan Advising Center advisor to create a course plan that feeds their curiosity while meeting the College of LSA's graduation requirements. Learn more about the program and the specific requirements [here](#).

## Requirements needed to complete the Bachelor in General Studies

- [60 Upper-Level Credit Requirement](#)
- [First-Year Writing Requirement](#)
- [Upper-Level Writing Requirement](#)
- [Race & Ethnicity Requirement](#)
- [Quantitative Reasoning Requirement](#)
- [Non-LSA Coursework](#)

# Joint Degrees

Several special degree programs are offered by the joint cooperation of LSA and other colleges or schools within the University. Admission to some of these programs is highly competitive. Because many of these programs require specific courses for admission, it is important for students to identify program interests early in their undergraduate careers. Although the basic requirements are summarized on this page, students should consult academic advisors associated with the various programs.

## Joint Undergraduate Degree Programs

### **Architecture (Joint Program in Liberal Arts and B.S. in Architecture)**

Students may earn the [B.S. degree awarded](#) by the Taubman College of Architecture and Urban Planning and a second degree awarded by LSA.

### **Art and Design (Joint Program in Liberal Arts and Art and Design)**

These [joint degree programs](#) are intended for students whose educational goals include earning undergraduate degrees from both LSA and the Stamps School of Art & Design.

### **Engineering (Joint Program in Liberal Arts and B.S. in Engineering)**

The [program](#) is intended for students who wish to develop a depth of understanding in the technical studies associated with the College of Engineering and in the physical and natural sciences, humanities, and social sciences in LSA.

### **Music (Joint Degree Program in Liberal Arts and Music)**

These [joint degree programs](#) are intended for students who seek to combine LSA's technical or academic studies in combination with the professional training in performance-based or academic music studies of the School of Music, Theatre & Dance.

### [Joint Undergraduate-Graduate Degree Programs](#)

#### [The Concurrent Undergraduate-Graduate Studies Program](#)

The Concurrent Undergraduate-Graduate Studies (CUGS) Program enables a few students each year to enroll simultaneously in LSA and the Rackham Graduate School and to apply a maximum of 15 credits toward both an undergraduate degree and a graduate degree. See the [CUGS information sheet and election form](#) for more information. The Center for Russian, East European, and Eurasian Studies also offers a [Concurrent Undergraduate-Graduate Study Program](#).

#### [Engineering \(Bachelor of Science in Cell and Molecular Biology and Master of Science in Biomedical Engineering\)](#)

The Department of Molecular, Cellular, and Developmental Biology in LSA and the Department of Biomedical Engineering in the College of Engineering administer a five-year program awarding a concurrent B.S. in cell and molecular biology from LSA and an M.S. in biomedical engineering from the College of Engineering.

## **Joint Degree in Liberal Arts and B.S. in Engineering**

This program is designed to enable students to develop a course of study that offers broader academic opportunities than those offered by either college. The program is intended for students who wish to develop a depth of understanding in the technical studies associated with the College of Engineering and in the physical and natural sciences, humanities, and social sciences in LSA. This integration of technical studies with the liberal arts is the primary strength of the program. It is open to students enrolled in Engineering or LSA and leads to concurrent bachelor's degrees from both colleges. It is intended primarily for students who enroll as first-year students in one of the two colleges.

The variety of courses that students may elect in the joint program makes it impractical to list specific requirements. Instead, each student should consult faculty members and academic advisors in each college to develop the best plan of study. Primary responsibility for planning the academic program and continuing contact with academic advisors in the two fields is assumed by the student, who also is responsible for becoming familiar with the academic policies and procedures of both colleges and the academic requirements and courses in both fields of the major.

It is usually possible for students carrying 16 credits a term to meet all requirements in 10 or 11 terms.

## Administrative Regulations

1. Students may initially enroll either in the College of Engineering or LSA.
2. To be qualified for admission to the joint degree program, students are usually expected to have completed 30 credits of courses with an overall grade point average of at least 2.7. Entry of LSA students to some programs in Engineering may require a substantially higher grade point average.
3. Students considering this program should discuss their plans with the program advisor associated with the college in which they are enrolled. Usually this contact should be made early in their sophomore year.
4. Students must complete an application form indicating their program in each college. Applications are available from the Academic Advising Center, 1255 Angell Hall, (734.764.0332), or the College of Engineering's Registrar's Office, College of Engineering, 145A Chrysler Center, (734.647.7117).
5. Once admitted to the program, each student continues to register in the college of initial enrollment. That college maintains the primary academic record.
6. Students must consult the academic advisor for each major and secure approval for their class schedule according to the academic policies and procedures of each college.
7. Students must maintain good academic standing in both colleges to continue in the joint degree program.
8. Students in good academic standing who wish to withdraw from the program may complete a degree in either college. Students not in good academic standing are subject to the academic discipline of that college.
9. Upon completion of the requirements of both colleges, students are granted concurrent degrees. By the beginning of the term in which graduation is anticipated, a diploma application must be filed with each college, and the academic advisor for each major (specialization) must provide appropriate notification that departmental requirements are satisfied.

## Joint Degree Program Structure

Candidates for the combined Bachelor of Science in Engineering (B.S.E.) and liberal arts degree (A.B., B.S., B.S.Chem, or B.G.S.) must:

1. complete one of the degree programs in the College of Engineering;
2. complete a minimum of 90 credits of LSA courses;
3. have a cumulative grade point average of at least 2.0.

In addition, candidates for the joint degree in the Engineering Bachelor of Science in Engineering (B.S.E.) and the LSA Bachelor of Arts (A.B.), Bachelor of Science (B.S.), or Bachelor of Science in Chemistry (B.S.Chem) must complete the LSA degree requirements (the [First-Year Writing Requirement](#), the [Upper-Level Writing Requirement](#), the [Race & Ethnicity Requirement](#), the [Quantitative Reasoning Requirement](#), the [Language Requirement](#), and an approved [area distribution plan](#)), and an approved [LSA plan for the major](#).

Candidates for the joint Bachelor of Science in Engineering (B.S.E.) and [Bachelor in General Studies \(B.G.S.\)](#) degree must complete the [LS&A First-Year Writing Requirement](#), the [Upper-](#)

[Level Writing Requirement](#), the [Race & Ethnicity Requirement](#), the [Quantitative Reasoning Requirement](#), and a minimum 40 credits of LSA courses at the 300 level or above with a GPA of at least 2.0. No more than 15 of these credits may be elected from any one subject.

## Biomedical Engineering

The [Department of Molecular, Cellular, and Developmental Biology \(MCDB\)](#) in the College of LSA and the [Department of Biomedical Engineering](#) in the [College of Engineering](#) administer a five-year program awarding a concurrent B.S. degree in Cell and Molecular Biology from the College of LSA and an M.S. in Biomedical Engineering from the Rackham Graduate School upon completion of all [program requirements](#). A student will apply to both the Department of Molecular, Cellular, and Developmental Biology and the Department of Biomedical Engineering for entrance. A student will be admitted into the program only after completing the first year of the concentration prerequisites (BIOL 162, CHEM 210/211, PHYSICS 135/136 or 140/141, MATH 115 and 116) with a GPA of 3.2 or higher.

Upon acceptance into the program, each student will be assigned two advisors, one in MCDB and one in biomedical engineering. Student course selections must be approved by both advisors each term.

Students are typically admitted into the M.S. phase at the end of their third year when they achieve senior standing. Students must have completed all concentration prerequisites and be judged by both academic advisors as making adequate progress toward the B.S. At this time, students must formally apply to the [Rackham Graduate School](#) for the [M.S. program in biomedical engineering](#). All students with a 3.2 GPA or higher in the B.S. concentration phase will automatically be admitted into the M.S. phase. Other students who have reached senior standing with a 3.2 GPA or higher and have fulfilled all concentration prerequisites, but did not previously apply or were not admitted in the B.S. phase, can also apply for admittance into the M.S. phase. Students with senior standing will have two years to mix undergraduate and graduate courses, simultaneously fulfilling the requirement for both the B.S. and M.S. degrees. Students will be charged graduate tuition for only one academic year.

## Second Degree

Individuals with a bachelor's degree who want to earn a second degree must obtain permission from the Office of Undergraduate Admissions. Normally, at least two calendar years must transpire between the awarding of the first baccalaureate degree and the beginning of the second baccalaureate degree program. Applicants must pursue an academic program significantly different from that of the first baccalaureate degree. Except in the case of [joint degrees](#), the College does not award concurrent bachelor's degrees. For graduates of schools and colleges on the Ann Arbor campus, the two baccalaureate degrees should be different (for example, not two Bachelor of Arts or two Bachelor of Science degrees). The second degree program cannot be a [B.G.S. degree](#), and students whose first degree is the B.G.S. degree are ineligible for a second



bachelor's degree. Applicants who already have an LSA degree must earn at least 30 credits in residence in LSA beyond the credits required for the first degree, with at least 15 in the new field of the major. Graduates of another Ann Arbor unit must earn at least 30 credits while registered in LSA. The second program must include a minimum of 100 LSA credits. To be considered for admission to a second baccalaureate degree program, all applicants who have a baccalaureate degree from the Ann Arbor campus of the University of Michigan must have a 2.0 minimum grade point average. Credit cannot be transferred from another school if that credit is also being counted toward another baccalaureate or graduate or professional degree. "[Special Joint Degree Programs](#)" are exceptions to this policy.

Applicants whose first degree comes from any other institution (including [U-M Dearborn](#) and [U-M Flint](#)) will be required to complete at least 60 credits in residence at the Ann Arbor campus. Students must be registered in LSA for at least 30 credits beyond the credits required for the first degree. The second degree program must include a minimum of 100 LSA credits. To be considered for admission to a second baccalaureate degree program, applicants must have the same minimum grade point average as the College requires for students who transfer from other institutions.

## Non-Degree Status

Non-degree status offers the opportunity to elect courses in the College to meet personal objectives without enrollment in a degree program. Consideration for admission as a non-degree student is determined by (1) certified good academic standing at another college or university and eligibility to return or (2) successful completion of a college degree. Interested students should submit the *Non-Degree LSA Application* which is available online from the Office of Undergraduate Admissions website. Applicants are asked to submit an official transcript of their college work, or official documentation confirming their college degree unless the degree was conferred by UM—Ann Arbor. High school graduates not entering U-M in the fall as freshmen may be considered for non-degree admission for summer term only.

A student who has a degree from any unit of the University of Michigan is eligible to apply for non-degree status. Non-degree status is not intended to accommodate qualified degree applicants who apply after the deadline or after enrollment limits for a particular term have been reached. Nor is non-degree status intended to accommodate high school students who wish to elect college-level courses unless they meet the conditions for dual enrollment as defined by LSA and implemented by the Office of Undergraduate Admissions.

Students dismissed from the College for unsatisfactory academic performance may not enroll as non-degree students. No student having an academic stop in any unit of the University as a degree-seeking student may be admitted to non-degree status without receiving special permission from the Office of Undergraduate Admissions.

The [Office of Undergraduate Admissions](#) grants admission as applications are received. *If non-degree status is granted, the student may register for courses only on or after the first day of classes of the term for which admission has been granted.* This is to ensure that degree-seeking



students have first priority in electing courses. Non-degree students may register for any course as long as it is open or an *Electronic Permission* can be obtained.

The Registrar's Office maintains an official transcript of all courses elected by each non-degree student. Non-degree students are subject to the same policies that apply to degree-seeking students. They are expected to maintain a minimum 2.0 grade point average to be eligible for continued enrollment.

If non-degree students plan to seek a degree from the College, they should discuss their interests with an admissions counselor and an academic advisor. Non-degree status is not changed to degree status except by formal application through the Office of Undergraduate Admissions. Successful completion of work elected as a non-degree student is considered, but does not ensure admission as a degree student. If admission as a degree student is granted, credit earned during enrollment as a non-degree student may be applied toward a degree. It is considered in-residence credit and earns [honor points](#).

Non-degree students who would like to discuss their academic plans are encouraged to contact the [Newnan Academic Advising Center](#).

# LSA Requirements

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## Rules for Degree Requirements

As a student, you are responsible for knowing and meeting the requirements for you to get your degree. Along these lines, there are two important things to keep in mind:

- You can comply with either the degree requirements that were in effect in your first term of enrollment or with the requirements in effect at the time of your graduation. If you have questions, you can always check with your general advisor.
- Requirements for majors and minors are those in effect at the time that you declared your major(s) or minor(s).

Use [My LSA Audit Checklist](#) to check your progress and see if you're on track to graduate.

# Credit Requirements

## 120 Total Credit Requirement

The [Bachelor of Arts](#), [Bachelor of Science](#), and [Bachelor in General Studies](#) degrees require students to complete a minimum of 120 credits (124 for [B.S.Chem.](#)).

## 100 LSA Credit Requirement

LSA students must complete a minimum of 100 credits of LSA courses, thus allowing 20 credits of [non-LSA coursework](#) in the 120 required for the degree.

## 90 Graded Credit Requirement

LSA students must complete 90 graded credits for an LSA degree. More information on non-graded credits can be found on the [non-graded courses page](#).

## Residence Requirements

There are three residence requirements:

- At least 60 of the 120 credits required for a degree must be earned in residence. Residence credit is granted for courses elected on the Ann Arbor campus or at off-campus sites directed by Ann Arbor faculty present on the site. Credit earned through Advanced Placement, credit by examination, correspondence courses, transfer credit from other institutions, or off-campus independent study counts as out-of-residence credit.
- At least 30 of the last 60 credits for the degree must be earned in residence.
- Cross-campus transfer students may receive credit for a maximum of 90 credits from a previous college or school on the Ann Arbor campus. No more than 60 of these 90 credits may have been

completed at other institutions. LSA residency requires that a student earn 30 credits in the College.

For more information please see the [Transfer Information & Residence Policy page](#).

### 60 Credits Outside Major Dept.

Students electing an area, interdepartmental, or special concentration must earn at least 60 credits outside of their major department. More information on this policy can be found on the [60 Credits in One Department page](#).

### 90 Credits of Regular Courses (Not Experiential, Not Independent)

A combined total of 30 credits of [Experiential and Directed Reading / Independent Study](#) courses may be counted in the 120 credits required for a degree.

## Grade Point Average

To qualify for a degree from the College, a student must complete a minimum of 120 credits with a cumulative grade point average (GPA) of 2.0 (C). The overall GPA of courses included in the field of the major (see [Policies for the Major](#)) for an A.B. or B.S. degree or counted toward the 60 credits of upper-level courses required for a B.G.S. degree must be at least 2.0.

### *Term and Cumulative Grade Point Averages*

The term grade point average is determined by dividing the total number of Michigan Semester Hours (MSH) elected during a term into the total number of Michigan Honor Points (MHP) earned during the same term. The cumulative grade point average is determined by dividing the total number of MSH into the total number of MHP earned. Notations of Y, I, NR, and NG are not initially calculated into the term or cumulative grade point averages. Notations of I, NR, and NG, if unresolved by the end of the fourth week of the next fall or winter term in residence or by an approved extension deadline, lapse to E or ED and are computed into both the term and cumulative grade point averages, if the course was a graded election.

### *Minimum Term and Cumulative Grade Point Averages Required*

To be eligible for continued enrollment, a student must earn at least a 2.0 term grade point average and a 2.0 cumulative grade point average. If a student fails to accomplish this, the "honor point deficit" can be determined by multiplying the Michigan Semester Hours (MSH) elected by 2.0 and subtracting the total number of Michigan Honor Points (MHP) earned. Only honor points earned in courses elected at the University of Michigan (Ann Arbor, Dearborn, or Flint campuses) may affect the grade point average.

- [Computing Your Grade Point Average](#)

- [How to Compute an Honor Point Deficit](#)
- [Why Honor Points Matter](#)

## Computing Your Grade Point Average

Graduation requirements include that a student have a minimum 2.0 overall grade point average (GPA) and a minimum 2.0 average in their major(s) and in any minors. For B.G.S. students, a 2.0 average must be maintained in the upper-level courses required for the degree. Grades of "C+" and higher add to the GPA; grades of "C" are neutral; and grades of "C-" and lower subtract from the GPA. Only graded courses (as opposed to courses taken pass/fail, credit/no credit, etc.) are included in this calculation.

A GPA is calculated by dividing the total number of Michigan Semester Hours (MSH) elected during a term into the total number of Michigan Honor Points (MHP) earned during the same term. The cumulative grade point average is determined by dividing the total number of MSH into the total number of MHP. Notations of Pass (P), Fail (F), Credit (CR), No Credit (NC), Satisfactory (S), or Not Satisfactory (NS) are not included in the GPA. Notations for Incomplete (I), No Report (NR, no grade submitted by the instructor), or Unofficial Drop (ED-student is listed on the grade sheet but has not been in class), which indicate that a course has not been finished and graded on time for some reason, initially are not calculated into the GPA. If these courses are not resolved by the end of the fourth week of the next fall or winter term in residence or by a new deadline established by a formal time extension, then these grades are calculated as an "E," if the course had been elected for a grade. A notation of a course that extends over two terms (Y) is not calculated until the course is actually finished.

On an LSA transcript, each term's course information is formatted to indicate MSH, Credits Toward Program (CTP), Final Grade, and MHP.

Here is an example:

Course	Title	MSH	Grade	MHP
ENGLISH 125	Intro Comp	4	B+	13.2
HISTORY 261	US 1865-Present	4	P	0.0
MATH 115	Analy Geom-Calc I	4	C+	9.2
PSYCH 111	Intro Psych	4	A-	14.8
		MSH 12	CTP 16	MHP 37.2

In this case, the MSH is 12 because only 12 credits were taken for a grade. The CTP, Credits Toward Program, remains at 16 since the student passed all four classes. The MHP changes to 37.2, reflecting the fact that pass/fail credits do not generate honor points. The term GPA is 3.1 for this particular example.

Here's a full list of all grades and their numerical equivalent:

<b>Letter Grade</b>	<b>Honor Points</b>
A+	4.0
A	4.0
A-	3.7
B+	3.3
B	3.0
B-	2.7
C+	2.3
C	2.0
C-	1.7
D+	1.3
D	1.0
D-	0.7
E	0.0
Non-graded courses <i>e.g.</i> P, F, CR, NC	0.0

## How to Compute an Honor Point Deficit

A deficit means that a student's grade point average (GPA) in their major, minor, or cumulative average has fallen below the required minimum of 2.0. The deficit is the number of hours of "B" grades necessary in the future to raise the average to the required 2.0 level. Any grade of "C+" or better reduces an honor point deficit; any grade of "C-" or lower adds to the honor point deficit.

On an LSA transcript, each term's course information is formatted to indicate Michigan Semester Hours (MSH), Credits Toward Program (CTP), Final Grade, and Michigan Honor Points (MHP).

Here is an example:

<b>Course</b>	<b>Title</b>	<b>MSH</b>	<b>Grade</b>	<b>MHP</b>
ENGLISH 125	Intro Comp	4	C-	6.8
HISTORY 261	US 1865-Present	4	B	12.0
MATH 115	Anal Geom-Calc-I	4	D	4.0
PSYCH 111	Intro to Psych	4	D-	2.8
		MSH 16	CTP 16	MHP 25.6

MSH lists the number of credits attempted during the term; MHP indicates the numerical value of the grade received. CTP indicates the number of credits earned toward the LSA degree. In our example, since the student technically "passed" everything, the MSH and the CTP are the same.

The GPA is figured by dividing Michigan Semester Hours (MSH) into Michigan Honor Points (MHP). MSH includes all the graded credit hours elected within U-M and recognized by LSA. MHP includes all the honor points earned within U-M in courses recognized by LSA as counting toward graduation. The honor point deficit is figured by multiplying MSH by 2 and then subtracting the listed MHP.  $\text{Deficit} = (2 \times \text{MSH}) - \text{MHP}$ .

Multiplying MSH by 2 gives the number of honor points necessary to have a 2.0 average on that number of MSH. In the example above, the honor point deficit is 6.4 (2 times 16 minus 25.6 equals 6.4). In order for this average to rise to 2.0, the student would need 6.4 credit hours of "B" in the future, with all other grades being no lower than "C."

Here's a full list of all grades and their numerical equivalent:

Letter Grade	Honor Points
A+	4.0
A	4.0
A-	3.7
B+	3.3
B	3.0
B-	2.7
C+	2.3
C	2.0
C-	1.7
D+	1.3
D	1.0
D-	0.7
E	0.0

## Why Honor Points Matter

Students are placed on academic probation if either the term grade point average or the cumulative grade point average falls below 2.0. If your cumulative grade point average falls below 2.0, you have an honor point deficit.

### Calculating Honor Points

Every grade has a value:

Letter Grade	Honor Points
--------------	--------------

A+	4.0
A	4.0
A-	3.7
B+	3.3
B	3.0
B-	2.7
C+	2.3
C	2.0
C-	1.7
D+	1.3
D	1.0
D-	0.7
E	0.0

Michigan Honor Points (MHP) are calculated by multiplying the number of Michigan Semester Hours (MSH) for the class by the value of the grade. Michigan Semester Hours are the credits earned in graded classes. Classes that are elected pass/fail, credit/no-credits, or satisfactory/non-satisfactory only earn Credits Toward Program (CTP) and are not part of the grade point average.

Fall 2004		Grade	CTP	MSH	MHP
AMCULT 100	C-		3	3	5.1
PSYCH 111	B		4	4	12.0
PSYCH 211	CR		2	0	0.0`
SOC 101	D+		4	4	5.2
SPANISH 103	E		0	4	0.0
			13	15	22.3

GPA = 1.486

Honor Point Deficit = 7.7



## Term and Cumulative Grade Point Averages

The term grade point average is determined by dividing the total number of Michigan Semester Hours (MSH) elected during a term into the total number of Michigan Honor Points (MHP) earned during the same term.

$$\text{MHP/MSH}=\text{GPA or } 22.3/15=1.486$$

The cumulative grade point average is determined by dividing the total number of MSH into the total number of MHP earned.

*Note:* Notations of Y, I, NR, NG, and ## are not initially calculated into the term or cumulative grade point averages. Notations of I, NR, NG, and ##, if unresolved by the end of the fourth week of the next fall or winter term in residence or by an approved extension deadline, lapse to E or ED and are then computed into both the term and cumulative grade point averages, if the course was a graded election. Only honor points earned in courses elected at the University of Michigan (Ann Arbor, Dearborn, or Flint campuses) may affect the grade point average.

## Calculating the Honor Point Deficit

The term honor point deficit can be determined by multiplying the total MSH by 2.0 and subtracting the number of MHP earned.

$$(\text{MSH} \times 2) - \text{MHP} = \text{HPD or } (15 \times 2) - 22.3 = 7.7$$

The cumulative honor point deficit can be determined by multiplying the total MSH elected by 2.0 and subtracting the total number of MHP earned.

The cumulative honor point deficit will determine how badly your grade point average has been affected. It will also tell you how many credits of "B" grades you will have to earn (with no other grades falling below a "C") in order to raise your cumulative grade point average to the 2.0 minimum needed to be in good standing and to graduate. You also need at least a 2.0 in your major grade point average to graduate.

Extremely large cumulative honor point deficits can lead to suspension or dismissal from the College. There may also be problems with your major grade point average. Large major deficits will necessitate a change of major.

## Things to Consider

In preparation of your required meeting with an Academic Standards Board member, take a look at your academic report on Wolverine Access and answer the following questions. Be prepared to discuss your answers during your appointment.

1. What is your term honor point deficit?

2. If your cumulative grade point average is below 2.0, what is your cumulative honor point deficit?
3. What is your major grade point average?
4. Do you have a deficit?
  1. If yes, what is the size of the deficit?
  2. If you have either a cumulative or major honor point deficit, can you see any patterns of classes or life events that have contributed to the deficit?

## First-Year Writing Requirement

The goal of the First-Year Writing Requirement (FYWR) is to prepare students to write in diverse academic contexts. As a broad preparation for the range of writing tasks students will encounter at the University of Michigan and beyond, FYWR courses emphasize evidenced, academic writing in a variety of genres and rhetorical situations. A FYWR course is foundational for students to master the kind of analysis and argumentation found in sophisticated academic writing.

Students should complete their first-year writing course in their first year, and must earn a C- or higher to meet the requirement. This requirement should be satisfied before attempting a course to meet the Upper-Level Writing Requirement. Advanced Placement (AP) credit does not fulfill the FYWR.

FYWR courses offered for a particular term can be found in the [LSA Course Guide](#) by using the “Skills Req” drop-down menu and selecting “**First-Year Writing (FYWR)**”.

Transfer students who have completed writing courses at another college or university may be able to use those courses to satisfy the FYWR. Detailed information about the approved and non-approved courses is available through the Sweetland Center for Writing's [First-Year Writing Requirement page](#).

**Students who seek a more individualized and gradual introduction to college writing may choose to take WRITING 100: Transition to College Writing and/or WRITING 120: College Writing for Multilingual Writers through the Sweetland Center for Writing before a First-Year Writing Requirement course.**

WRITING 100 is a 3-credit ungraded course designed for students who:

- learn best with one-to-one instructor support;
- seek more experience drafting and revising academic essays;
- prefer a more gradual introduction to writing longer academic essays on a variety of topics; and/or
- would benefit from an additional term to gain confidence in their writing and reading skills at the college level.

WRITING 120 is a 3-credit graded course designed for students who:

- feel most comfortable with academic writing in a language other than English and/or
- want an opportunity to work closely with an instructor to become better prepared for writing in English.

## Writing Placement

To help students choose their first writing course at the University, the Sweetland Center for Writing provides the First-Year and Transfer Directed Self-Placements for Writing. Neither Directed Self-Placement (DSP) is a test. Rather, each DSP is designed to give students insight into the kind of writing expected of undergraduates at the University of Michigan in order to help them judge their own readiness for and comfort with college-level writing. The specific DSP students must complete depends upon whether they have already met the FYWR with a transferred course.

# Upper-Level Writing Requirement

The goal of the Upper-Level Writing Requirement (ULWR) is to teach students to recognize and practice the range of writing activities and forms typical of academic and professional contexts.

Students should satisfy the First-Year Writing Requirement (FYWR) before electing one of the courses approved to satisfy the ULWR. A minimum course grade of C– is required in order to satisfy the ULWR.

Overall ULWR learning goals for students are as follows:

- build on skills and strategies developed in first-year writing courses;
- produce complex, analytical evidence-based arguments that address specific audiences;
- refine their ability to write effectively both within and beyond specific disciplines;
- use feedback to improve their writing through revision; and
- demonstrate familiarity with the genres and conventions characteristic of effective writing.

Over the course of the term, students will complete several writing assignments that are related to course content and intended to help students practice the rhetoric of their specific discipline. Possible assignments may include journals, research papers, critical analyses, and/or lab reports. Students will receive feedback on their writing from their ULWR instructor and are expected to revise much of their work throughout the term.

Upper-Level Writing Requirement courses offered for a particular term can be found in the [LSA Course Guide](#) by using the “Skills Req” drop-down menu and selecting “Upper-Level Writing (ULWR)”. A course approved to meet the requirement one term is not necessarily approved to meet the requirement in subsequent terms.

# Race and Ethnicity (R&E) Requirement

At some point before graduation, students must receive credit for one course of at least three credits chosen from a list of Race and Ethnicity (R&E) courses offered each term in the [LSA Course Guide](#). Credits transferred from another college or university do not meet the R&E Requirement except by successful petition to the Academic Standards Board.

These courses address issues arising from racial or ethnic intolerance and meet the following criteria:

**Required content.** All courses satisfying the requirement must provide discussion concerning:

- the meaning of race, ethnicity, and racism;
- racial and ethnic intolerance and resulting inequality as it occurs in the United States or elsewhere;
- comparisons of discrimination based on race, ethnicity, religion, social class, or gender.

**Required focus.** Every course satisfying the requirement must devote substantial, but not necessarily exclusive, attention to the required content. Although it is hoped that many of these courses will focus on the United States, it is not required that they do so. Courses that deal with these issues in other societies, or that study them comparatively, may also meet the requirement.

Credits used to satisfy the R&E requirement also may be used to satisfy other College requirements.

## Quantitative Reasoning Requirement

The goal of the Quantitative Reasoning (QR) Requirement is to ensure that every graduate of the College achieves a certain level of proficiency in using and analyzing quantitative information.

Quantitative reasoning is the methodology used to analyze quantitative information to make decisions, judgments, and predictions. It involves defining a problem by means of numerical or geometrical representations of real-world phenomena, determining how to solve it, deducing consequences, formulating alternatives, and predicting outcomes. QR courses may come from a wide range of disciplines representing the natural and social sciences.

Students may fulfill this requirement by:

- passing one course of three or more credits designated for full QR credit (QR/1); or
- passing two courses (at least one of which must be of three or more credits) designated for half QR credit (QR/2).

Advanced Placement (AP) credit may not be used to meet the QR Requirement, however in some cases, A-level or IB credit may be used to meet the QR Requirement.

Courses transferred from another college or university do not generally satisfy the QR Requirement, except in the following circumstances:

- students who transfer in **all** of the required prerequisites courses for science, math, or computer science majors, as so designated by the major advisor
- students who receive transfer credit of at least three credits for PHYSICS 125, 126, 140, or 240 or any class that transfers as STATS 250 or Statistics Departmental

Courses used to satisfy the QR requirement also may satisfy other College requirements.

## Language Requirement

LSA's language requirement seeks to prepare students for a world that has been profoundly transformed by the forces of globalization. Language shapes both how we understand and how we negotiate our world; learning a second language provides both a deep awareness of linguistic and cultural differences and a means to bridge them. Informed respect for other cultures, tolerance, cosmopolitanism, self-awareness, and flexibility are the hallmarks of a liberal arts education, and the study of foreign languages fosters precisely these capacities.

A student whose first language is not English and who attended a high school where English was not the language of instruction is considered to have met the requirement.

### Language Requirement Policies

1. **Students must earn a grade of C- or better in the prerequisite language course to proceed to the subsequent course.** Any exception to this rule must be granted by a designated faculty representative in the department.
2. **The final course in an elementary language sequence used to satisfy the Language Requirement must be elected on a graded basis.**
3. LSA students cannot satisfy the Language Requirement by electing [out-of-residence credit](#) after they have begun degree enrollment in LSA. Foreign language departments rarely grant exceptions to this policy, but may do so—only prior to the student's electing out-of residence language courses—due to a student's extenuating circumstances. Language departments vary widely in their flexibility for approving plans in advance; therefore, students pursuing this option must first find out if the department will consider making an exception.
4. No more than 60 credits in one language (other than English) may be counted in the 120 required for a degree. However, the 60 credit limit on courses elected in one major may be exceeded when the excess credits have been used to meet the Language Requirement.

### Fourth-Term Proficiency and Language Requirement Course List

**Fourth-term proficiency in a language other than English is required and may be met in any of the following ways:**

1. Certified proficiency on a University of Michigan reading and/or listening test. Students with previous experience in the language they plan to use to meet the language requirement must take a language placement test. A student may not elect to enroll for credit in a language course below this placement level without departmental permission.

**2. Credit for a University of Michigan fourth-term language course listed below with a grade of C- or better.**

- African Languages (AAS 226)  
Akan/Twi, Bambara/Bamana, Wolof, Zulu/IsiZulu
- American Sign Language (LING 251 or RCCORE 204 or RCASL 202)
- Arabic
  - Classical (AAPTIS 582)
  - Modern Standard (one of: ARABIC 202, 205, 421, 426 [or AAPTIS 202, 205, 216, 218] or AAPTIS 204, 419, 420)
- Armenian
  - Eastern (ARMENIAN 206 [or AAPTIS 282 or ARMENIAN 282])
  - Western (ARMENIAN 202 [or AAPTIS 272 or 273, or ARMENIAN 272 or 273])
- Bosnian, Croatian, and Serbian (BCS 232 or 225)
- Central Asian Languages (NESLANG 481 [or AAPTIS 250 or ASIANLAN 250])  
Uzbek, Kazakh, Uyghur, Pashto, or Tajik
- Chinese (ASIANLAN 202, 203, or 204)
- Czech (CZECH 242)
- Dutch (DUTCH 232)
- Filipino (ASIANLAN 212)
- French (FRENCH 230 or 232, or RCLANG 290)
- German (GERMAN 230 or 232 or 291, or RCLANG 291)
- Greek
  - Classical (GREEK 301 and 302, or 405)
  - Biblical (GREEK 307 and 308, or ACABS 307 and 308)
  - Modern (MODGREEK 202)
- Hebrew
  - Classical (NESLANG 202 [or ACABS 202])
  - Modern (HEBREW 202 or 203 [or HJCS 202 or 210])
- Hindi (ASIANLAN 216 or 217)
- Indonesian (ASIANLAN 222)
- Italian (ITALIAN 232 or 230)
- Japanese (ASIANLAN 226 or 227 or 229, or RCLANG 296)
- Korean (ASIANLAN 236 or 237 or 238)
- Latin (LATIN 232 or 233 or 295, or RCLANG 295)
- Middle Egyptian (NESLANG 531: Advanced Middle Egyptian II)
- Ojibwe (AMCULT 323)
- Persian (PERSIAN 202 [or AAPTIS 242] or AAPTIS 243)
- Polish (POLISH 222)
- Portuguese (PORTUG 232 or 230)
- Quechua (LACS 474)
- Punjabi (ASIANLAN 246)
- Russian (RUSSIAN 202 or 203 or 223 or 225 or 325, or RCLANG 293)
- Sanskrit (ASIANLAN 252)

- Spanish (SPANISH 230 or 232, or RCLANG 294)
- Swahili (AAS 216)
- Swedish (SCAND 234)
- Thai (ASIANLAN 262)
- Tibetan
  - Classical (ASIANLAN 468)
  - Modern (ASIANLAN 266)
- Turkish (TURKISH 202 or 203 [or AAPTIS 252 or 255])
- Ukrainian (UKR 252 or 203)
- Urdu (ASIANLAN 272)
- Uzbek (AAPTIS 253)
- Vietnamese (ASIANLAN 276)
- Yiddish (YIDDISH 202 or JUDAIC 202 or GERMAN 228)

Students who wish to meet the requirement with proficiency in a language not listed in the table above should contact the Academic Standards Board.

3. Credit for a University of Michigan language course that presumes a fourth-term proficiency in a language (except for 305 and/or 306 in FRENCH, GERMAN, ITALIAN, LATIN, MODGREEK and SCAND; 405 and/or 406 in GERMAN and SCAND; SPANISH 278/AMCULT 224; and SPANISH 308.

## Area Distribution Requirement

LSA seeks to instill an understanding and an appreciation of all major areas of learning. Students are not expected to master all areas in detail, but they should develop a coherent view of essential concepts, structures, and intellectual methods that typify these disciplines.

Courses offered by the academic departments and programs of the College are divided into five area categories:

- the Natural Sciences
- the Social Sciences
- the Humanities
- Mathematics and Symbolic Analysis
- Creative Expression

Each of these divisions represents a different perspective on human knowledge and learning; some departments and programs overlap these divisions while others may stand outside them.

### Distribution Requirement

All candidates for the Bachelor of Arts and Bachelor of Science degrees from the College must fulfill the 30-credit Distribution Requirement.

This broad intellectual experience, which forms an essential part of a liberal arts education, is to be achieved in the following way:

1. Students must complete seven credits in each of the following three areas: Natural Science (NS), Social Science (SS), and Humanities (HU), for a total of 21 credits.
2. Students must also complete three additional credits in three of the following five areas: (NS), (SS), (HU), Mathematical and Symbolic Analysis (MSA), and Creative Expression (CE), for a total of nine credits. Credits in courses designated Interdisciplinary (ID) may be used to satisfy up to nine credits of this part of the requirement.

### General Policies for Area Distribution Plans

An area distribution plan **may** include:

1. prerequisites to a major elected outside the department of the major;
2. courses elected pass/fail, credit/no credit, or by any other non-graded pattern;
3. courses elected to satisfy *one* of two major plans by students who elect a double major;
4. transfer credit from other schools and colleges of the University of Michigan and from other academic institutions;
5. a course elected outside the department of major or major requirements used to meet the Upper-Level Writing Requirement, the Race and Ethnicity Requirement, or the Quantitative Reasoning Requirement;
6. courses in [Non-LSA units offering courses with a Creative Expression designation](#). (Credits are counted as non-LSA.)

An area distribution plan **may not** include:

1. any course from the department of major;
2. required cognates in a major plan;
3. courses at the 400-level and above;
4. experiential courses, Independent Study, and University (UC) mini-courses;
5. Advanced Placement credits.

### Area Definitions

#### Natural Science

Natural Science (NS) courses focus on the understanding of our natural world through application of the scientific method, which emphasizes observation, experimentation, formation of testable hypotheses about natural phenomena, and testing of those hypotheses.

#### Social Science

Social Science (SS) courses focus on the study of the social behavior of individuals, groups, societies, nations, and states. Social scientists often use qualitative methods, such as ethnography, oral history, and descriptive analysis of archival materials and artifacts. They also



use quantitative tools grounded in the scientific method to collect and analyze data, and form testable hypotheses about social phenomena.

### Humanities

Humanities (HU) courses focus on the human condition as expressed, for example, in literature, religion, philosophy, and the visual and performing arts. Its methods are analytical, critical, and speculative, and can often be contrasted with the quantitative and qualitative methods employed in the social sciences.

### Mathematical and Symbolic Analysis

Mathematical and Symbolic Analysis (MSA) courses focus primarily on the mathematical and statistical tools used to support the study of the natural and social sciences. Rather than mathematical manipulation or computation, these courses focus on the methodology used to analyze quantitative information to make decisions, judgments and predictions. This involves defining a problem by means of numerical or geometrical representations of real-world phenomena, determining how to solve it, deducing consequences, formulating alternatives, and predicting outcomes. In addition to mathematics and statistics, MSA courses are taught in a variety of subjects, including astronomy, biology, chemistry, economics, the environment, geological sciences, philosophy, physics, and sociology.

### Creative Expression

Creative Expression (CE) courses entail hands-on activities that allow students to express their creativity through a wide range of arts. This differs from courses in the Humanities (HU) that are taught at a more theoretical or abstract level. For example, HU music courses focus on theory without making sounds or practicing music. CE courses teach students how to apply the theory not only on paper but through playing an instrument, creating sound, composing music, or arranging music. CE courses may address many different mediums, including the performing arts, fine arts, plastic and visual arts architecture, ceramics, metalworking, paper and textiles, woodworking, and glass.

### Interdisciplinary

Interdisciplinary (ID) courses combine in roughly equal measure the approaches within two or three of the primary distributions (HU, NS, and SS) in order to examine the differences and similarities between disciplines and explore alternative ways of discovering and organizing knowledge. Interdisciplinary work is primarily concerned with crossings and connections between areas of knowledge, inquiry, and method. ID courses emphasize critical thinking, team-based intellectual work, and the analytic skills characteristic of each discipline.

### General Guidelines for Distribution Courses

In general, Distribution courses should:

- Be broad in scope rather than narrowly focused
- Be accessible to students with no background in the subject
- Be introductory in nature rather than a specialized upper-level course

These types of courses will not be approved for Distribution:

- Independent studies, experiential and research courses
- Courses designed to develop or hone specific skills (e.g. introductory composition and language courses)

## Non-LSA Units Offering Courses with Creative Expression

Penny W. Stamps School of Art & Design

*Art and Design (ARTDES)*

- 110. Digital Studio I: Image
- 170. Drawing Studio I: Line
- 171. Printmaking for Non-Majors
- 172. Painting for Non-Majors
- 173. Digital Photography for Non-Majors
- 174. Watercolor for Non-Majors
- 175. Life Drawing for Non-Majors
- 176. Graphic Imaging for Non-Majors
- 177. Metals for Non-Majors
- 178. Animation for Non-Majors
- 179. Sculpture for Non-Majors
- 181. Clay for Non-Majors
- 182. Wood for Non-Majors
- 220. Tools, Materials, and Processes Studio III: Time
- 230. Concept Form and Context Studio III
- 231. Concept Form and Context Studio III

College of Engineering

*University Arts (UARTS)*

- 150. Introduction to the Creative Process (effective Winter 2015)

## A. Alfred Taubman College of Architecture and Urban Planning

### *Architecture (ARCH)*

- 201. Basic Drawing
- 202. Graphic Communication
- 218. Visual Studies

## School of Music, Theatre & Dance

### *Dance (DANCE)*

- 100. Introduction to Dance
- 261. Congolese Dance 1
- 262. Congolese Dance 1

### *Ensemble (ENS):*

All Courses 100-399

### *Performance - Piano (PIANO)*

- 110. Performance
- 111. Performance

### *Other courses*

Courses (100-399) in Music Performance SUBJECTS other than Piano Performance may also be used for Creative Expression, but enrollment is restricted to students of advanced ability.

# Majors

The major provides students the opportunity to acquire in-depth knowledge in one academic discipline while developing and refining skills that will serve them in a wide array of academic and non-academic endeavors.

All majors and minors are listed on the official transcript once the student graduates and the degree is posted. Majors and minors are not listed, however, on the diploma unless a student receives Honors in a major through the Honors Program.

### General Guidelines

1. Students normally declare a major during the second term of their sophomore year.
2. To declare a major, a student should contact the appropriate department and make an appointment with a department advisor.

3. After developing a plan for the major with the student, the department advisor has the major entered on the student's record.
4. Requirements for majors are those applicable at the time the student declares the major.
5. A student may change the plan for the major with the approval of the department advisor.
6. Students may change majors after meeting with a department advisor in a different department.
7. Students with academic interests outside existing majors may propose their own major and, on approval, elect an Individualized Major Program within [Honors](#) or the [Residential College](#).

## Current Policies

Effective Winter 2019 | [Prior Policies](#)

1. Each A.B. or B.S. student must develop a major plan in consultation with a major advisor, who must also approve it.
2. Course requirements for the various majors range from 24 to 48 credits at the 200-level and above.
3. No more than 60 credits in a major (including courses in one department and the required cognates) may be counted toward the 120 for the degree. When an academic department has two or more SUBJECTs (e.g., Anthropology, Romance Languages and Literatures), a student may count a total of 60 credits from that department, not from each SUBJECT.
4. No more than 60 credits in one language (other than English) may be counted in the 120 required for a degree. However, the 60 credit limit on courses elected in one major may be exceeded when the excess credits have been used to meet the language requirement.
5. Students electing an area, interdepartmental, or special major may count no more than 60 credits in any one department.
6. Students may not elect courses in a major, including required cognates, using the Pass/Fail grading option.
7. A department or program may include courses that are graded on a Credit/No Credit basis in its major, but all other courses in the major must be taken for a grade.
8. A maximum of one course may be shared between the requirements of a minor and a major.
9. No course may be shared between the requirements a major and a supplemental studies program.
10. No course from the department of a major or a required course in a major may be part of a distribution plan. However, when pursuing more than one major, courses from one of the majors may be used toward distribution.
11. A student must earn an overall GPA of at least 2.0 in courses taken in the major. This includes all courses taken in the department of the major (prerequisites, required courses, and electives) and any required cognates. Exceptions for specific majors are listed in the Academics and Requirements section of the LSA website.
12. Courses that are part of the student's major may also meet the Upper-Level Writing Requirement, the Race & Ethnicity Requirement, or the Quantitative Reasoning Requirement.
13. Effective in Fall 2004, students graduating with an Honors major are required to earn an overall GPA of 3.4. Individual departments may have higher GPA requirements for courses in their majors. Check Honors major guidelines in individual departments listed in the Academics and Requirements section of the LSA website.

14. Test credits may not be used to meet the *requirements* of a major, but may be used to meet *prerequisites*. Departmental exceptions to this policy may be granted by the LSA Curriculum Committee.

## Multiple Majors

A student electing a double major must meet all requirements for both majors. Courses, including cognates, elected as part of one major may be used, when appropriate, to satisfy the requirements of the second major. Courses from one of the majors may be used toward distribution. Each plan for the major must be developed in consultation with and approved by a department advisor.

### Second Major after Graduation

Students may complete a second major any time after graduation by registering as a non-degree candidate through the Office of Admissions. Once the requirements for the major are complete, their department advisor must submit an online major/minor release form to the academic auditors so the second major can be added to the student's transcript. Students may not add, complete, or declare a minor after graduation. Students are, however, permitted to use the credits earned towards a minor in the completion of an additional major after graduation. Upon completion of this additional major, the minor will be removed from the student's transcript and be replaced by the major. Students also may not change their degree (e.g., A.B. to B.S.) after graduation.

## Honors Majors

All departments and interdisciplinary programs offer Honors versions of their majors, which are coded as Honors Plans. At the beginning of the third year, or when it is appropriate in the department's process, students may apply to a departmental Honors major. Students who meet departmental criteria are eligible to apply whether or not they have previously been in the Honors Program. Admission of upperclass students is determined by LSA departments and programs. Students will be required to have a cumulative GPA of 3.4 to graduate with Honors; they may embark on an Honors major before they have reached that threshold, but the minimum should be attainable by the time they graduate.

Students who are accepted into an Honors plan automatically become LSA Honors students.

Honors majors are described under the relevant [departmental listings](#). Candidates for graduation with Honors must perform very well in courses and also demonstrate ability in original thesis work and, in some majors, pass a comprehensive examination. Effective fall 2004, students graduating with an Honors plan are required to earn an overall GPA of 3.4. Individual departments may have higher GPA requirements for courses in the major. Check Honors plan guidelines within individual departments.

Many departments require their Honors majors to register for special seminars and independent study research courses. During the senior year, Honors majors carry out research and write a thesis under the direction of a faculty mentor. With only a few exceptions, graduation with Honors requires the completion of a Senior Honors thesis.

After an evaluation of the thesis and the overall academic record, Honors department advisors recommend that students graduate with an Honors degree.

The department will then send one of four possible recommendations to the Honors Office: "No Honors," "Honors," "High Honors," or "Highest Honors." No Honors is given for work that does not meet departmental standards, and for students with GPAs under 3.4 ("No Honors" is not noted on the transcript or diploma.) The other three will be posted on the final transcript and diploma. Honors majors are described under the relevant departmental listings under [Majors and Minors](#).

Students may also petition the Honors Program for approval of an [Honors Individualized Major Program \(HIMP\)](#). Information about the program is available in 1330 Mason Hall.

In some rare circumstances, departments may ask the Honors Academic Board to graduate with Honors a student whose cumulative GPA is below the required threshold at the time of graduation. The request should be made by the faculty advisors who know the student's work and history best, but must be endorsed by the director of undergraduate studies and the chair of the department. The letter(s) for this request should explain the student's circumstances, describe the Honors work, and provide a justification for making an exception to the GPA requirement.

The Honors IMP is intended for exceptional students who wish to undertake a liberal arts program of study not currently available in an existing departmental major or program. HIMPs are interdepartmental or interdisciplinary in character and include courses from a variety of sources. While the HIMP encourages diversity and flexibility, each HIMP must have an identifiable academic focus within LSA, an appropriate disciplinary base, and unifying theme, and culminate in the writing of an Honors thesis. An HIMP should not be a specialization within an already existing major. It should include an adequate number of prerequisite courses.

Since HIMPs require an unusual level of intellectual competence and maturity, an overall GPA of 3.5 and, in most cases, a 3.7 in courses related to the HIMP subject are required for admission to the program. The [Honors Academic Board](#) reviews all proposals.

[Graduation with "Honors," "High Honors," or "Highest Honors"](#) is granted upon recommendation of the thesis advisor and readers.

**Honors Advising.** Students interested in submitting an HIMP should contact [Lisa Broome](#), Associate Director of the [Honors Program](#), to discuss goals and procedures. A formal prospectus, developed in consultation with appropriate faculty advisor, is then submitted for review and approval by the Honors Academic Board.

Students who have completed at least 58 credits in residence and have demonstrated high academic achievement and capacity for independent work in a departmental Honors concentration program may be recommended for a degree "with Highest Honors," "with High Honors," or "with Honors" in the major. Capacity for independent work must be demonstrated in part by superior performance in an Honors program or some achievement of equivalent character. A minimum overall grade point average of 3.4 is required. A notation is made on the diploma and the transcript.

During the senior year, Honors majors carry out research and write a thesis under the direction of a faculty mentor. With only a few exceptions, such as Math and Computer Science, graduation with Honors requires the completion of a Senior Honors thesis. This consists of detailed, original research in a student's chosen field. The thesis is normally completed during the senior year. Length and format requirements vary by department. Thesis research and writing is normally done under the direction of a professor who shares the student's areas of interest.

Many departments require their Honors majors to register for special seminars and independent study research courses. Other departments do not have these courses, so their students can choose to enroll in HONORS 490. Since thesis research and writing most often extends beyond one term, the course may be assigned a "Y" grade for the term or terms prior to completion. This simply means "extended course" or "work in progress." At the completion of the thesis, one letter grade will be assigned for all the terms involved. Unlike an "I" (for an incomplete), the "Y" does not remain on the record.

After an evaluation of the thesis and the overall academic record, Honors department advisors recommend that students graduate with Honors. Deadlines and procedures for evaluating senior theses vary by department. Some departments have a committee that evaluates all theses, whereas others are based primarily on the judgment of the student's advisor and the Departmental Honors advisor.

The Department will then send one of four possible recommendations to the Honors Office: "No Honors," "Honors," "High Honors," or "Highest Honors." No Honors is given for work that does not meet departmental standards, and for students with GPAs under 3.4 ("No Honors" is not noted on the transcript or diploma). The [Honors Academic Board](#) will accept petitions from departments requesting exceptions to the above minimum GPA requirements if there is compelling evidence that an Honors student's final GPA does not adequately represent the student's record of outstanding academic achievement. The other three recommendations ("Honors," "High Honors," "Highest Honors") will be posted on the final transcript and diploma. These are separate from the Distinction awards, which are also posted on graduates' diplomas and transcripts. Levels of Distinction are awarded on the basis of the student's final cumulative GPA.

All seniors are eligible to apply for senior thesis and travel grants. These include the *Graf Research Grant*, the *Hellman Family Grant*, the *Davidson Grant*, the *Kennedy Travel Grant*, and the *Cutcheon Research and Travel Grants*. Information is available in the Honors Office, and on the Honors website.

**Honors Thesis Intent Form for the Upper-Level Writing Requirement:**

Honors students have the option of using their senior theses to satisfy the Upper-Level Writing Requirement. A *Sweetland Center for Writing Thesis Intent Form* is available in the [Honors Office](#), and must be filled out by the student and the thesis advisor. An Honors Director will then approve the request, and it will be forwarded to the Sweetland Center for Writing for processing. This form should be completed within the first couple of weeks of the term the student plans to finish the thesis. Completion of the requirement hinges on satisfactory completion of the thesis. The form is available in the Honors Office or is downloadable from the [Honors](#) website.

**Deep Blue Archive.** The Honors Program recognizes the significance of the scholarship in Honors theses by making it permanently available to the academic community. This can be done by Honors students depositing their thesis in the Honors Thesis collection of the University of Michigan's Deep Blue electronic archive. Every term after graduation, the Honors academic auditor sends all Honors graduates information and web links to submit the Honors thesis in the Deep Blue archive.

Students who have completed at least 58 credits in residence and have demonstrated high academic achievement and capacity for independent work in a departmental Honors concentration program may be recommended for a degree "with Highest Honors," "with High Honors," or "with Honors" in the major. Capacity for independent work must be demonstrated in part by superior performance in an Honors program or some achievement of equivalent character. A minimum overall grade point average of 3.4 is required. A notation is made on the diploma and the transcript.

## **Policies for the Major (Effective through Fall 2015)**

Effective Winter 2016 - Fall 2018

*Effective Through Fall 2018*

1. Each A.B. or B.S. student must develop a major plan in consultation with a major advisor, who must also approve it.
2. Course requirements for the various majors range from 24 to 48 credits at the 200-level and above.
3. No more than 60 credits in a major (including courses in one department and the required cognates) may be counted toward the 120 for the degree. When an academic department has two or more SUBJECTs (e.g., Anthropology, Romance Languages and Literatures), a student may count a total of 60 credits from that department, not from each SUBJECT.
4. No more than 60 credits in one language (other than English) may be counted in the 120 required for a degree. However, the 60 credit limit on courses elected in one major may be exceeded when the excess credits have been used to meet the language requirement.
5. Students electing an area, interdepartmental, or special major may count no more than 60 credits in any one department.



6. Students may not elect courses in a major, including required cognates, using the Pass/Fail grading option.
  7. A department or program may include Experiential or Directed Reading/Independent Study courses that are graded on a Credit/No Credit basis in its major, but all other courses in the major must be taken for a grade.
  8. A maximum of one course may be shared between the requirements of a minor and a major.
9. No course may be shared between the requirements a major and a supplemental studies program.
1. No course from the department of a major or a required course in a major may be part of a distribution plan (see, however, "Double Concentration" below).
  2. A student must earn an overall GPA of at least 2.0 in courses taken in the major. This includes all courses taken in the department of the major (prerequisites, required courses, and electives) and any required cognates. Exceptions for specific majors are listed in the Academics and Requirements section of the LSA website.
  3. Courses that are part of the student's major may also meet the Upper-Level Writing Requirement, the Race & Ethnicity Requirement, or the Quantitative Reasoning Requirement.
  4. Effective in Fall 2004, students graduating with an Honors major are required to earn an overall GPA of 3.4. Individual departments may have higher GPA requirements for courses in their majors. Check Honors major guidelines in individual departments listed in the Academics and Requirements section of the LSA website.
  5. Test credits may not be used to meet the *requirements* of a major, but may be used to meet *prerequisites*. Departmental exceptions to this policy may be granted by the LSA Curriculum Committee.

Effective Through Fall 2015

*Effective Through Fall 2015*

1. Each A.B. or B.S. student must develop a major plan in consultation with a department advisor, who must also approve it.
2. Course requirements for the various majors range from 24 to 48 credits at the 200-level and above.
3. No more than 60 credits in a major (including courses in one department and the required cognates) may be counted toward the 120 for the degree. When an academic department has two or more [SUBJECTs](#) (e.g., Anthropology, Romance Languages and Literatures), a student may count a total of 60 credits from that department, not from each SUBJECT.
4. No more than 60 credits in one language (other than English) may be counted in the 120 required for a degree. However, the 60 credit limit on courses elected in one major may be exceeded when the excess credits have been used to meet the language requirement.
5. Students electing an area, interdepartmental, or special major may count [no more than 60 credits in any one department](#).
6. Students may not elect courses in a major, including required cognates, using the Pass/Fail grading option.

7. A department or program may include [Experiential or Directed Reading/Independent Study](#) courses that are graded on a [Credit/No Credit basis](#) in its major, but all other courses in the the major must be taken for a grade.
8. A maximum of one course may be shared between the requirements of a [minor](#) and a [major](#).
9. No course may be shared between the requirements a major and a [supplemental studies program](#).
10. No course from the department of a major or a required course in a major may be part of a distribution plan (see, however, [Double Major](#)).
11. A student must earn an overall GPA of at least 2.0 in courses taken in the major. This includes all courses taken in the department of the major (prerequisites, required courses, and electives) and any required cognates. Exceptions for specific majors are listed at their [department site](#).
12. Courses that are part of the student's major may also meet the [Upper-Level Writing Requirement](#), the [Race & Ethnicity Requirement](#), or the [Quantitative Reasoning Requirement](#).
13. Effective in Fall 2004, students graduating with an [Honors plan](#) are required to earn an overall GPA of 3.4. Individual departments may have higher GPA requirements for courses in their majors. Check Honors major guidelines in individual departments listed in the [Academics and Requirements](#) section of the LSA website.

# Minors

## Current Policies

Effective Winter 2020 | [Previous Policies](#)

Students in the College may elect one or more minors offered by departments and programs within the College or by other academic units on campus. Electing to earn a minor is optional, and there is no limit to the number of minors a student may elect.

A minor must require no fewer than 15 credits of course work, show structure and coherence, and contain some upper-level courses. At least nine out of the 15 credits must be taken in residence. Students who declare and complete an approved minor will receive a notation on their student transcript but not on their diploma.

Each A.B. or B.S. student who wishes to complete an approved minor must develop a plan for the minor in consultation with a department or program advisor, who must also approve it.

1. After developing a plan with the student, the program or department advisor has the minor entered on the student's record.
2. A minor is not an option available to students earning the B.G.S. degree.
3. An individually designed minor is not allowed.
4. Students may not elect the pass/fail grading option for courses included in a minor.
5. A department or program may include courses that are graded on a credit/no credit basis in a minor, but all other courses in the minor must be taken for a grade.
6. No course may be shared between the requirements of more than one minor.
7. No course may be shared between the requirements of a minor and a supplemental studies program.

8. A maximum of one course may be shared between the requirements of a minor and a major.
  - If a student has more than one major, the shared minor course can be different for each major (course "A" with the first major, course "B" with the second major, etc.). It's also acceptable for students to share the same course in their minor with multiple majors (course "A" with the first and the second major).
9. If the minor has prerequisites, courses used as prerequisites to a major may also count as prerequisites to the minor.
10. Test credits may not be used to meet the *requirements* of a minor, but they may be used to meet *prerequisites*.
11. Courses elected to meet the requirements of a minor may also be part of the student's area distribution plan.
12. A student must earn an overall GPA of at least 2.0 in the minor, including any departmental prerequisites necessary for the completion of the minor.
13. Courses that are part of a student's minor may also meet the Language Requirement, the Upper-Level Writing Requirement, the Race and Ethnicity Requirement, or the Quantitative Reasoning Requirement.
14. Students may not add, complete, or declare a minor after graduation. Students are, however, permitted to use the credits earned towards a minor in the completion of an additional major after graduation. Upon completion of this additional major, the minor will be removed from the student's transcript and be replaced by the major.

## Minors — Other Units

Students in the units listed below also have the option of pursuing minors offered by LSA. Limitations may apply on which minors may be chosen. Interested students should consult an academic advisor in their home unit before making an appointment to see an LSA department advisor about minors offered in LSA.

- the A. Alfred Taubman College of **Architecture and Urban Planning** (effective fall 2003)
- the Penny W. Stamps School of **Art & Design** (effective winter 2002)
- the Stephen M. Ross School of **Business** (effective fall 2004)
- the **Dental Hygiene** Program (effective winter 2003)
- the School of **Education** (effective fall 2002)
- the College of **Engineering** (effective winter 2001)
- the School of **Information** (effective fall 2014)
- the School of **Kinesiology** (effective fall 2001)
- the School of **Music, Theatre & Dance** (effective winter 2002)
- the School of **Natural Resources and Environment** (effective winter 2002)
- the School of **Nursing** (effective fall 2002)
- the School of **Public Health** (effective fall 2017)
- the Gerald R. Ford School of **Public Policy** (effective fall 2007)

**The College of Pharmacy is the only undergraduate unit that does *not* allow students to elect LSA minors.**

The **Penny W. Stamps School of Art & Design** offers a minor in [Art and Design](#).

The **Stephen M. Ross School of Business** offers a [Minor in Business](#).

The **School of Education** offers a [minor in Education for Empowerment](#).

The **College of Engineering** offers the following minors:

1. [International minor](#) for engineers (not open to LSA students)
2. [Multidisciplinary design](#)
3. [Electrical engineering](#)
4. [Computer science](#)
5. [Climate and space sciences and engineering](#)
6. Naval architecture and marine engineering (not open to LSA students)
7. Environmental engineering (not open to LSA students)

The **School of Kinesiology** offers the following minors (not open to LSA students):

1. Health
2. Health and fitness leadership
3. Movement science  
*The movement science minor is open only to dance majors in the School of Music, Theatre & Dance.*

The **School of Music, Theatre & Dance** offers four minors:

1. [Music](#)
2. [Global theatre and ethnic studies](#)
3. [Performing arts management](#)
4. [Design and production](#)

The **School of Social Work** offers a minor in [Community Action and Social Change](#).

## Previous Policies for Minors

Effective Winter 2019 - Fall 2019

*Effective Winter 2019 - Fall 2019*

Students in the College may elect one or more minors offered by departments and programs within the College or by other academic units on campus. Electing to earn a minor is optional, and there is no limit to the number of minors a student may elect.

A minor must require no fewer than 15 credits of course work, show structure and coherence, and contain some upper-level courses. At least 10 out of the 15 credits must be taken in residence. Students who declare and complete an approved minor will receive a notation on their student transcript but not on their diploma.

## Academic Policies

Each A.B. or B.S. student who wishes to complete an approved minor must develop a plan for the minor in consultation with a department or program advisor, who must also approve it.

1. After developing a plan with the student, the program or department advisor has the minor entered on the student's record.
2. A minor is not an option available to students earning the B.G.S. degree.
3. An individually designed minor is not allowed.
4. Students may not elect the pass/fail grading option for courses included in a minor.
5. A department or program may include courses that are graded on a credit/no credit basis in a minor, but all other courses in the minor must be taken for a grade.
6. No course may be shared between the requirements of more than one minor.
7. No course may be shared between the requirements of a minor and a supplemental studies program.
8. A maximum of one course may be shared between the requirements of a minor and a major.
  - o If a student has more than one major, the shared minor course can be different for each major (course "A" with the first major, course "B" with the second major, etc.). It's also acceptable for students to share the same course in their minor with multiple majors (course "A" with the first and the second major).
9. If the minor has prerequisites, courses used as prerequisites to a major may also count as prerequisites to the minor.
10. Test credits may not be used to meet the *requirements* of a minor, but they may be used to meet *prerequisites*.
11. Courses elected to meet the requirements of a minor may also be part of the student's area distribution plan.
12. A student must earn an overall GPA of at least 2.0 in the minor, including any departmental prerequisites necessary for the completion of the minor.
13. Courses that are part of a student's minor may also meet the Language Requirement, the Upper-Level Writing Requirement, the Race and Ethnicity Requirement, or the Quantitative Reasoning Requirement.
14. Students may not add, complete, or declare a minor after graduation. Students are, however, permitted to use the credits earned towards a minor in the completion of an additional major after graduation. Upon completion of this additional major, the minor will be removed from the student's transcript and be replaced by the major.

Effective Winter 2016 - Fall 2018

*Effective Winter 2016 - Fall 2018*

Students in the College may elect one or more minor offered by departments and programs within the College or by the other academic units on campus. Electing to earn a minor is optional, and there is no limit on the number of minors a student may elect. For more information, see the Academics and Requirements section of the LSA website.

A minor must require no less than 15 credits of course work, show structure and coherence, and contain some upper-level courses. At least 10 out of the 15 credits must be taken in-residence.

Students who declare and complete an approved minor will receive a notation on their student transcript but not on their diploma.

### **Academic Policies**

1. Each A.B. or B.S. student who wishes to complete an approved minor must develop a plan for the minor in consultation with a department or program advisor, who must also approve it.
2. After developing a plan for its minor with the student, the program or department advisor has the minor entered on the student's record.
3. The minor is not an option available to students earning the B.G.S. degree.
4. An individually designed minor is not allowed.
5. Students may not elect courses included in a minor by the Pass/Fail grading option.
6. A department or program may include Experiential or Directed Reading/Independent Study courses that are graded on a Credit/No Credit basis in a minor, but all other courses in the minor must be taken for a grade.
7. No course may be shared between the requirements of more than one minor.
8. No course may be shared between the requirements of a minor and a supplemental studies program.
9. A maximum of one course may be shared between the requirements of a minor and a major.
10. If the minor has prerequisites, courses used as prerequisites to a major may also count as prerequisites to the minor.
11. Test credits may not be used to meet the requirements of a minor, but may be used to meet prerequisites.
12. Courses elected to meet the requirements of a minor also may be part of the student's area distribution plan.
13. A student must earn an overall GPA of at least 2.0 in the minor, including any departmental prerequisites necessary for the completion of the minor.
14. Courses that are part of a student's minor may also meet the Language Requirement, the Upper-Level Writing Requirement, the Race & Ethnicity Requirement, or the Quantitative Reasoning Requirement.

Effective Winter 2014 - Fall 2015

*Effective Winter 2014 - Fall 2015*

1. Each A.B. or B.S. student who wishes to complete an approved minor must develop a plan for the minor in consultation with a department or program advisor, who must also approve it.
2. After developing a plan for its minor with the student, the program or department advisor has the minor entered on the student's record.
3. The minor is not an option available to students earning the B.G.S. degree.
4. An individually designed minor is not allowed.
5. Students may not elect courses included in a minor by the Pass/Fail grading option.
6. A department or program may include Experiential or Directed Reading/Independent Study courses that are graded on a Credit/No Credit basis in a minor, but all other courses in the minor must be taken for a grade.
7. No course may be used to satisfy the requirements of more than one minor.

8. No course may be shared between the requirements of two minors, or between a minor and an undergraduate certificate.
9. A maximum of one course may be shared between the requirements of a minor and a major.
10. If the minor has prerequisites, courses used as prerequisites to a major may also count as prerequisites to the minor.
11. Advanced Placement credits may not be used to meet the *requirements* of a minor, but may be used to meet *prerequisites*.
12. Courses elected to meet the requirements of a minor also may be part of the student's area distribution plan.
13. A student must earn an overall GPA of at least 2.0 in the minor, including any departmental prerequisites necessary for the completion of the minor.
14. Courses that are part of a student's minor may also meet the Language Requirement, the Upper-Level Writing Requirement, the Race & Ethnicity Requirement, or the Quantitative Reasoning Requirement.
15. Students may not add, complete, or declare a minor after graduation.

Effective Winter 2012-Fall 2013

*Effective Winter 2012-Fall 2013*

1. Each A.B. or B.S. student who wishes to complete an approved minor must develop a plan for the minor in consultation with a department or program advisor, who must also approve it.
2. After developing a plan for its minor with the student, the program or department advisor has the minor entered on the student's record.
3. The minor is not an option available to students earning the B.G.S. degree.
4. An individually designed minor is not allowed.
5. Students may not elect courses included in a minor by the Pass/Fail grading option.
6. A department or program may include Experiential or Directed Reading/Independent Study courses that are graded on a Credit/No Credit basis in a minor, but all other courses in the minor must be taken for a grade.
7. No course may be used to satisfy the requirements of more than one minor.
8. No course may be shared between the requirements of two minors, or between a minor and an undergraduate certificate.
9. A maximum of one course may be shared between the requirements of a minor and a major.
10. If the minor has prerequisites, courses used as prerequisites to a major may also count as prerequisites to the minor.
11. Advanced Placement credits may not be used to meet the *requirements* of a minor, but may be used to meet *prerequisites*.
12. Courses elected to meet the requirements of a minor also may be part of the student's area distribution plan.
13. A student must earn an overall GPA of at least 2.0 in the minor, including any prerequisites.
14. Courses that are part of a student's minor may also meet the Language Requirement, the Upper-Level Writing Requirement, the Race & Ethnicity Requirement, or the Quantitative Reasoning Requirement.
15. Students may not add, complete, or declare a minor after graduation, or convert a minor to a major after graduation.

## Effective Fall 2008-Fall 2011

### *Effective Fall 2008-Fall 2011*

1. Each A.B. or B.S. student who wishes to complete an approved minor must develop a plan for the minor in consultation with a department or program advisor, who must also approve it.
2. After developing a plan for a minor with the student, the program or department advisor has the minor entered on the student's record.
3. The minor is not an option available to students earning the B.G.S. degree.
4. An individually designed minor is not allowed.
5. Courses in the minor must be elected for a grade.
6. Students may not elect a major and a minor, or two minors, in the same department or program, unless a specific exemption to this policy is noted in the minor description posted on the academics and requirements website
7. No course may be used to satisfy the requirements of more than one minor.
8. Students may not use more than one course to meet both the requirements of a minor and the prerequisites or requirements of a major.
9. If the minor has prerequisites, courses used as prerequisites to a major may also count as prerequisites to the minor.
10. Advanced Placement credits may not be used to meet the *requirements* of a minor, but may be used to meet *prerequisites*.
11. Courses elected to meet the requirements of a minor also may be part of the student's area distribution plan.
12. A student must earn an overall GPA of at least 2.0 in the minor, including any prerequisites.
13. Courses that are part of a student's minor may also meet the Language Requirement, the Upper-Level Writing Requirement, the Race & Ethnicity Requirement, or the Quantitative Reasoning Requirement.
14. Students may not complete a minor after graduation, and a minor may not be converted to a major after graduation.

## Effective Through Summer 2008

### *Effective through Summer 2008*

1. Each A.B. or B.S. student who wishes to complete an approved minor must develop a plan for the minor in consultation with a department or program advisor, who must also approve it.
2. After developing a plan for a minor with the student, the program or department advisor has the minor entered on the student's record.
3. The minor is not an option available to students earning the B.G.S. degree.
4. An individually designed minor is not allowed.
5. Courses in the minor must be elected for a grade.
6. Students may not elect a major and a minor, or two minors, in the same department or program, unless a specific exemption to this policy is noted in the minor description posted on the academics and requirements website
7. Students may not use more than one course to meet the requirements of both a plan for the major and a minor.
8. No course may be used to satisfy the requirements of more than one minor.



9. If the minor has prerequisites, courses used as prerequisites to a major may also count as prerequisites to the minor.
10. Advanced Placement credits may not be used to meet the *requirements* of a minor, but may be used to meet *prerequisites*.
11. Courses elected to meet the requirements of a minor also may be part of the student's area distribution plan.
12. A student must earn an overall GPA of at least 2.0 in the minor, including any prerequisites.
13. Courses that are part of a student's minor may also meet the Language Requirement, the Upper-Level Writing Requirement, the Race & Ethnicity Requirement, or the Quantitative Reasoning Requirement.

## Supplemental Studies

The College does not sanction supplemental studies offered by LSA departments. On the other hand, the College will consider supplemental studies offered by non-LSA departments or programs. Undergraduate supplemental studies can provide opportunities for LSA students to develop additional experience and skills to complement their major(s) or minor(s).

Each A.B., B.S., B.S.-Chem., or B.G.S. student may complete one or more supplemental studies programs approved by the College. Electing to earn supplemental studies is optional, and there is no limit to the number of supplemental studies a student may elect. Supplemental studies, along with their requirements and other pertinent information, are described in detail on this page.

Supplemental studies must require no fewer than nine credits of course work, show structure and coherence, and contain some upper-level courses. Students who declare and complete approved supplemental studies will receive a notation on their student transcript but not on their diploma.

### Policies for Supplemental Studies

Effective Winter 2014 | [Previous Requirements](#)

1. Each A.B., B.S., or B.G.S. student may complete one or more supplemental studies program.
2. Each student who wishes to complete a supplemental studies program must develop a plan in consultation with a program advisor.
3. After developing a plan with the student, the program or department advisor has the supplemental studies program entered on the student's record.
4. An individually designed supplemental studies program is not allowed.
5. Students may not elect courses included in a supplemental studies program using the pass/fail grading option.
6. A department or program may include experiential or directed reading/independent study courses that are graded on a credit/no credit basis in a supplemental studies program, but all other courses in the supplemental studies program must be taken for a grade.
7. No course may be shared between the requirements of two supplemental studies programs, between a major and a supplemental studies program, or between a minor and a supplemental studies program.

8. One course may be shared between the B.G.S. upper-level credits requirement and a supplemental studies program.
9. Advanced Placement (AP) credits may not be used to meet the requirements of a supplemental studies program.
10. A student must earn an overall GPA of at least 2.0 in the required courses in the supplemental studies program.
11. Courses elected to meet the requirements of a supplemental studies program also may be part of the student's area distribution plan.
12. Courses that are part of a supplemental studies program may also meet the Language Requirement, the Upper-Level Writing Requirement, the Race & Ethnicity Requirement, or the Quantitative Reasoning Requirement.
13. Students may not complete a supplemental studies program after graduation, and a supplemental studies program may not be converted to an academic minor after graduation.

### List of Supplemental Studies Programs

- [Program in Entrepreneurship \(Innovate Blue\)](#)
- [Sustainability \(Graham Sustainability Institute\)](#)

## Previous Policies for Supplemental Studies

1. Each A.B., B.S., or B.G.S. student may complete one or more supplemental studies program.
2. Each student who wishes to complete a supplemental studies program must develop a plan in consultation with a program advisor.
3. After developing a plan with the student, the program or department advisor has the supplemental studies program entered on the student's record.
4. An individually designed supplemental studies program is not allowed.
5. Students may not elect courses included in a supplemental studies program using the pass/fail grading option.
6. A department or program may include Experiential or Directed Reading/Independent Study courses that are graded on a Credit/No Credit (C/NC) basis in a supplemental studies program, but all other courses in the supplemental studies program must be taken for a grade.
7. No course may be shared between the requirements of two supplemental studies program, between a major and a supplemental studies program, or between a minor and a supplemental studies program.
8. One course may be shared between the B.G.S. upper level credits requirement and a supplemental studies program.
9. Advanced Placement credits may not be used to meet the requirements of a supplemental studies program.
10. A student must earn an overall GPA of at least 2.0 in the supplemental studies program.
11. Courses elected to meet the requirements of a supplemental studies program also may be part of the student's area distribution plan.

12. Courses that are part of a supplemental studies program may also meet the Language Requirement, the Upper-Level Writing Requirement, the Race & Ethnicity Requirement, or the Quantitative Reasoning Requirement.
13. Students may not complete a supplemental studies program after graduation, and a supplemental studies program may not be converted to an academic minor after graduation.

# LSA Academic Policies

This document is an unofficial representation of the information available on the LSA website. For official and updated information, please view the LSA website: <http://lsa.umich.edu/lsa/academics/lsa-academic-policies.html>

# LSA Academic Policies

The Academic Policy portion of the LSA website governs the conduct of academic matters affecting students enrolled in the College. Exceptions to these policies may be granted only upon written petition to the Academic Standards Board.

Honors students petition the [Honors Academic Board](#); Residential College students petition the [RC Board on Academic Standing](#) (BOAS).

## Credit Limits

- [Non-LSA Coursework](#)
- [Non-Graded Courses \(P/F, CR/NC, S/U\)](#)
- [Experiential and Directed Reading/Independent Study](#)
- [60 Credits in One Department](#)
- [Transfer Credit](#)
- [Repetition and Out of Sequence](#)

## Special Kinds of Credit

- [Test Credit \(AP, CLEP, IB, A-Level, etc.\)](#)
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## Transfer Information & Registration Policy

- [Transfer Within the U-M System](#)
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## Registration and Enrollment

- [Accuracy of Schedule](#)
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## Your Academic Record

- [Student Records Policy](#)
- [Transcripts, Notations and Grades](#)
- [Grading Issues](#)
- [Grade Grievance](#)
- [Honors and Awards](#)
- [Dean's Certification Forms](#)

# Credit Limits

Select an option below to learn more about:

- [Experiential and Directed Reading / Independent Study](#)
- [Non-LSA Course Work](#)
- [Non-Graded Courses \(P/F, CR/NC, S/U\)](#)
- [Transfer Credit](#)
- [60 credits in one department](#)
- [Repetition and Out of Sequence Courses](#)

# Non-LSA Coursework

Students in LSA must complete a program of study consisting of courses primarily from LSA or equivalent transfer credit.

Undergraduate LSA courses are listed in the [LSA Undergraduate Course Catalog](#). Courses offered by other academic units (e.g., the Stephen M. Ross School of Business, the School of Education, the College of Engineering, etc.) of the University of Michigan (Ann Arbor) and not listed in the [LSA Undergraduate Course Catalog](#) are defined as non-LSA courses.

Non-LSA coursework earns credit toward a degree and honor points according to the following policies:

1. Candidates for an A.B., B.S., or B.G.S. degree must complete a minimum 100 credits of LSA courses, allowing 20 credits of non-LSA coursework in the minimum 120 required for the degree. Non-LSA credits in excess of 20 will be included in the calculation of a student's GPA, but will not be counted toward the 120 credits needed for a bachelor's degree in LSA.
2. Courses cross-listed between LSA and another school or college of the University of Michigan (Ann Arbor) count toward the required number of LSA credits.

3. School of Kinesiology courses cross-listed with an LSA SUBJECT count for degree credit as LSA courses.  
All other [School of Kinesiology courses](#) are recorded as "not for credit" for LSA students except for the courses for which LSA students may receive non-LSA degree credits.
4. University of Michigan School of Music, Theatre & Dance ensemble courses yield non-LSA degree credit but no honor points (except for those cross-listed with LSA: ENS 405, 406, 407).
5. Transfer credit for journalism courses are counted as non-LSA.
6. The College does not grant degree credit for any courses offered through the **Military Officer Education Programs** except for those courses cross-listed in other academic units.

## School of Kinesiology courses

All School of Kinesiology courses not listed here are recorded as "not for credit" for LSA students.

LSA Credit (School of Kinesiology courses cross-listed with an LSA SUBJECT count for degree credit as LSA courses)

- **KINESLGY**
  - KINESLGY 505. Disability Studies.
- **SM**
  - SM 421. Gender and Sport.

Non-LSA (Approved for LSA Degree Credit as non-LSA Courses)

- **AT**
  - AT 220. Anatomy & Physiology.
  - AT 221. Human Anatomy Lab.
- **HF**
  - HF 220. Anatomy & Physiology.
  - HF 221. Appl Hum Anat Lab.
  - HF 240. Intro to Fit&Health.
  - HF 241. Ex Nutr Wt Cn.
  - HF 331. Biomech Sprt Ftns.
  - HF 333. Legal Iss Sprt Ftns.
  - HF 425. PA & Ped Disability.
  - HF 434. Mgr Ethcs Sprt Fitns.
  - HF 437. Psych Sport&Exer.
  - HF 446. Soc Factors Phys Act.
- **KINESLGY**
  - KINESLGY 302. Kines Study Abroad.
  - KINESLGY 421. Disord Vol Move.
  - KINESLGY 422. Motor Learning.

- KINESLGY 423. Sensorimot Dev.
- KINESLGY 424. Aging&Motor Perfmnc.
- KINESLGY 425. PA & Ped Disability.
- KINESLGY 427. Expertise.
- KINESLGY 435. Biomech Hum Locomot.
- KINESLGY 437. MotnCap Anim Biomech.
- KINESLGY 438. Musculoskeletal Imag.
- KINESLGY 441. Environ Exer Phys.
- KINESLGY 442. Exer Endocrinology.
- KINESLGY 443. Exrcse&Succ Aging.
- KINESLGY 444. 6-12 Methods in PE.
- KINESLGY 446. Soc Factors Phys Act.
- KINESLGY 448. CV Ex Phys.
- KINESLGY 450. Sem Adapted Phys Act.
- KINESLGY 471. Phys Activity Epid.
- KINESLGY 472. Adul Exer Prog.
- KINESLGY 474. Worksite Wellness.
- KINESLGY 533. Neuromechanics.

- **MOVESCI**

- MOVESCI 110. Bio&Beh Bases Hu Mvt.
- MOVESCI 219. Scientific Writing.
- MOVESCI 230. Hum Musculo Anat.
- MOVESCI 231. Hum Musculo Anat Lab.
- MOVESCI 240. Intro to Fit&Health.
- MOVESCI 241. Ex Nutr Wt Cn.
- MOVESCI 250. Statistics.
- MOVESCI 280. Kin UG Research Opp.
- MOVESCI 320. Motor Control.
- MOVESCI 330. Biomech of Hum Mvmt.
- MOVESCI 340. Exercise Physiol.
- MOVESCI 361. Intro Surg Neuromon.
- MOVESCI 421. Disord Vol Move.
- MOVESCI 422. Motor Learning.
- MOVESCI 423. Sensorimot Dev.
- MOVESCI 424. Aging&Motor Perfmnc.
- MOVESCI 425. PA & Ped Disability.
- MOVESCI 426. Cog Neuro of Action.
- MOVESCI 427. Expertise.
- MOVESCI 435. Biomech Hum Locomot.
- MOVESCI 437. MotnCap Anim Biomech.
- MOVESCI 438. Musculoskeletal Imag.
- MOVESCI 441. Environ Exer Phys.
- MOVESCI 442. Exer Endocrinology.
- MOVESCI 443. Exrcse&Succ Aging.
- MOVESCI 446. Soc Factors Phys Act.
- MOVESCI 448. CV Ex Phys.
- MOVESCI 450. Sem Adapted Phys Act.



- MOVESCI 471. Phys Activity Epid.
- MOVESCI 474. Worksite Wellness.
- **PHYSED**
  - PHYSED 255. Hlth Ed Elem Teacher.
  - PHYSED 336. K-12 Rhythm&Dance.
  - PHYSED 444. 6-12 Methods in PE.
- **SM**
  - SM 101. Pub&Small Grp Comm.
  - SM 111. His-Soc Hum Move.
  - SM 203. Intro Sport Mgmt.
  - SM 217. Business Comm.
  - SM 246 (346). Prin of Marketing.
  - SM 249. Research Methods.
  - SM 331. Econ of Sport.
  - SM 332. Org Behave-Sport Org.
  - SM 333. Legal Iss Sprt Ftns.
  - SM 341. Sport Finance.
  - SM 431. Sports & the Media.
  - SM 432. Hum Res Mang in Spt.
  - SM 433. Spt&Public Policy.
  - SM 434. Mgr Ethcs Sprt Fitns.
  - SM 435. Sport&the Consumer.
  - SM 436. Race Rel,Cul Images.
  - SM 437. Psych Sport&Exer.
  - SM 438. Sports Econ Policy.
  - SM 439. Spnsrshp Lnkd Mrktng.
  - SM 440. Sports & Eco Dev.
  - SM 444. Sales Mng in Spt Ind.
  - SM 446. Brand Strat&Ad Camp.
  - SM 499 (342). Strat of Sport Orgs.

All School of Kinesiology courses not listed here are recorded as "not for credit" for LSA students.

## Non-Graded Courses (P/F, CR/NC, S/U)

Students may count a maximum 30 non-graded credits toward the 120 credits required for a degree. Non-graded credits are earned in courses for which no letter grade (A through E) is recorded on the transcript. Only those non-graded credits actually earned are counted as part of the total number of non-graded credits applicable toward a degree.

1. A student cannot choose to elect a course by the CR/NC and S/U grading patterns; the *optional* non-graded pattern is P/F.

2. Non-graded courses earn credit toward a degree but not honor points. Therefore, "Pass" (or "Credit") grades do not enter into the computation of the term or cumulative grade point averages.
3. *A change in grading pattern for a course is not permitted after the first three weeks of a full term (first two weeks of a half-term).* Grading pattern choices must be modified through the registration system. Courses elected after the third week of a term may not be elected on a non-graded basis unless the course is offered as a "mandatory non-graded" course. The only exceptions to this policy are *short courses* (e.g., EARTH 101-115) which have started after the beginning of the term. In these cases, the grading pattern may not be changed after the second week of class. **The Academic Standards Board does not grant exceptions to this policy.**
4. *The College holds students responsible for ensuring the accuracy and completeness of their class schedule.*
5. Instructor approval is not required for a choice in the elected grading pattern nor should the instructor be informed of such a choice. Instructors report letter grades (A through E) for all students in their courses, except in mandatory CR/NC courses. In the case of a student who has chosen to elect a course "Pass/Fail," the Office of the Registrar converts the letter grades according to the following policies:
  - Grades of A through C– are posted on a transcript as "P" (Pass); credit toward a degree is earned.
  - Grades of D through E are posted on a transcript as "F" (Fail); no degree credit is earned.
6. In the case of an incomplete course elected "Pass/Fail," credit is posted only when the work has actually been completed and a grade of at least C– has been reported. "Pass/Fail" courses which are not finished lapse to "Fail," although the term and cumulative grade point averages remain unaffected.
7. If the instructor of a mandatory Credit/No Credit course believes that the amount and quality of a student's work is such that it deserves credit, CR (Credit) is posted on the transcript. If the instructor believes that a student's work does not justify the awarding of credit, NC (No Credit) is posted on the transcript. Courses offered *mandatory Credit/No Credit* are designated in the course listings.
8. Students who have transferred "non-graded" credit to the College must count that credit as part of the maximum 30 hours of "non-graded" credit which may be counted toward an LSA degree. Advanced Placement credit as well as transfer courses for which students earned grades at another institution do not count against the 30-credit limit.
9. Classes at Camp Davis may not be elected on a Pass/Fail basis (effective Spring Term 2012).
10. Non-graded courses *may* be included in a distribution plan.
11. Pass/Fail courses *may not* be included in a plan for the major or in a minor.
12. Experiential and Directed Reading/Independent Study courses that are graded on a Credit/No Credit or Satisfactory/Unsatisfactory basis *may be* included in a major program.
13. The final course in a sequence used to fulfill the Language Requirement *may not* be elected on a Pass/Fail basis. (Effective for all students admitted to the College in Fall Term, 1995 and thereafter.)
14. In computing the grade point average for honorary societies, the *reported letter grades* for "non-graded" elections are computed into the cumulative grade point average.
15. No course elected "Pass/Fail" will receive the Honors notation on the transcript or be counted as an "Honors" course for the Sophomore Honors Award.
16. A student may pay a special fee set by the Registrar's Office and request a specially prepared appendix to the transcript on which the original grades submitted for all courses elected "Pass/Fail" are listed.

# Experiential and Directed Reading / Independent Study

*Effective for all students active in LSA Fall 2013 and thereafter (as well as all August 2013 degree candidates)*

**Approved by the LSA Faculty Winter 2015, made retroactive by the College Curriculum Committee to Fall 2014**

The College distinguishes "Experiential" and "Independent" courses from its other course offerings.

Experiential courses (denoted EXPR in the [Undergraduate Course Catalog](#) and [LSA Course Guide](#)) involve academic work that may take place in a setting other than a university classroom, laboratory, library, or studio and in which the experience is directly related to an academic discipline. Most Experiential Credit is awarded through programs administered by departments and is recorded as credit in one of the departmental Experiential course numbers.

Independent courses may be:

1. Directed Reading/Independent Study courses (denoted INDS in the [Undergraduate Course Catalog](#) and [LSA Course Guide](#)) which are designated by title and not normally offered by classroom instruction;
2. courses normally offered through classroom instruction but occasionally taught on an independent study basis;
3. courses not specially designated as "Independent" and normally offered as classroom instruction but elected by special arrangement with the instructor.

The following limitations apply to Experiential and Directed Reading / Independent Study credit:

1. A combined total of 30 credits of Experiential and Directed Reading / Independent Study courses may be counted in the 120 credits required for a degree.
2. No more than 8 credits may be earned in a single term.
3. Experiential and Independent Study courses are excluded from area distribution plans.

## 60 Credits in One Department

[For the degree](#)

Students electing an area, interdepartmental, or special concentration may count no more than 60 credits in any one department. For BGS students, no more than 60 credits may be elected in *all* SUBJECTs of a department.

## For the major

No more than 60 credits in a major (including courses in one department and the required cognates) may be counted toward the 120 for the degree. When an academic department has two or more SUBJECTs (*e.g.*, Anthropology, Romance Languages and Literatures), a student may count a total of 60 credits from that department, not from each SUBJECT.

No more than 60 credits in one language (other than English) may be counted in the 120 required for a degree. However, the 60 credit limit on courses elected in one major may be exceeded when the excess credits have been used to meet the language requirement.

## Transfer Credit

- Students who transfer from a two-year college are permitted 60 transfer credits (62 if an Associate's degree requiring 62 credits has been completed).
- [Prior to Spring 2014, LSA had the following policy: "Students who have completed 60 credits toward an LSA degree cannot earn degree credit for courses elected at a two-year college. Please note, in order for LSA to accept community college credits toward the 120-credit requirement after the student has already completed 60 credits, the student needs to be enrolled in the community college course as of Spring 2014 or later. LSA will not allow students who took the course prior to Spring 2014 and who had >60 credits at the time they took the community college course, to count toward their 120 credits regardless of when they send their transfer transcript to U-M. Because the Curriculum Committee explicitly decided to make the new policy effective this Spring 2014 and NOT make it retroactive, the Academic Standards Board will not entertain petitions for students who took community college credit prior to Spring 2014 and want it to count toward their 120-credit requirement. As always, community college credit taken prior to Spring 2014 can count toward other LSA general requirements regardless of how many credits the student has completed, including BS and LSA credit, as well as distribution.]
- Up to 60 credits may be transferred from the Flint and Dearborn campuses of the University of Michigan. Courses completed at these campuses are defined as [out-of-residence](#) credit (effective September 1, 1976), even though they carry Michigan Honor Points.
- Even if a course is transferable, credit is not allowed if the final grade earned is "C-" or lower. This includes all transferable credit earned outside the University of Michigan. (All credits and grades from the University of Michigan-Dearborn and -Flint campuses transfer.)
- Credit cannot be transferred from another school if that credit is also being counted toward another baccalaureate or graduate or professional degree. ["Special Joint Degree Programs"](#) are exceptions to this policy.

## Credit from Dual Enrollment Programs while in High School

Students interested in electing out-of-residence credit should consult the [Office of Undergraduate Admissions' website](#) about transfer equivalencies and an academic advisor about the appropriateness of the intended elections. Tables of [transfer equivalencies](#) are available on the College website.

Students who wish to take a course not listed on the equivalency tables may have that course evaluated by using a Transfer Credit Equivalency form (formerly the Out-of-Residence form). This form can be completed [online](#).

If credit elected out-of-residence is to be included in a plan for the major, approval should be obtained *in advance* from a department advisor.

The language requirement cannot be fulfilled by out-of-residence credit that is elected after the student has begun degree enrollment in LSA unless the appropriate language department has approved that plan in advance.

Seniors planning to elect the final portion of the senior year out of residence should contact the LSA Academic Auditors prior to leaving campus for information about procedures to avoid a delay of graduation.

LSA students who elect courses which duplicate Advanced Placement or transfer credit will receive degree credit and honor points (for graded courses) for the LSA election while credit for the duplicated Advanced Placement or transfer courses will be deducted. The only exceptions to this policy are courses transferred from another school or college on the Ann Arbor campus of the University of Michigan or from UM-Flint or UM-Dearborn. In these cases, courses elected in LSA which duplicate the transfer courses are posted on the academic record as "repetitions" or "not for credit" elections. The original course elections continue to appear on the academic record for degree credit, and grades earned in these courses continue to be computed in the grade point average.

Students electing courses in LSA which are prior to those in a course sequence for credits already awarded via transfer credit will have the transferred credits deducted, and the credits and honor points earned by the LSA elections will stand. This could mean losing credit for several courses while retaining credit for only one (for example, transfer credit for one or more terms of foreign language can be deducted because of subsequently completing the first term of that language at the University of Michigan).

Official transcript(s) of the completed transfer work should be sent to:

**The Office of Undergraduate Admissions  
University of Michigan  
300 Student Activities Building  
515 East Jefferson Street  
Ann Arbor, MI 48109-1316.**

## **Repetition and Out of Sequence**

[Repetition of Courses](#)

**Effective Spring 2015**

If a course was taken in residence and a grade of A+ through C, P, CR, or S was earned, then repetition of this course results in no additional credit or honor points. The course and grade appear on the transcript with the notation "Not for Credit." A student repeating a course in which C- through D- was previously earned will receive honor points but no additional credit toward a degree. The course appears on the transcript with the notation "Repetition." Repetition of a course in which an E, F, or U grade was originally earned produces both credits toward a degree and honor points for courses elected on the graded pattern; there is no special transcript notation. In all such cases, the first election and grade earned remain on the transcript. The grades earned by repetition of courses are not averaged and posted as a single entry; but are posted as separate elections.

#### Previous Repetition of Courses Policy

If a course was taken in residence and a grade of A+ through C-, P, CR, or S was earned, then repetition of this course results in no additional credit or honor points. The course and grade appear on the transcript with the notation "Not for Credit." A student repeating a course in which D+ through D- was previously earned will receive honor points but no additional credit toward a degree. The course appears on the transcript with the notation "Repetition." Repetition of a course in which an E, F, or U grade was originally earned produces both credits toward a degree and honor points for courses elected on the graded pattern; there is no special transcript notation. In all such cases, the first election and grade earned remain on the transcript. The grades earned by repetition of courses are not averaged and posted as a single entry; but are posted as separate elections.

#### Out of Sequence Courses

Students should assume that once they take an in-residence course in a sequence (chemistry, mathematics, language, and others), they cannot receive credit for taking a prior course in the sequence. For example, a student who took SPANISH 231 after taking and passing SPANISH 232 on the Ann Arbor campus would not receive credit for the SPANISH 231 course.

Students who transfer in credit for a course in a sequence should assume they will lose credit for that course if they take a prior course in the sequence in residence at Ann Arbor. For example, a student taking MATH 115 in Ann Arbor after transferring credit for MATH 116 from another institution would lose the credit for the MATH 116 course.

Students should contact a LSA academic advisor if they have questions about whether or not a course is part of a sequence.

## Special Kinds of Credit

As a part of your LSA degree you can use up to 60 credits as out-of-residence credit, which can take the form of test credit or transfer credit.

# Test Credit (AP, CLEP, IB, A-Level, etc.)

## College Level Examination Program (CLEP)

[College Level Examination Program](#) offers general and subject examinations that can be used to gain college credit. The assumption is that the exams measure learning or knowledge gained through experiences outside of the traditional classroom. The faculty at U-M will not accept any of the GENERAL EXAMS. It is possible for students to get CLEP credit for some of the subject exams if they were taken before matriculation at the University of Michigan. Credit will not be given for any CLEP exams taken after the student enrolls at U-M.

Please note that the U-M is NOT a testing center for any CLEP exams.

## A-Level and Other International Advanced Standing Credit Guidelines

Students who are pursuing or who have completed A-level exams will generally be awarded advanced standing ranging between 6 and 10 credit hours for certain advanced or principal level examinations completed with a grade of D or better. Three to five credits may be awarded for certain A/S exams with an acceptable grade.

Your transfer credit from another university or your A-Level credit should be evaluated by Undergraduate Admissions by the time you meet with your academic advisor at Orientation. Your advisor will explain how these courses might be used to meet prerequisites or in your distribution plan.

International advanced standing credit guidelines can be found on the [Undergraduate Admissions website](#).

## International Baccalaureate (IB) Credit

### International Baccalaureate (IB) Credit

To receive credit for International Baccalaureate (I.B.) examinations, an official Transcript of Examination Grades must be sent by the I.B. Office (New York, Geneva, or London) directly to the Office of Undergraduate Admissions. The Office of Undergraduate Admissions generally awards credit for I.B. higher level examinations passed with scores of 5 (or in some subjects, 4) or above. The University does not give credit for subsidiary level examinations.

IB credits are treated as equivalent to college course credit and may be used in a distribution plan.

# Advanced Placement (AP) Credits

## AP Credit: Summary

Students may receive credit for Advanced Placement exams they complete in High School. Policies governing AP credits vary from department to department. In some cases a score of 3 or better on the AP exam may be enough to receive credit. In other cases, a 4 or better is required on the exam. In still other cases students need to take an additional course or to meet with a department advisor in order to receive credit. As a result, it is essential that you discuss AP credits with your Academic Advisor at orientation.

If you have not had your AP scores sent to the U-M, go to the College Board AP Exam Grades web site: [www.collegeboard.com/student/testing/ap/exgrd.html](http://www.collegeboard.com/student/testing/ap/exgrd.html) and click on "Grade Reporting Services," or call (888) 225-5427.

**Your AP credit cannot count toward any LSA requirement other than the language requirement.**

For a tentative list of AP credits, please refer to the University of Michigan Admissions web site.

# Credit by Examination (CBE)

Recognizing that students may have background in particular academic areas, the faculty has left it to each department to decide if it is possible for students to earn credit by examination. While the opportunities are quite limited, the amount and type of credit in any area is determined by the academic department(s) in which a student feels qualified to seek credit by examination.

Some departments recognize certain subject area College Entrance Examination Board [College Level Examination Program \(CLEP\) examinations](#) and grant credit on the basis of specified performance on such examinations. All CLEP credit is evaluated as incoming transfer credit, and questions regarding CLEP credit should be addressed to the Office of Undergraduate Admissions. Only those CLEP examinations specifically accepted by academic departments at the University of Michigan may be used to certify credit by examination toward a degree. Credit will not be given for any CLEP exams taken after the student enrolls at U-M.

In addition to, or in place of, CLEP examinations, some academic departments have prepared examinations that are administered on campus. Questions regarding such departmental examinations should be directed to the respective department.

Credit earned by examination is [out-of-residence credit](#). It is posted on a student's transcript as credit earned toward the degree but without honor points and is identified by the notation "Credit



by Examination." Failure to pass a departmental examination is not noted on a student's transcript or in a student's academic advising file.

# International Advanced Standing Credit Guidelines

## Retroactive Language Credits

LSA students may earn up to a maximum of 8 retroactive credits for prior academic work completed in French, German, Hebrew, Latin, Modern Greek, and Yiddish. To earn these credits students must complete an upper-level course into which they were placed with a grade of B or better.

### Details and Restrictions

1. This policy is effective for all students whose first term of enrollment in LSA is Fall 1997 or after. Students who entered LSA before Fall 1997 are not eligible for retro-active language credit.
2. Students must successfully complete a designated course on the U-M—Ann Arbor campus with a B or better.
3. The course taken to earn retro-credits must be the first college course in the foreign language and must be designated as appropriate for this purpose by that department.
4. Although there is no time limit on retro-credit, students are advised to complete coursework and apply for retro-credits within their first year of enrollment in LSA.
5. Taking a designated course Pass/Fail disqualifies students from receiving the retroactive credit.
6. Transfer students are not allowed to earn double credit for the same work. That is, transfer students may either receive transfer credits for the foreign language or retroactive credits given through successful completion of the designated course, but not both.
7. Students may receive a maximum of 8 credits through AP/IB examination and/or retroactive credits. For guidelines on AP/IB credit, consult an LSA academic advisor or the relevant language department.
8. Retroactive language credits are available only to students who began learning French, German, Hebrew, Latin, Modern Greek, or Yiddish as a second/non-native foreign language, primarily in a school setting. Students with native language fluency (*i.e.*, students who learned the target foreign language in ways other than formal schooling/instruction) are **not** eligible to earn retro-credits in that foreign language. Unusual cases will be addressed by the individual departmental department advisors.

### How to Apply for Retroactive Credits in French, German, Hebrew, Latin, Modern Greek, and Yiddish

1. If your placement is 232 (202 for Hebrew and Modern Greek), enroll in 232 (202 for Hebrew and Modern Greek). If you have placed out of the language requirement, enroll in a designated upper-level language course in that language.

2. Fill out the [Application for Retroactive Credits](#). Return this form to your instructor as early as possible during the term.
3. Complete the course with a grade of B or better.
4. The department will forward it to the [LSA Academic Advising Center](#) or the [Honors Program](#) Office for authorization.

If you are awarded credits, approximately 2 months after the end of the term, it will appear on your transcript as “Credit By Exam.” If the term has ended and you have not applied for retroactive credits turn in your application at the LSA Academic Advising Center, 1255 Angell Hall.

## Transfer Information & Residence Policy

LSA students may transfer credits from other colleges and universities, either before enrolling in LSA or while enrolled in LSA. Transfer credits are subject to the following guidelines.

### Residency Policy

- It is your responsibility to review and understand the Residency Policy:
  - Up to 60 credits may be transferred from other colleges and universities to count toward the 120 required for a LSA degree. Students who have completed an associate’s degree that required 62 credits may transfer 62 credits.
  - Thirty of a student's last 60 credits must be taken in residence (on the Ann Arbor campus, a U-M sponsored study abroad program, Michigan in Washington, or Semester in Detroit).
  - Cross-campus transfer students may receive credit for a maximum of 90 credits from a previous college or school on the Ann Arbor campus. No more than 60 of these 90 credits may have been completed at other institutions. LSA residency requires that a student earn 30 credits in the College of Literature, Science, and the Arts.

### Transferring Credit to U-M Ann Arbor

- **Transfer course equivalencies:** It is the responsibility of the student to confirm that a course will transfer before enrolling in the course.
  - Students can check to see if a course has been approved for transfer through the Transfer Credit Equivalency(TCE) webpage at [http://www.ugadmiss.umich.edu/TCE/Public/CT\\_TCESearch.aspx](http://www.ugadmiss.umich.edu/TCE/Public/CT_TCESearch.aspx).
  - If a course is not listed on the TCE, current U-M students may request a pre-evaluation from the Office of Undergraduate Admissions by completing an online form at [https://www.ugadmiss.umich.edu/TCE//Student/CT\\_TCEForm.aspx](https://www.ugadmiss.umich.edu/TCE//Student/CT_TCEForm.aspx).
- **Grades:**

- Only courses with a grade of C or better will be accepted for transfer credit. This includes all transferable credit earned outside the University of Michigan (all credits and grades from UM-Dearborn and UM-Flint transfer).
  - Except for courses from UM-Dearborn and UM-Flint, grades for classes taken at other institutions do not transfer and will not factor into a student's U-M GPA.
- **Transferring credits from UM-Dearborn and UM-Flint:**
  - Grades earned for courses at UM-Dearborn and UM-Flint transfer and are included in the student's UM-Ann Arbor GPA.
  - Courses completed at UM-Dearborn and UM-Flint are defined as out-of-residence credit even though they are included in the student's UM-Ann Arbor GPA.
- **Limitations on transfer credit:**
  - For all transferable credit earned outside of the University of Michigan, only courses with a grade of C or better will be accepted. All courses taken at UM-Dearborn or UM-Flint will transfer regardless of grade.
  - Credit cannot be transferred from another school if that credit is also being counted toward another baccalaureate or graduate or professional degree. [Special Joint Degree Programs](#) are exceptions to this policy.
  - While LSA will accept some online courses, it is important to know that several departments prohibit any and all online courses from transferring to the U-M. These exceptions are noted on the [Transfer Credit Equivalency \(TCE\) site](#).
- **Credit Conversion:**
  - Courses taken at a institution on the quarter system: If you have taken courses at an institution that uses quarter credits, your quarter credits will be converted to semester credits. Each quarter credit hour typically converts to 0.67 semester hours.
  - Courses taken at institutions outside the United States: If you have taken courses at an institution outside the United States, the credits will be converted to U-M semester credit. The conversion differs based on the credit system of the country in which you took the courses. International students should be aware that the number of credits approved for transfer might differ significantly from what appears on your transcript from your previous institution.
- **Dual enrollment while in high school:** College credits completed through Dual Enrollment while a student is in high school is subject to the [Dual Enrollment Policy](#).
- **[Dual enrollment with another college or university:](#)** To take a class or classes at another college or university while also enrolled at U-M in the same term, students must get permission from the Academic Standards Board (Honors students follow the procedures established by the Honors Office; Residential College students follow RC procedures).
  - To request permission, students must e-mail LSADualEnroll@umich.edu from their umich account and provide their full name, UMID, term of dual enrollment, the name of the other school, the course(s) they plan to take at the other institution, and their rationale for doing so. Students will receive a response by e-mail within 5 business days letting them know if their request is approved.
  - Even if the courses from the other school are transferable, the transfer credit will not be posted without this approval.

- **Submitting Transcripts:** To receive credit for classes taken at another institution, students must have an official transcript sent to:

Credit Evaluators, Office of Undergraduate Admissions

300 Student Activities Building

515 East Jefferson

Ann Arbor , MI 48109-1316

Or if electronically: [oua.transcripts@umich.edu](mailto:oua.transcripts@umich.edu)

- **Submitting Transcripts from Chinese Universities:** Students must arrange for an official CHESICC "verification report" to be sent directly to the Office of Undergraduate Admissions by the CHESICC China Credentials Verification, Baiyan Building, NO. 238 Beisihuan Zhonglu, Haidian District, Beijing, P.R. China (Postcode:100191). Tel: 86-10-61139123 or 86-10-61139120, Website: <http://www.chsi.com.cn> or <http://www.chsi.cn>, Email: [kefu@chsi.com.cn](mailto:kefu@chsi.com.cn) or [info@chsi.com.cn](mailto:info@chsi.com.cn).

More information about this policy or other international transfer policies can be found on the [Undergraduate Admissions website](#).

- **Transfer Credit posting:** Courses approved for transfer will be posted to a student's U-M transcript in one of the following ways:
  - **Equivalent Credit:** Courses granted equivalent credit have descriptions that closely match the descriptions of courses taught at UM–Ann Arbor. These courses will appear on the University of Michigan transcript with a U-M course number assigned (e.g., CHEM 130; ENGLISH 125).
  - **Departmental Credit:** Courses granted departmental credit have descriptions that do not match a specific course in a department at UM–Ann Arbor, but are recognized as credit earned in a specific department. The course is assigned a three-digit departmental number (e.g., CHEM 101X; ENGLISH 202X). The first digit indicates the course level: 100, 200, 300, 400, etc. The third digit represents how many courses transferred in that department as departmental credit. The "X" denotes that departmental credit has been granted.
  - **Interdepartmental Credit:** Courses that cover a broad range of topics within a general area of study transfer as interdepartmental credit. These are courses that, because of the scope of their subject material, cannot be assigned to any individual academic department. The course is assigned to an interdepartmental category and is assigned a three-digit course number (e.g., INTERHUM 101X, INTERSS 202X, INTERNS 301X) The first digit indicates the course level: 100, 200, 300, or 400. The third digit represents how many courses transferred as that interdepartmental credit at the same level. The "X" denotes that interdepartmental credit has been granted.

## Applying Transfer Credit Toward LSA Degree Requirements

- All transfer credits are applicable as elective credit, subject to the limit on total number of credits completed out-of-residence outlined in the [Residency Policy](#) and the limit on non-LSA credits outlined in the [Non-LSA Course Work Policy](#).
- In certain circumstances, transfer credit can be used to satisfy individual college requirements or departmental requirements.
  - **Major or Minor credit:** Courses that transfer as equivalent credit to existing LSA courses will typically count towards major requirements just as the U-M version would. Most departments limit the number of transfer credits that can be used toward their majors or minors. See each department's website for specific policies regarding transfer credit. Courses that transfer as departmental credit or interdepartmental credit must be approved by an advisor in your major's home department.
  - **For Area Distribution:** Courses that transfer as equivalent credit to existing LSA courses will typically count towards the same distribution area as the U-M version. Courses that transfer as departmental credit must be approved by an LSA academic advisor to count towards a distribution area. Interdepartmental credit counts toward the corresponding distribution area (e.g. INTERSS 101X counts toward Social Science).
    - Michigan Transfer Agreement Courses: Courses that are part of each Michigan community college's Michigan Transfer Agreement curriculum have been pre-evaluated for distribution credit which is posted at <https://admissions.umich.edu/michigan-transfer-agreement>.
  - **First-Year Writing Requirement:** The Sweetland Center for Writing maintains lists of [approved](#) and [not-approved](#) transfer courses. If your course is not listed on either the approved or not-approved list, you may complete an online [Petition for Transfer Course Credit](#).
  - **Quantitative Reasoning:** Courses transferred from another college or university, even those deemed direct equivalents of LSA courses that meet the QR requirement and transferred as equivalent credit (e.g., MATH 115), do not automatically count for QR credit except in the following circumstances:
    - Transferred courses (minimum three credits) of PHYSICS 125, 126, 140, 240 or any STATISTICS courses (except business statistics) receive QR/1 credit.
    - QR is considered fulfilled for all science, math, and computer science majors who transfer in all the prerequisites for their specific major.

For other quantitative coursework, students may [petition the Academic Standards Board](#) to be allowed to satisfy the QR requirement with a class transferred from another institution.
  - **Race & Ethnicity:** Transfer credit cannot be used to satisfy Race and Ethnicity except by successful petition after the completion of the course.
  - **Language Requirement:**

For entering transfer students, the language requirement may be fulfilled by a course at the previous institution that has been approved for transfer by the appropriate department for transfer as credit equivalent to the fourth semester course at UM.

For current LSA students, once you enroll in LSA, you may not elect courses to meet the Language Requirement at another school unless the appropriate language department approves that plan in advance.

- Transfer credit can count toward LSA general requirements and departmental requirements upon approval of general or department advisors, regardless of how many credits the student has completed. For example, you may have 72 transferable credits from a former institution. All of these credits will post to your transcript and can be used to count for requirements, but only 60 of these credits can count towards the 120 credits needed to graduate.

### Cross Campus Transfer

- Individuals who entered U-M as first-year students are eligible to make a cross campus transfer into or out of LSA after they have completed two full terms in their original U-M school or college. The application may be submitted during the second term of enrollment.
- Students who entered U-M as external transfer students may make a cross campus transfer into or out of LSA after at least one full term.
- The GPA of the last term before transfer and the cumulative GPA must both be above 2.0 in order for a student to be eligible to transfer into LSA. Students who wish to make a cross-campus transfer after the freshman year should discuss their plans with an academic advisor; the advisor will assist in selecting an appropriate academic program for the second term of the freshman year. Cross-campus transfer students may receive credit for a maximum of 90 credits from the previous college or school. LSA residency requires that a student earn 30 credits in LSA.

## Registration and Enrollment

- [Accuracy of Schedule](#)
- [Class Attendance](#)
- [Drop/Add](#)
- [Mini-Courses](#)
- [Withdrawal from the College](#)
- [Pass/Fail](#)
- [Full Time vs Part Time Status](#)
- [Class Standing](#)
- [Closed Course, Waitlist, and Override Information](#)
- [Final Exams](#)
- [Dual Enrollment](#)
  - [Dual Enrollment While in High School](#)
  - [Dual Enrollment with Another College or University](#)
- [Readmission](#)

- [Auditing Courses](#)

## Accuracy of Schedule

Students are held responsible for the accuracy of their course elections and are encouraged to keep a printed copy of their schedule. Any changes made to the schedule must be made by the student through [Wolverine Access](#); the instructor cannot handle this process for the student.

Before the end of the third week, students should check the accuracy and completeness (*e.g.*, P/F, properly numbered sections) of their schedule.

- Students need to be sure that a course has been modified properly.  
The accuracy of the Pass/Fail (P/F) designation is particularly important since, after open drop/add, a course cannot be changed from graded to P/F or vice versa.
- Students should ensure that they have no unexpected time conflicts.

Most students can access their schedules at anytime, anywhere (with a computer and Internet access). Students are encouraged to check Wolverine Access to confirm their schedule. A copy of the schedule can also be printed from [wolverineaccess.umich.edu](http://wolverineaccess.umich.edu).

## Class Attendance

### [Policy on Class Attendance](#)

It is critical that students attend classes from the beginning of the term. Even though students may be registered officially for a course, departments may give away a student's place in a course if the student does not attend:

- the first meeting of biology, chemistry, and physics laboratories
- the first meeting of Sweetland Center for Writing courses
- either of the first two meetings of English courses
- the first two meetings of HISTORY 496 and 497
- any of the first two meetings of language courses in the Romance Languages department
- the first two meetings of seminars and lecture courses and the first two lectures and the first discussion/lab section of courses with discussion/lab sections in Communication Studies
- first two meetings of courses in other departments

At the same time, departments are not obligated to withdraw students officially from the course, even though the student has been informed that his/her place in a course has been taken away.

**Students always are responsible for the accuracy of their own schedules.**

Students registered for a course that they do not intend to keep should drop it so that the space is available for other students, and faculty will have an accurate course roster. In most instances,



students are not automatically dropped from a class roster for non-attendance. Classes dropped after the drop deadline will result in a “W” on a student’s transcript whether or not the student has attended.

### Absence from Class Due to Illness or Unanticipated Circumstances

Students are expected to attend class regularly and meet all requirements set by the instructor. When a student misses class because of an illness or unanticipated event, it is the student’s responsibility to notify the instructor and provide an explanation. In the case of documented short-term absence due to illness or other unanticipated circumstance, instructors should provide reasonable effort to accommodate the student in a way that maintains the integrity of the class.

### Requiring Documentation for missing assignments

If the student’s absence due to illness causes the student to miss an assignment, an exam or any other required work for the class affecting the course grade, the professor has the right to require additional documentation verifying the cause of absence. If the instructor excuses the absence, the options available to make up that missed work may be limited and will be determined by the instructor within the limits of the course.

Students are held to the expectations outlined in the *LSA Community Standards of Academic Integrity* when seeking any accommodation due to absence.

### Students Representing the University in an Official Capacity Off-Campus

There may be instances when students must miss class due to their commitment to officially represent the University. These students may be involved in the performing arts, scientific or artistic endeavors, or intercollegiate athletics. Absence from classes while representing the University does not relieve students from responsibility for any part of the course missed during the period of absence.

Within reason, an instructor should provide appropriate arrangements to the student for missed work, providing such accommodations does not place unreasonable burden on the instructor or fundamentally alter the integrity of the course. When the absence coincides with an exam or other assignment due date, the options to make up that missed work may be limited and will be determined by the instructor within the boundaries of the course.

For further information, see the [Office of the Provost's letter](#) to the University community or consult with your department's chair.

### Religious-Academic Conflicts

It is the policy of the University of Michigan to make every reasonable effort to allow members of the University community to observe their [religious holidays](#) without academic penalty. Absence from classes or examinations for religious reasons does not relieve students from



responsibility for any part of the course work required during the period of absence. Students who expect to miss classes as a consequence of their religious observance shall be provided with a reasonable alternative opportunity to make-up missed academic work. It is the obligation of students to provide faculty with reasonable notice of the dates on which they will be absent. When the absence coincides with an exam or other assignment due date, the options to make up that missed work may be limited and will be determined by the instructor within the boundaries of the respective class.

## Drop/Add

**The College expects students to finalize their academic schedules in the first three weeks of a term (first two weeks of a half-term). Later changes may be made according to the policies described below.**

Courses dropped in the first three weeks of a term (first two weeks of a half-term) do not appear on the academic record. Thereafter, all courses officially dropped appear on the transcript with a "W" notation indicating withdrawal. *For students in their first fall or winter term at the University of Michigan, the W(s) are expunged from the official transcript after the term is completed.* The "W" means that the student dropped a course after the third week of a Fall or Winter Term (second week of a half-term) and that the College accepted the reason(s) for the drop and gave its approval.

Failure to complete a course or to secure approval for a late drop of the course results in the transcript notation Unofficial Drop (ED) which is averaged into the term and cumulative grade point averages as a failing grade (E). Courses elected on a non-graded pattern do not affect the term or cumulative grade point averages.

*Weeks one through three of a term (weeks one through two of a half-term):*

Students may make drop/add changes without advisor approval when these changes result in an academic schedule of 18 credits or less during a term (9 credits in a half-term). Programs of more than 18 credits during a term (more than 9 credits during a half-term) require advisor approval as do all course changes made by Honors students. Adds of classes that are closed or require permission of instructor must be accompanied by an *electronic permission* from the department. **Students are responsible for any work assigned in the course from its beginning, regardless of the date of election. Therefore, it is important to talk with the course instructor about work assigned to date *before* adding a course in the second or third week.**

Since the tuition and fee assessment is not set until the end of this three-week period (two weeks in a half-term), a student dropping below 12 credits (six in a half-term) will be assessed a lower tuition charge.

*Weeks four through nine of a term (three through five of a half-term):*

The deadline for students to submit their Late Drop/Add request is 11:59 PM EST on the Late Drop/Add Deadline. W's are posted for courses dropped during this period, regardless of the reason for the drop.

Students requesting a late drop must:

1. Go to their Backpack/Registration page in Wolverine Access and select the DROP tab at the top of the screen.
2. Select the class, click "Drop," then click the green button "Request Late Drop."
3. Answer the questions and click "Submit Request" at the bottom.
4. Click "OK" on the confirmation page. Students will receive a confirmation email.

Students requesting a late add must:

1. Go to their Backpack/Registration page in Wolverine Access, select the class to add, click "Proceed to Step Two," then click "Finish Registering."
2. Click on the green button "Request Late Add."
3. Answer the questions and click "Submit Request" at the bottom.
4. Click "OK" on the confirmation page. Students will also receive a confirmation email.

All requests to add courses must be accompanied by an electronic permission entered by the department. Honors students follow the procedures established by the Honors Office; Residential College students follow RC procedures.

Students are encouraged to meet with an advisor to discuss the request and its impact on the student's program. In some instances, students may need an advisor's approval to drop the course.

Fees are not reduced even if a student drops below 12 credits (six in a half-term).

*Week ten through the last day of classes of a term (after the end of week five through the last day of classes for a half-term):*

Only the most serious circumstances warrant dropping a course after the ninth week of the term. Fear of failing the course or no longer needing the course in a degree program are not considered valid reasons for granting approval to drop a course in this period.

In order for the Academic Standards Board to grant a drop at this time, some non-academic, extraordinary event (like serious illness or a severe personal disruption) would have occurred after the ninth-week (after the fourth week of a half-term) drop deadline and would make completion of a course or courses very difficult if not impossible; the Board assumes that the student's academic performance up to the point of the disruptive event has been satisfactory.

Students wishing to drop a class must fill out a [Petition for an Exception to the Late Drop Deadline Form](#), with their instructor. This form is available online or at the [Newnan LSA Academic Advising Center](#), 1255 Angell Hall.

The course instructor or GSI must complete the pertinent sections of the form. In addition, the student must meet with an academic advisor to discuss the circumstances and possible consequences surrounding the student's request. The instructor's and advisor's signatures on the form indicate that the student has discussed the request for a drop with them, but does not indicate approval. That decision is made by the Academic Standards Board.

Students who want to add a course after the ninth week of the term (after the fourth week of a half-term) must obtain and complete a [Petition for an Exception to the Late Add Deadline Form](#), which is available online or at the [Newnan LSA Academic Advising Center](#), 1255 Angell Hall. The Academic Standards Board reviews these add and drop requests and will respond to the student via e-mail.

*After the last day of classes of a term (or half-term):*

Students wanting to request a drop of a class from a previously completed term may do so by [petitioning](#) the Academic Standards Board. While the Board rarely grants retroactive drops of individual courses, students whose situation meets the following criteria should consult with a Board member (734.764.0332) about the possibility of the drop:

- Something non-academic and unexpected occurred after 9<sup>th</sup> week drop deadline of the term that impeded completion of course.
- Student must provide documentation of the event to verify the date of its occurrence and its severity.
- Student had been passing the class up to the occurrence of the event which had to occur after the late drop deadline.
- Instructor must describe the student's performance in the course including the grades and the dates of exams and assignments.
- Instructor must verify that the student did not take the final/finish the final project.
- The instructor must verify that the student did not ask for an incomplete.
- Student must explain why the event affected that course and not the others.

Students must meet with a Board member **before** they submit the [petition](#). Students should include a copy of the [petition](#) cover sheet with their written statement. Students may make requests for retroactive drops no later than **one year** past the end of the term of the course in question. Because this petition requires documentation and statements from the course instructors, it is best to write the petition sooner rather than later.

Describing the chronology (with exact dates) of the event(s) which affected a student's completion of the course(s) is crucial to the strength of your petition. The documentation provided should verify the occurrence and severity of the event(s). The Board is unlikely to grant a request for a retroactive drop without clear documentation, and will not grant a request that does not meet the above criteria.

# Mini-Courses

1. "W" and fee deadlines may differ for mini-courses. Check the [LSA Course Guide](#) for specific deadlines for individual courses
2. Students requesting a late drop of a mini-course must obtain a *Request for Late Drop of Mini-Courses Only* form and *Election Worksheet* from 1255 Angell Hall. Students who are adding a mini-course must obtain the *Request for Late Add* form and *Election Worksheet*. After the ninth week (four-and-a-half week of a half-term) students must obtain the *Exception to the Late Add Policy* form and *Election Worksheet* from 1255 Angell Hall. All requests to add mini-courses must be accompanied by an *electronic permission* entered by the department.

All requests to drop or add mini-courses submitted after the applicable free drop/add period are decided by the Academic Standards Board.

# Withdrawal from the College

*The "withdrew" notation will appear on the transcripts of students who withdraw from all of their classes after the third week of a full term (or after the second week of a half term), including those students in their first term at the University of Michigan.*

Students who have early registered for a term or half-term but who subsequently decide not to return to the University should notify:

Office of the Registrar  
LSA Suite 5000  
500 S. State Street  
Ann Arbor, MI 48109-1382  
Fax: 734.763.9053  
email: [ro.registration.questions@umich.edu](mailto:ro.registration.questions@umich.edu)

Include name, UMID number, term(s) to disenroll, signature.

To avoid a disenrollment fee, notification of intention to disenroll must be received before the first day of classes.

Students who wish to withdraw once classes have begun should contact the Academic Advising Center, 1255 Angell Hall, 734.764.0332. Students who withdraw within the first three weeks of the term (two weeks for a half-term) are assessed a disenrollment fee plus a registration fee, but the registration will not appear on the student's record. Consult the Registrar's Office website for fee amounts.

Students who withdraw between the fourth and sixth week of a full term or in the third week of a half-term are assessed 50% tuition and the registration appears on the transcript with a "withdrew" notation. These dates are posted for each term on the following website: [ro.umich.edu](http://ro.umich.edu). **Full tuition is assessed after these dates.**

After the sixth week of classes in a full term (third week in a half-term), students wishing to withdraw from the College must make an appointment with a member of the Academic Standards Board. After the late drop deadline (ninth week in a full term or four and a half in a half term), students who withdraw from the term will have a hold placed on their records. These students will be out of registration at least one full term (14 weeks) and must obtain permission from the Academic Standards Board to continue in the College.

For information about withdrawing from a class, see [Drop Policy](#).

### Withdrawal by Not Registering

Students who withdraw from the College simply by not registering for the following term do not need to follow any formal "withdrawal" or "leave of absence" procedures. If they leave in good academic standing, such students are eligible for readmission at any time.

### Disenroll

#### *Before Classes Begin:*

Prior to the first day of the term you may disenroll from the term. Contact the Office of the Registrar.

1. Visit a Student Service Site (2200 SAB or 2202 Pierpont Commons) make sure you have identification
2. E-mail the request to [ro.registration.questions@umich.edu](mailto:ro.registration.questions@umich.edu) (please include full name, id number and term)
3. FAX your request to (734) 763-9053 (please include full name, ID number, term and signature)
4. Mail your request to the Registrar's Office, 2200 SAB., 515 E. Jefferson St, Ann Arbor, MI 48109-1316 (please include full name, ID number, term and signature)

Check the Office of the Registrar's Web site ([ro.umich.edu/](http://ro.umich.edu/)) for additional information

### Term Withdrawals

#### *Before Classes Begin:*

Prior to the first day of the term you may disenroll from the term. Contact the Office of the Registrar.

1. Visit a Student Service Site (2200 SAB or 2202 Pierpont Commons) make sure you have identification
2. E-mail the request to [ro.registration.questions@umich.edu](mailto:ro.registration.questions@umich.edu) (please include full name, id number and term)
3. FAX your request to (734) 763-9053 (please include full name, ID number, term and signature)
4. Mail your request to the Registrar's Office, 2200 SAB., 515 E. Jefferson St, Ann Arbor, MI 48109-1316 (please include full name, ID number, term and signature)

Check the [Office of the Registrar's Web site](#) for additional information.

### *Weeks One Through Six:*

Students who wish to withdraw once classes begin must contact the Academic Advising Center and fill out the [Term Withdrawal](#) form. The form may be obtained from our web site. You can do any of the following:

1. Visit the Academic Advising Center (1255 Angell Hall) make sure you have identification
2. E-mail the Term Withdrawal form to [academicstandards@umich.edu](mailto:academicstandards@umich.edu)
3. FAX the Term Withdrawal form to (734) 764-2772
4. Mail the Term Withdrawal form to Academic Standards, 1255 Angell Hall, 435 S. State Street, Ann Arbor, MI 48109-1003.

Students who have early registered and subsequently withdraw after the term begins will be responsible for the registration and disenrollment fees regardless of their class attendance. To avoid a disenrollment fee, notification of intention to disenroll must be received **before** the first day of classes.

Students who withdraw within the first three weeks of the term (two weeks for a half-term) are assessed a \$50 disenrollment fee plus an \$80 registration fee (\$40 for a half-term), but the registration will not appear on the student's record. Students who withdraw between the fourth and sixth week of a full term or in the third week of a half-term are assessed 50% tuition and the registration appears on the transcript with W's and a withdrew notation. These dates are posted for each term on the following website: [ro.umich.edu/termwd.html](http://ro.umich.edu/termwd.html). Full tuition is assessed after these dates.

### *After Week Six:*

**After the sixth week of classes during a full term (third week in a half-term)**, students who intend to withdraw from the College must make an appointment with a member of the Academic Standards Board. Students who withdraw after the middle of a term may be required to obtain permission from the Academic Standards Board before continuing in the College.

### **Drop (W) / Official Withdrawal / Unofficial Withdrawal (ED)**

If a student withdraws officially from a course after the first three weeks of a full term (first two weeks of a half-term), the course is recorded on the transcript with a W notation; neither credits toward a degree program nor honor points are earned.

### **Request for Term Withdrawal (PDF)**

Students who wish to withdraw once classes have begun should contact the Academic Advising Center. Students who withdraw within the first drop/add period are assessed disenrollment and registration fees, but the registration...

Retroactive term withdrawals are rarely granted. If you feel you have extraordinary circumstances that warrant an exception, make an appointment with a Board member by calling 734-764-0332. The Board member will review your situation and the petition guidelines with you. You must have this appointment before you can submit a petition. Your petition must

include a completed [petition cover sheet](#), an instructor statement for each class, and documentation of the extenuating circumstances. You must make a case that you were unable to finish your classes and present a compelling reason why you were not able to request a withdrawal during the term. Non-attendance alone is not sufficient.

Note that there is a ONE-YEAR time limit for these requests. It's to your advantage to begin the petition process as soon as possible. Be sure to review the Pre-Submission checklist to learn about the possible implications of a retroactive withdrawal. See the [petition cover sheet](#) for additional details and instructions.

In most cases students will be notified of a decision within 7 to 10 business days of submitting the petition.

## Pass/Fail

You are allowed to take up to 30 credits Pass/Fail or Credit/No Credit. (Pass/Fail is an option. Credit/No Credit is a mandatory grading pattern established at the course level.)

Keep the following guidelines in mind:

- No class in your concentration or academic minor may be taken Pass/Fail.
- The 4<sup>th</sup> term of your language requirement may not be taken Pass/Fail.
- You have until the end of third week of a full term to decide if you want to modify a class Pass/Fail.
- You must earn at least a C– to receive a Pass for a class.

Other factors to consider:

- Instructors do not know you are taking courses Pass/Fail unless you tell them.
- Pass/Fail grades do not calculate into your GPA.
- You should NOT take pre-professional requirements (pre-med or pre-business courses) as Pass/Fail.
- You should always take your coursework seriously. Do not slack off on work in a Pass/Fail class.
- If in doubt about taking a class Pass/Fail, talk to your Advisor.

You make a course Pass/Fail by adding the election modifier "P/F" via [Wolverine Access](#). You may do this any time after you have registered for the course, up until the third-week Open Drop/Add deadline. You may remove the P/F modifier just as easily, also up until the third week deadline. After the third week, it is impossible to add or remove the P/F modifier.

### [Detailed Information about Non-Graded Courses \(P/F, CR/NC, S/U\)](#)

Students may count a maximum 30 non-graded credits toward the 120 credits required for a degree. Non-graded credits are earned in courses for which no letter grade (A through E) is

recorded on the transcript. Only those non-graded credits actually earned are counted as part of the total number of non-graded credits applicable toward a degree.

1. A student cannot choose to elect a course by the CR/NC and S/U grading patterns; the *optional* non-graded pattern is P/F.
2. Non-graded courses earn credit toward a degree but not honor points. Therefore, "Pass" (or "Credit") grades do not enter into the computation of the term or cumulative grade point averages.
3. *A change in grading pattern for a course is not permitted after the first three weeks of a full term (first two weeks of a half-term).* Grading pattern choices must be modified through the registration system. Courses elected after the third week of a term may not be elected on a non-graded basis unless the course is offered as a "mandatory non-graded" course. The only exceptions to this policy are *short courses* (e.g., EARTH 101-115) which have started after the beginning of the term. In these cases, the grading pattern may not be changed after the second week of class. **The Academic Standards Board does not grant exceptions to this policy.**
4. *The College holds students responsible for ensuring the accuracy and completeness of their class schedule.*
5. Instructor approval is not required for a choice in the elected grading pattern nor should the instructor be informed of such a choice. Instructors report letter grades (A through E) for all students in their courses, except in mandatory CR/NC courses. In the case of a student who has chosen to elect a course "Pass/Fail," the Office of the Registrar converts the letter grades according to the following policies:
  - Grades of A through C– are posted on a transcript as "P" (Pass); credit toward a degree is earned.
  - Grades of D through E are posted on a transcript as "F" (Fail); no degree credit is earned.
6. In the case of an incomplete course elected "Pass/Fail," credit is posted only when the work has actually been completed and a grade of at least C– has been reported. "Pass/Fail" courses which are not finished lapse to "Fail," although the term and cumulative grade point averages remain unaffected.
7. If the instructor of a mandatory Credit/No Credit course believes that the amount and quality of a student's work is such that it deserves credit, CR (Credit) is posted on the transcript. If the instructor believes that a student's work does not justify the awarding of credit, NC (No Credit) is posted on the transcript. Courses offered *mandatory Credit/No Credit* are designated in the course listings.
8. Students who have transferred "non-graded" credit to the College must count that credit as part of the maximum 30 hours of "non-graded" credit which may be counted toward an LSA degree. Advanced Placement credit as well as transfer courses for which students earned grades at another institution do not count against the 30-credit limit.
9. Classes at Camp Davis may not be elected on a Pass/Fail basis (effective Spring Term 2012).
10. Non-graded courses *may* be included in a distribution plan.
11. Pass/Fail courses *may not* be included in a plan for the major or in a minor.
12. Experiential and Directed Reading/Independent Study courses that are graded on a Credit/No Credit or Satisfactory/Unsatisfactory basis *may be* included in a major program.
13. The final course in a sequence used to fulfill the Language Requirement *may not* be elected on a Pass/Fail basis. (Effective for all students admitted to the College in Fall Term, 1995 and thereafter.)
14. In computing the grade point average for honorary societies, the *reported letter grades* for "non-graded" elections are computed into the cumulative grade point average.



15. No course elected "Pass/Fail" will receive the Honors notation on the transcript or be counted as an "Honors" course for the Sophomore Honors Award.
16. A student may pay a special fee set by the Registrar's Office and request a specially prepared appendix to the transcript on which the original grades submitted for all courses elected "Pass/Fail" are listed.

## Full Time vs Part Time Status

In defining a normal academic load, a distinction must be made between what load students are permitted to elect and what is recommended.

The College does not require students to be enrolled full time, although this may be a requirement for financial aid or auto or health insurance. To be considered full-time, an undergraduate must be registered in at least 12 credits in a full term or 6 credits in a half-term. Students may elect up to 18 credits in a full term and 9 credits in a half-term without special approval from an academic advisor. Generally, a program of four or five courses totaling 13 to 17 credits is considered typical, and first-year students are usually advised to elect four courses (14 to 16 credits).

Since the considerations for determining academic loads are often complex and personal, the College encourages students to discuss each term's elections with an academic advisor.

## Class Standing

Class standing is determined by the number of credits earned toward a degree:

Class Standing	Credits
First Year:	Fewer than 25 credits
Sophomore:	25 through 54 credits
Junior:	55 through 84 credits
Senior:	85 credits or more

## Closed Course, Waitlist, and Override Information

Closed class information is available from Wolverine Access.

## Closed classes

Each class is listed with a specific number of available spaces. This number is determined by the department offering the course. Classes that reach enrollment capacity during registration will be listed as “closed.” On occasion, classes reopen if a department raises the enrollment capacity of the course and/or adds additional sections.

A student may register for a closed class only by obtaining an override (a permission entered in M-Pathways) for that class. Students obtain overrides from the department. Please refer to the section on “Overrides” located below and check with your department regarding the procedures for granting overrides.

## Waitlists

Waitlist procedures exist to help deal fairly with students who wish to enroll in closed classes. The specific procedures vary from one department to the next and may vary for courses within a department. Waitlists may be administered through Wolverine Access, by departments, or by the individual instructors. Check with your department for procedures that apply to your course. You may indicate your course’s waitlist procedure in the [LSA Course Guide](#). Departments also may indicate a department-wide policy as a summary statement in the *LSA Course Guide*.

Registration waitlists that begin when a course section has filled with registered students serve a number of uses for faculty, departments, and our College. From the students’ perspective, however, there is one important fact to know about how waitlists work. All students should be aware that there is no general rule that when overrides are issued for a class they must be in the order that they appear on the waitlist. The waitlist exists to let the faculty member know who and how many students have waitlisted a particular course section. And while the student names do appear on the list in the chronological order in which students added themselves to the list, no individual faculty member or department is obligated to issue permission numbers by this numerical ordering. It may be felt that other criteria weigh more heavily. For example, class standing (senior, junior, *etc.*) or whether or not the student is a major in the department may be considered more important than what number a student is on the waitlist.

Some courses are of special importance to students – for instance, declared majors or potential majors who need the course for the degree or as a prerequisite to additional work – and faculty may want to accommodate such students. There is often some attrition in the enrollment of a class; it is difficult to predict how much loss of enrollment a class might experience and the impact that overrides might have on the final numbers. Often students will attend a class, even though not officially registered, in the hope that natural attrition will free a space for them. The history of enrollment for the class and the presence of vacancies in other sections of the same class may influence a decision as to whether to issue overrides to students on the waitlist.

## Overrides

Overrides allow all teaching departments to control entrance into those classes that have requirement groups, are by consent of instructor or department only, or are closed. If a class is

“closed” in Wolverine Access or if entry into the class requires permission of instructor, a faculty member may provide an electronic override to allow the election. By giving students permission to enter a closed class or restricted courses with an override, those students can then enroll through Wolverine Access.

Students should contact either the instructor or the department involved for information on obtaining an override. Overrides are NOT available from the Newnan LSA Academic Advising Center or the Academic Standards Board.

## Final Exams

The [Final Exam Schedule](#) is published in the *University Schedule of Classes*. The *Schedule of Classes* is available at <http://www.ro.umich.edu/schedule/>.

The *Faculty Code* states:

"The official examination schedule should be followed; and the instructor may not depart from the schedule."

LSA faculty are expected to follow this policy. Final exams may not be scheduled during regular instructional class time or during Study Days—including on the last day of class—regardless of whether they are called "final exams." The *Faculty Code* allows for the possibility that an individual student might need to take the final earlier or later than the designated time, and such is possible by mutual agreement of instructor and student; but there may not be a class vote, or similar action, to cancel the regularly scheduled time of the exam and substitute another time.

If an instructor wishes to request an official change in the time for your final exam, he/she must contact the Dean's and Registrar's Offices, 1210 LSA Building, 764-6280.

If an instructor, with permission of the Registrar and Dean, changes the published assigned time of the exam, any student who wishes to take the exam at the assigned time must be allowed to do so.

If any student is assigned four examinations during the same day, the student can request a letter from the University Registrar seeking rearrangement of one exam.

[University of Michigan's Final Exam Policy](#)

## Dual Enrollment

LSA allows transferable dual enrollment credits to count toward LSA requirements and degrees. Dual enrollment involves a non-University of Michigan college or university or a high school. For information about special degree programs that are offered by the joint cooperation of LSA and other colleges or schools within the University, please refer to the [LSA joint degrees policy](#).

# Dual Enrollment while in High School

The State of Michigan has mandated that all public universities must award credit for transferable college-level courses taken by high school students. U-M will not consider whether dual enrollment credits earned by an incoming student were utilized towards his or her high school graduation requirements when making a determination as to whether those credits may be used by the student toward completion of a university degree or certificate program.

LSA allows transferable dual enrollment credits to count toward LSA requirements and degrees. Admissions will review dual enrollment credit for [transfer credit](#) and they will post accepted courses to a student's U-M transcript. Students should work with their LSA academic advisor to determine how transfer credits work toward their [degree requirements](#).

## Dual Enrollment Policy (Effective Spring Summer 2013)

The State of Michigan mandated that all public universities, effective January 3, 2013, must award credit for college-level courses taken by high school students. Accordingly, President Coleman signed the following statement which commits LSA to change its policy on dual enrollment credits:

The University certifies that, by January 3, 2013, it will not consider whether dual enrollment credits earned by an incoming student were utilized towards his or her high school graduation requirements when making a determination as to whether those credits may be used by the student toward completion of a university degree or certificate program. (See Lester Mont's January 10 memo to All University Admissions Offices.)

Previously, LSA restricted the granting of transfer credit for incoming students when dual enrollment credits were used to meet high school graduation requirements and/or our own internal admissions requirements. Under our new policy we will lift these specific restrictions and allow transferable dual enrollment credits to count toward LSA degree requirements.

While the State of Michigan mandated broad changes to how public universities treat dual enrollment credit, public universities retain the ability to determine the transferability of dual enrollment courses to their respective institutions. The Deans of all the Schools and Colleges at the University of Michigan reaffirmed this position with the following statement, which re-asserts the right of faculty to determine which courses are suitable for transfer to the respective Schools and Colleges at the University of Michigan.:

High school students who dually enroll for courses at accredited institutions of higher education may receive credit for work taken at these institutions for courses that have been recognized for transfer to the University of Michigan in accordance with the University's transfer credit policy. Acceptance of courses and credits deemed suitable for transfer to the University of Michigan is determined by faculty in the department, school, or college responsible for instruction in the subject area. Among factors influencing the determination of acceptability are accreditation

status, comparable academic quality, and the relationship of the course to other course offerings in the primary administrative unit and other academic units at the University of Michigan, and the basis for student performance evaluation in the course. Additionally, the Office of Undergraduate Admissions will continue to determine which students are eligible for admission to U-M based on the overall strength and quality of the student's academic preparedness. In other words, the Office of Undergraduate Admissions will admit those individuals that present the strongest range of credentials and experiences that are consistent with those of our incoming student body.

Overall, while our new position on dual enrollment will allow incoming students to potentially count more of their dual enrollment credits towards LSA degree requirements, we will retain the ability to assess whether individual courses meet our standards for being awarded transfer credit in the first place. For instance, we will continue to designate courses taught to high school students in a high school setting as non-transferable. That is, as with all potential transfer credit, we must determine that individual courses fully meet the standards and expectation, as set by LSA faculty, for awarding transfer credit to college courses taken while in high school.

LSA Office of the Assistant Dean for Undergraduate Education

Executive Director of the Newnan LSA Academic Advising Center April 2013

Dual Enrollment FAQ

[Does this policy apply to students who started at the University of Michigan prior to January 2013?](#)

No, this policy is not retroactive. Instead it applies only to those students who matriculated to the University of Michigan in Spring 2013 or later. Students who do a cross campus transfer to LSA in Spring 2013 or later will be held to the date that they first enrolled at the University of Michigan in determining if Dual Enrollment credits will be transferred.

[Will U-M give college credit for dual enrollment courses taken during high school?](#)

Yes. High school students who dually enroll for courses at accredited institutions of higher education may receive credit for work taken at these institutions for courses that have been recognized for transfer to the University of Michigan in accordance with the University's transfer credit policy.

[How will I know if the college course\(s\) will transfer to U-M?](#)

See the course equivalencies database website:

[http://www.ugadmiss.umich.edu/TCE/Public/CT\\_TCESearch.aspx](http://www.ugadmiss.umich.edu/TCE/Public/CT_TCESearch.aspx). This website provides information regarding how courses from other institutions will be posted to the U-M transcript.

[How will online college courses be considered for transfer to U-M?](#)

While LSA will accept some online courses, it is important to know that several departments, for example Mathematics, prohibit any and all online courses from transferring to the U-M. Other

departments place significant restrictions on how online courses can be used to meet departmental requirements.

[Is there a limit to the number of college credits that will transfer to U-M?](#)

Yes. LSA will allow a maximum of 60 credits to transfer.

[Will I receive credit if I took a course pass/fail?](#)

It is preferred that transfer courses be taken for a letter grade. You must earn a grade of “C” or higher for a course to be posted to your U-M transcript. Most universities/colleges provide an explanation of the “pass” grade for their institutions. If the institution indicates that the pass grade is a “C” or higher for the transferable course, credit may be awarded.

[Can I use transfer credits to count toward some degree requirements in LSA?](#)

Many degree requirements can be fulfilled with transfer credit. At Orientation, your academic advisor will help you understand how transfer credit applies to specific LSA degree requirements.

[Can I use transfer credits to count toward my major or minor?](#)

Each department in LSA sets its own guidelines for the use of transfer credits towards specific requirements in that program; there are no general rules that govern the process. If you are transferring credits from another institution and you want any of those credits to count toward the requirements of your major, these credits must be approved by your major’s department academic advisor. Transfer courses that are in the department of your major, but are not accepted by your department advisor, may be used as elective credit.

[Will my college courses be evaluated in the admissions review process?](#)

Yes. In order for any student to be considered for admission to LSA, all college transcripts with dual enrollment courses must be submitted. Your admissibility to the University will be based, in part, on the quality of your dual enrollment coursework. Failure to disclose any college-level courses taken prior to matriculating at U-M is considered a form of misrepresentation and may result in revocation of your admission to the University.

[Can I pick and choose which transfer courses I want posted to my U-M transcript?](#)

No. In presenting dual enrollment credits for transfer to the University of Michigan, all of these credits become a permanent part of your U-M record; LSA does not allow students to selectively remove transfer courses from the U-M transcript.

Where do I send my official college transcript for potential transfer credit?

If you took "college" level courses prior to completing your high school or secondary-level program, you should have a transcript sent directly to the address below by mid-June prior to the start of your first year at the University of Michigan:

Office of Undergraduate Admissions

University of Michigan

300 Student Activities Building

515 East Jefferson Ann Arbor, MI 48109-1316

## Dual Enrollment with Another College or University

To take a class or classes at another college or university while also enrolled at U-M in the same term, students must get permission from their College. Honors and Residential College students must follow the procedures established by that Program and Residential College.

Students interested in dual enrollment should send an e-mail to [LSADualEnroll@umich.edu](mailto:LSADualEnroll@umich.edu) from their umich account with the following information:

**Full name**

**UMID**

**Term of dual enrollment**

**Name of the Other School you will be attending**

**Course(s) you will take at the other institution**

**Rationale for dual enrollment**

Students will get a response by e-mail within 5 business days letting them know if their request is approved. Even if the courses from the other school are transferrable, the **transfer credit will not be posted without this approval.**

## Readmission

Readmission to the College

The College of Literature, Science, and the Arts allows readmission of a student previously enrolled if the student left in good academic standing. Students who have been away for less than two years should contact the Office of the Registrar, 500 South State Street, to obtain an appointment for registration. Students who have been absent from the College for more than two

full years (24 months) must apply for readmission by submitting an [Application for Reactivation](#) which is available from the Office of Academic Advising, 1255 Angell Hall. Students also must meet with an [Academic Standards Board](#) member. International students on temporary U.S. visa status (F-1 or J-1) who have missed a full year must contact the International Center to have their visa status updated.

If a student has done academic work out of residence since leaving the College, official transcript(s) of that work should be submitted to the Office of Undergraduate Admissions.

Students suspended from the College for reasons of unsatisfactory academic performance must obtain permission to register from the Academic Standards Board. In these cases, the readmission decision rests entirely with the Academic Standards Board. Such students must make an appointment with a member of the Academic Standards Board *at least eight weeks prior* to the desired readmission term to discuss readmission to the College. Petitions requesting reinstatement should be received by the Academic Standards Board *at least six weeks prior* to the beginning of the term in question.

Individuals with a bachelor's degree who want to earn a second degree must obtain permission from the Office of Undergraduate Admissions. Normally, at least two calendar years must transpire between the awarding of the first baccalaureate degree and the beginning of the second baccalaureate degree program. Applicants must pursue an academic program significantly different from that of the first baccalaureate degree. Except in the case of [joint degrees](#), the College does not award concurrent bachelor's degrees. For graduates of schools and colleges on the Ann Arbor campus, the two baccalaureate degrees should be different (for example, not two Bachelor of Arts or two Bachelor of Science degrees). The second degree program cannot be a [BGS degree](#), and students whose first degree is the BGS degree are ineligible for a second Bachelor's degree. Applicants who already have an LSA degree must earn at least 30 credits in residence in LSA beyond the credits required for the first degree, with at least 15 in the new field of the major. Graduates of another Ann Arbor unit must earn at least 30 credits while registered in LSA. The second program must include a minimum of 100 LSA credits. To be considered for admission to a second baccalaureate degree program, all applicants who have a baccalaureate degree from the Ann Arbor campus of the University of Michigan must have a 2.0 minimum grade point average.

Applicants whose first degree comes from any other institution (including [U-M Dearborn](#) and [U-M Flint](#)) will be required to complete at least 60 credits in residence at the Ann Arbor campus. The student must be registered in LSA for at least 30 credits beyond the credits required for the first degree. The second degree program must include a minimum of 100 LSA credits. To be considered for admission to a second baccalaureate degree program, applicants must have the same minimum grade point average as the College requires for students who transfer from other institutions.

#### [Reinstatement after Suspension](#)

Students may be suspended from the College



1. for incurring a significant honor point deficit in a single term or half-term,
2. for failure to make satisfactory progress toward a degree, or
3. for any other reason deemed sufficient under the policies of the LS&A Academic Standards Board.

Since first year students often experience problems adjusting to college, the Academic Standards Board maintains more liberal policies for them than for other students. As a general rule, unless there is a significant honor point deficit the first term, freshmen are placed on probation and are permitted a second term of enrollment to improve their level of academic performance.

Similarly, transfer students are given special consideration unless the first term's work in residence shows marked inability to meet the academic standards of the College. ***However, there is no automatic, one-term probation period before a student may be suspended from the College.***

#### Readmission/Reactivation

##### Reactivation

A student who has been out of registration for over two years must meet with a Board member and complete an [Application for Reactivation](#) available from the Board member.

Students who left in good academic standing (i.e. were not suspended) will receive an e-mail notifying them that the Board staff has reactivated their record a few days after they have submitted the reactivation application. Once they receive this message, then they can contact the Office of the Registrar to obtain a registration time. The Board member with whom they meet will provide information necessary for registration.

Students who did not leave in good academic standing (were suspended) and who have been out of registration for more than two years also must complete a reactivation application. The Board member with whom they meet for their required readmit interview will provide them with this form.

#### Readmission/Reinstatement

The Board places on academic suspension students whose academic performance is endangering the likelihood of completing a degree program in the College. Suspended students must be out of registration at UM for the 14 weeks of a Fall or Winter semester; students suspended after a Winter semester must be out of registration at least until the next Winter semester. The Board expects most suspended students to complete successfully at least a semester of coursework at another college or university to demonstrate their readiness to resume work at UM. If the student identifies health, mental health, financial or family issues as having largely caused his/her academic difficulties, then the student must address these issues and produce documentation (if appropriate) verifying the issues are manageable or no longer present. A few weeks after receiving the suspension notification, the student can meet with a Board member to determine the most effective strategy for readmission.

Students apply for readmission by writing a petition (letter) to the Board. Prior to writing the petition, students must meet with a Board member at least eight weeks prior to the term they would like to return. At this meeting, the Board member will give the student guidelines for writing the readmission petition, list any documentation the student should include with the petition, and set a deadline for submitting the petition. The student can contact the Board member during the petitioning process if he/she has any questions or concerns about readmission. The Board will review the student's petition and one of the members will e-mail a decision to the student within a week to ten days.

#### Timeline for Reactivation

Specific deadlines vary with the term

See [ro.umich.edu/calendar](http://ro.umich.edu/calendar)

Students should contact the Newnan Advising Center to schedule an appointment with an Academic Standards Board member. At the appointment, the student will be given the Application for Reactivation to fill out. The Board member will then sign the application. Students who are not in Ann Arbor may schedule a phone appointment (International Students who are out of the country do not need to schedule an appointment until they return to campus; International students will be given an electronic form to complete and then submit by email only if form can be signed or by fax).

Reactivation is automatic if the student left in good standing. Once the form has been processed and the student has been reactivated, the student will receive an email along with an Information Sheet.

Reactivation can be done prior to the first day of classes for the term in which the student wishes to enroll. International students should request reactivation *at least six weeks prior* to the term for which they wish reactivation to allow time for the International Center to complete an I-20 Form.

Please note that applications for Spring, Summer or Fall Terms cannot be processed prior to February and applications for Winter Term cannot be processed before October.

## Auditing Courses

Students are expected to elect courses for credit. Occasionally, however, a student may wish to attend a course but not elect it for credit. This arrangement can take the form of an *official audit* (sometimes called *Visitor* status).

An *official audit* obligates a student to attend classes regularly and complete course requirements (e.g., papers, laboratory assignments, tests, and the final examination). Regular tuition fees apply, and the course appears on the transcript with the grade *VI (Audit)*; and no degree credit is earned. To arrange an official audit, a student must submit a [Request for Audit Status form](#) to the Academic Standards Board, 1255 Angell Hall. A request to officially audit a course must be approved by the end of the third week of a full term or second week of a half-term. Students who

do not fulfill course requirements earn the grade ED to indicate that the course was unofficially dropped. In these cases, the term and cumulative grade point averages remain unaffected.

## Your Academic Record

The Academic Record is the official record of a student's course elections, grades, and credits earned toward a degree. Since the academic record is a permanent record of a student's academic performance, it must be correct. Students who believe an error has been made on their academic records should contact the Assistant to the Academic Standards Board (1255 Angell Hall).

LSA academic records are maintained by the Records and Enrollment Department in the Registrar's Office (1210 LSA Building).

## Student Records Policy

All LSA students have an academic advising file containing admissions material, test scores, unofficial copies of academic records, memoranda, correspondence, and notes which academic advisors or members of the [Academic Standards Board](#) have made about their conversations with a student. Information of a sensitive nature may be removed from the academic advising file at the discretion of a member of the Academic Standards Board or at the request of the student and placed in a confidential Dean's file. Dean's files also are created for those students charged with some form of academic misconduct, and for other serious violations of student conduct policies.

Dean's files are maintained in confidence by the Assistant Dean in the Office of Student Academic Affairs.

Students have the right to examine most materials in their own academic files. Students who wish to review their advising files may do so by scheduling an appointment with an academic advisor. Access to Dean's files may be obtained by contacting the [Office of the Assistant Dean](#). Students may request duplicate copies of most information in their academic files at cost. They also may add clarifying notes and other materials to their advising files during regular business hours. Requests for deletions and additions of material from an advising file or a Dean's file should be addressed in writing to the Office of the Assistant Dean.

The [Family Educational Rights and Privacy Act of 1974](#) (FERPA) governs both the release of, and access to, student records in the College and University. Occasionally, instructors may be contacted by parents or others to inquire about a particular student's academic record. It is important to recognize that the release of student information to a third party, including parents, requires the written permission of the respective student. Students may use the online [FERPA release form](#) to authorize release of their advising record and related academic information to third parties. If you have questions about access to student records, contact the Office of the Assistant Dean.

FERPA grants students the right:

- to inspect and review their education records;
- to request amendment of the student's education records that the student believes are inaccurate, misleading, or otherwise in violation of the student's privacy rights under FERPA; and
- to consent to disclosures of personally identifiable information contained in the student's education records, except to the extent that FERPA authorizes disclosure without consent.

Access to individual student LSA advising files is restricted to official university academic advisors, members of the LSA Academic Standards Board, and clerical staff who assist in carrying out official advising or Academic Standards Board functions.

One exception which permits disclosure without consent is disclosure to school officials with legitimate educational interests. A school official is a person employed by the College or University in an administrative, supervisory, academic or research, or support staff position; or a student serving on an official committee, such as a judicial committee or assisting another school official in performing his or her tasks. A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibility.

## Transcripts and Notations

The Academic Record is the official record of a student's course elections, grades, and credits earned toward a degree. Since the academic record is a permanent record of a student's academic performance, it must be correct. Students who believe an error has been made on their academic records should contact the Assistant to the Academic Standards Board (1255 Angell Hall).

LSA academic records are maintained by the Records and Enrollment Department in the Registrar's Office (1210 LSA Building).

A student wishing to have a transcript of the academic record sent to another college or university or to an employer can place an order online from [Wolverine Access](#). You will need a Uniquename and university password and should receive a confirmation number. Requests with paper attachments or needing special services should be brought to a Student Services site, 1210 LSA Building Street or B430 Pierpont Commons.

### **Mailed or faxed requests may be sent/faxed to:**

Transcript and Certification Office  
University of Michigan  
1210 LSA Building  
500 South State Street  
Ann Arbor 48109-1382  
Fax: (734) 764-5556

All requests should include dates of attendance and a student identification number. A transcript of the academic record bearing the official seal of the University of Michigan and the signature of the Registrar is forwarded *directly* to the institution or person specified by the student, assuming there is no outstanding financial commitment from the student to the University. There is no fee for official transcripts. A student has the option of ordering a paper official transcript or an electronic (PDF) official transcript (if the academic record is entirely electronic). A student may request and receive an unofficial transcript, on demand, at a student services site: 1207 LSA Building or B430 Pierpont Commons. The unofficial transcript contains additional information not included in the official transcript. It should not be used in lieu of an official transcript for the purposes of admission or employment. A copy of your unofficial transcript can be obtained from [Wolverine Access](#).

A student may pay a fee set by the Registrar's Office and request a special transcript including an appendix listing the original grades submitted for all courses elected "Pass/ Fail."

A specially prepared transcript indicates which of these options has been chosen. *A request for a special transcript does not permanently revise the original academic record.*

See the [Office of the Registrar](#) for details.

#### Summary of Transcript Notations

##### *Pass/Fail*

P (passed)	credit, no honor points
F (failed)	no credit, no honor points

##### *Credit/No Credit*

CR (credit)	credit, no honor points
NC (no credit)	no credit, no honor points

##### *Satisfactory/Unsatisfactory*

S (satisfactory)	credit, no honor points
U (unsatisfactory)	no credit, no honor points

(The S/U symbols are used by the School of Education.)

##### *Withdrawal/Drop*

W (official withdrawal)	no credit, no honor points
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ED (dropped unofficially)

no credit, no honor  
points

(A notation of ED for a graded election has the same effect on the grade point average as does an E.)

*Incomplete/Work in Progress*

I (incomplete)

no credit, no honor  
points

Y\* (work in progress for project approved to extend for two successive terms)

no credit, no honor  
points

*Official Audit (VI)*

VI (Audit)

no credit, no honor  
points

*Miscellaneous Notations (NR, ##)*

NR (no report)

no credit, no honor  
points

NG (no grade reported)

no credit, no honor  
points

*A notation of P, F, CR, NC, S, U does not affect a student's term or cumulative grade point average. A notation of I, Y, NG, or NR, if not replaced by a passing grade, eventually lapses to E or ED and, for graded elections, is computed into the term and cumulative grade point averages.*

\*LSA Curriculum Committee approval is required to use a Y grade. See "*Grading for a Two-Term Course (Y)*" below.

If an LSA student elects a course in another Ann Arbor unit which is graded on a pattern not indicated here (for example, graduate courses in the Stephen M. Ross School of Business), the grade will be translated by the Registrar to fit with LSA's letter grading scale.

## **Term and Cumulative Grade Point Averages**

The Term Grade Point Average is determined by dividing the total number of Michigan Semester Hours (MSH) elected during a term into the total number of Michigan Honor Points (MHP) earned during the same term. The Cumulative Grade Point Average is determined by dividing the total number of Michigan Semester Hours (MSH) into the total number of Michigan Honor Points (MHP) earned. Notations of Y, I, NR, and NG are not initially calculated into the term or cumulative grade point averages. Notations of I, NR, and NG, if unresolved by the end of the fourth week of the next fall or winter term in residence or by an approved extension deadline, lapse to E or ED and are computed into both the term and cumulative grade point averages, if the course was a graded election.

## Minimum Term and Cumulative Grade Point Averages Required

To be eligible for continued enrollment, a student must earn at least a 2.0 term grade point average and a 2.0 cumulative grade point average. If a student fails to accomplish this, the "honor point deficit" can be determined by multiplying the Michigan Semester Hours (MSH) elected by 2.0 and subtracting the total number of Michigan Honor Points (MHP) earned. Only honor points earned in courses elected at the University of Michigan (Ann Arbor, Dearborn, or Flint campus) may affect the grade point average.

### Grading for a Two-Term Course

A few courses (e.g., senior Honors thesis courses, Global Course Connections, or some Biological Sciences research courses) are approved as "two-term" sequences (approval has to be granted by the LSA Curriculum Committee). In these specially approved cases only, an instructor can report a Y grade at the end of the first-term course to indicate work in progress. When a final grade is reported at the end of the second term, that final grade is posted for both terms' elections. In cases where a Y grade is reported for a course which is not approved to extend for two successive terms, an I (Incomplete) is posted on the transcript and the course is subject to the regular deadline for incompletes. Students needing more time to complete this work must petition the Academic Standards Board for an official extension of the deadline.

### No Report (NR), No Grade (NG)

The instructor should report an NR if a student stops attending before the end of the term, but has not dropped the class or requested an Incomplete. If the NR is not resolved by the fourth week of the next fall or winter term in residence, the NR grade in a graded election is lapsed to an ED.\*The NG is recorded when a student has been registered into a class after the web grade rosters have been sent to the instructor. The NG will convert to an ED\* if unresolved after the first four weeks of the next fall or winter registration.\*An ED carries no degree credit, and the course is computed as an E in the term and cumulative grade point averages.

Students may count a maximum 30 non-graded credits toward the 120 credits required for a degree. Non-graded credits are earned in courses for which no letter grade (A through E) is recorded on the transcript. Only those non-graded credits actually earned are counted as part of the total number of non-graded credits applicable toward a degree. A student cannot choose to elect a course by the CR/NC and S/U grading patterns; the optional non-graded pattern is P/F. Non-graded courses earn credit toward a degree but not honor points. Therefore, "Pass" (or "Credit") grades do not enter into the computation of the term or cumulative grade point averages. A change in grading pattern for a course is not permitted after the first three weeks of a full term (first two weeks of a half-term). Grading pattern choices must be modified through the registration system. Courses elected after the third week of a term may not be elected on a non-graded basis unless the course is offered as a "mandatory non-graded" course. The only exceptions to this policy are short courses (e.g., EARTH 101-115) which have started after the beginning of the term. In these cases, the grading pattern may not be changed after the second week of class. The Academic Standards Board does not grant exceptions to this policy. The College holds students responsible for ensuring the accuracy and completeness of their class

schedule. Instructor approval is not required for a choice in the elected grading pattern nor should the instructor be informed of such a choice. Instructors report letter grades (A through E) for all students in their courses, except in mandatory CR/NC courses. In the case of a student who has chosen to elect a course "Pass/Fail," the Office of the Registrar converts the letter grades according to the following policies: Grades of A through C– are posted on a transcript as "P" (Pass); credit toward a degree is earned. Grades of D through E are posted on a transcript as "F" (Fail); no degree credit is earned. In the case of an incomplete course elected "Pass/Fail," credit is posted only when the work has actually been completed and a grade of at least C– has been reported. "Pass/Fail" courses which are not finished lapse to "Fail," although the term and cumulative grade point averages remain unaffected. If the instructor of a mandatory Credit/No Credit course believes that the amount and quality of a student's work is such that it deserves credit, CR (Credit) is posted on the transcript. If the instructor believes that a student's work does not justify the awarding of credit, NC (No Credit) is posted on the transcript. Courses offered mandatory Credit/No Credit are designated in the course listings. Students who have transferred "non-graded" credit to the College must count that credit as part of the maximum 30 hours of "non-graded" credit which may be counted toward an LSA degree. Advanced Placement credit as well as transfer courses for which students earned grades at another institution do not count against the 30-credit limit. Classes at Camp Davis may not be elected on a Pass/Fail basis (effective Spring Term 2012). Non-graded courses may be included in a distribution plan. Pass/Fail courses may not be included in a plan for the major or in a minor. Experiential and Directed Reading/Independent Study courses that are graded on a Credit/No Credit or Satisfactory/Unsatisfactory basis may be included in a major program. The final course in a sequence used to fulfill the Language Requirement may not be elected on a Pass/Fail basis. (Effective for all students admitted to the College in Fall Term, 1995 and thereafter.) In computing the grade point average for honorary societies, the reported letter grades for "non-graded" elections are computed into the cumulative grade point average. No course elected "Pass/Fail" will receive the Honors notation on the transcript or be counted as an "Honors" course for the Sophomore Honors Award. A student may pay a special fee set by the Registrar's Office and request a specially prepared appendix to the transcript on which the original grades submitted for all courses elected "Pass/Fail" are listed.

Students are expected to elect courses for credit. Occasionally, however, a student may wish to attend a course but not elect it for credit. This arrangement can take the form of an official audit (sometimes called Visitor status). An official audit obligates a student to attend classes regularly and complete course requirements (e.g., papers, laboratory assignments, tests, and the final examination). Regular tuition fees apply, and the course appears on the transcript with the grade VI (Audit); and no degree credit is earned. To arrange an official audit, a student must submit a Request for Audit Status form to the Academic Standards Board, 1255 Angell Hall. A request to officially audit a course must be approved by the end of the third week of a full term or second week of a half-term. Students who do not fulfill course requirements earn the grade ED to indicate that the course was unofficially dropped. In these cases, the term and cumulative grade point averages remain unaffected.

## Grading Issues



Select an option below to learn more about:

- [Grade Review](#)
- [Transcripts and Notations](#)
- [Incompletes](#)
- [Y Grades](#)
- [Pass/Fail](#)
- [Repetition and Out-of-Sequence](#)
- [Grade Appeals](#)

## Pass-Fail

Students may count a maximum 30 non-graded credits toward the 120 credits required for a degree. Non-graded credits are earned in courses for which no letter grade (A through E) is recorded on the transcript. Only those non-graded credits actually earned are counted as part of the total number of non-graded credits applicable toward a degree.

1. A student cannot choose to elect a course by the CR/NC and S/U grading patterns; the *optional* non-graded pattern is P/F.
2. Non-graded courses earn credit toward a degree but not honor points. Therefore, "Pass" (or "Credit") grades do not enter into the computation of the term or cumulative grade point averages.
3. *A change in grading pattern for a course is not permitted after the first three weeks of a full term (first two weeks of a half-term).* Grading pattern choices must be modified through the registration system. Courses elected after the third week of a term may not be elected on a non-graded basis unless the course is offered as a "mandatory non-graded" course. The only exceptions to this policy are *short courses* (e.g., EARTH 101-115) which have started after the beginning of the term. In these cases, the grading pattern may not be changed after the second week of class. **The Academic Standards Board does not grant exceptions to this policy.**
4. *The College holds students responsible for ensuring the accuracy and completeness of their class schedule.*
5. Instructor approval is not required for a choice in the elected grading pattern nor should the instructor be informed of such a choice. Instructors report letter grades (A through E) for all students in their courses, except in mandatory CR/NC courses. In the case of a student who has chosen to elect a course "Pass/Fail," the Office of the Registrar converts the letter grades according to the following policies:
  - Grades of A through C– are posted on a transcript as "P" (Pass); credit toward a degree is earned.
  - Grades of D through E are posted on a transcript as "F" (Fail); no degree credit is earned.
6. In the case of an incomplete course elected "Pass/Fail," credit is posted only when the work has actually been completed and a grade of at least C– has been reported. "Pass/Fail" courses which are not finished lapse to "Fail," although the term and cumulative grade point averages remain unaffected.
7. If the instructor of a mandatory Credit/No Credit course believes that the amount and quality of a student's work is such that it deserves credit, CR (Credit) is posted on the transcript. If the instructor believes that a student's work does not justify the awarding of credit, NC (No Credit)

is posted on the transcript. Courses offered *mandatory Credit/No Credit* are designated in the course listings.

8. Students who have transferred "non-graded" credit to the College must count that credit as part of the maximum 30 hours of "non-graded" credit which may be counted toward an LSA degree. Advanced Placement credit as well as transfer courses for which students earned grades at another institution do not count against the 30-credit limit.
9. Classes at Camp Davis may not be elected on a Pass/Fail basis (effective Spring Term 2012).
10. Non-graded courses *may* be included in a distribution plan.
11. Pass/Fail courses *may not* be included in a plan for the major or in a minor.
12. Experiential and Directed Reading/Independent Study courses that are graded on a Credit/No Credit or Satisfactory/Unsatisfactory basis *may be* included in a major program.
13. The final course in a sequence used to fulfill the Language Requirement *may not* be elected on a Pass/Fail basis. (Effective for all students admitted to the College in Fall Term, 1995 and thereafter.)
14. In computing the grade point average for honorary societies, the *reported letter grades* for "non-graded" elections are computed into the cumulative grade point average.
15. No course elected "Pass/Fail" will receive the Honors notation on the transcript or be counted as an "Honors" course for the Sophomore Honors Award.
16. A student may pay a special fee set by the Registrar's Office and request a specially prepared appendix to the transcript on which the original grades submitted for all courses elected "Pass/Fail" are listed.

## Incompletes

An "Incomplete" (denoted on the transcript by the symbol "I") may be reported only if the amount of unfinished work is small, the work is unfinished for reasons acceptable to the instructor, and the student's standing in the course is at least "C-". An "I" grade not finished by the incomplete deadline or an approved extended deadline lapses to "ILE".

Students who find themselves unable to finish all of the assignments for a course before the end of the term may request a grade of Incomplete from the instructor. The instructor is under no obligation to grant this request, and can only grant it if:

- the student has already finished about 70% of the work;
- the student's current grade in the course is at least "C-".

If the instructor agrees to give an incomplete, the student will have up to the end of the 4th week of the next Fall or Winter term of registration to complete the work. If the instructor has not submitted a grade for the student by 10 days past the deadline, the incomplete will lapse to an "ILE".

The "I" grade itself does not affect the term or cumulative grade point averages. Students may finish the work for incompletes while not in residence even if the Board has dismissed them from the College for reasons of unsatisfactory academic performance.

If the student does complete the work within the allowed period, the Registrar will post the final grade on the transcript; however, the "I" will remain next to the grade on the transcript. Students who are not able to finish the work within the allowed period may apply to the Academic Standards Board for an extension of the incomplete deadline. In order to qualify for an extension, the student must present documented unexpected circumstances that prevented completion of the course within the allotted time period. Unfinished "I" grades will lapse to "ILE" grades beyond the regular or extended incomplete deadline. In such cases, the student will earn no degree credit and lower his/her term and overall GPAs. Unfinished courses elected on a non-graded pattern (Pass/Fail, Credit/No Credit) lapse to "Fail or "No Credit" but do not affect the term or cumulative grade point averages.

### **Incomplete, Time Extension for (PDF)**

Use this form if you have an incomplete and need an extension beyond the deadline.

### **Frequently Asked Question About Incompletes**

#### **Does the 'I' grade on my transcript go away when I finish the work?**

No. The 'I' remains for posterity, alongside the new grade. The new grade counts normally towards your GPA, however.

#### **I want to sit in on the class during the following term. Can my instructor extend the allotted time to finish the incomplete work beyond 4 weeks?**

No. Your instructor does not have the authority to do this. Only the Academic Standards Board can approve extensions of the deadline. You must file a petition in 1255 Angell Hall. Since an 'I' grade is not intended to allow you to "retake" the course, such petitions are usually denied.

#### **My professor refuses to give me an Incomplete because I'm failing the course up to now. Can she do that?**

Yes. In fact, the LSA grading guidelines specifically state that an 'I' is only allowed if you have already completed "most" of the work in the course with a grade of 'C-' or better.

#### **Does an 'I' on my transcript look really bad if I am applying to graduate schools?**

One or even two completed 'I's probably won't make much of a difference. If you have a large number, however, your record does start to look troublesome. Graduate schools, like employers, like to know that you can meet deadlines, and finish what you take on in a timely manner.

## **Y Grades**

A few courses (*e.g.*, senior Honors thesis courses, Global Course Connections, or some Biological Sciences research courses) are approved as "two-term" sequences (approval has to be granted by the LSA Curriculum Committee). In these *specialty approved cases only*, an instructor can report a Y grade at the end of the first-term course to indicate work in progress. When a final grade is reported at the end of the second term, that final grade is posted for both

terms' elections. In cases where a Y grade is reported for a course which is not approved to extend for two successive terms, an I ([Incomplete](#)) is posted on the transcript and the course is subject to the regular deadline for incompletes. Students needing more time to complete this work must petition the Academic Standards Board for an official extension of the deadline.

## Grade Review

At the end of each term and half-term, the [Academic Standards Board](#) reviews the academic records of all LSA students showing evidence of academic difficulty.

The Residential College has a separate Board on Academic Standing (BOAS) that makes decisions regarding [academic discipline for RC students](#); the [Honors Academic Board](#) makes decisions for Honors students.

### Action Pending

*Action Pending* is assigned when a student's academic record for a term is incomplete (*i.e.*, not all grades are submitted or the student has an "i") and the student is in danger of completing the term with less than a 2.0 grade point average. The transcript is then reviewed again when final grades have been reported or after incomplete grades have lapsed. This review normally takes place during the fifth week of a student's next fall or winter term in residence. If all incomplete work has not been finished, or if it has been finished with grades that result in a grade point average below a 2.0, a student will be placed on *Probation*.

*Special Action Pending* is assigned when a student has an unusually large number of incomplete grades. These students are required to meet with an Academic Standards Board member within the deadline specified in the notification letter to discuss their plans to complete the work. **A student who fails to make this appointment could be disenrolled from the term.**

### Probation Actions

*Probation* is assigned to all students in the College whose *term* grade point average falls below 2.0 but whose deficit is not severe enough to justify suspension. Students are placed on probation whenever the term grade point average falls below a 2.0 during a term or half-term, regardless of the number of courses or credits elected or whether the cumulative grade point average remains above a 2.0.

*Probation Continued* is assigned when a student on probation has earned a term grade point average above a 2.0 but the cumulative grade point average of 2.0 has not yet been achieved. *Probation Continued* might also be assigned if a probationary student has a term average of exactly 2.0 or slightly below 2.0, so long as members of the Academic Standards Board feel that the student is making minimum progress toward fulfilling degree and program requirements.

*Special Probation* is assigned to students whose record leaves some question about whether immediate continuation in the College is advisable. These students are required to meet with an

Academic Standards Board member within the deadline specified in the notification letter to plan appropriate course electives. **A student who fails to make this appointment will be disenrolled from the term.**

The conditions for a student on *Probation* or *Probation Continued* are that all courses in the ensuing term will be completed by the end of the term with a *term* grade point average greater than 2.0. Specific conditions of probation are stated in a letter notifying the student of the action taken by the College.

All students placed on probation are required to discuss their academic situation with an academic advisor or a member of the Academic Standards Board and to take advantage of College and University resources to assist them in improving their level of academic performance.

*Raised Probation* officially confirms that a student has completed a probationary term with better than a 2.0 grade point average and that a student's cumulative grade point average is at least a 2.0.

### Suspension

The Board can suspend students after any term of enrollment, including the first; there is no automatic, one-term probation period before the Board will suspend a student from the College. A term GPA close to or equal to 0.00 will cause the Board to place a suspend action on a student record, as will significant failure to achieve a GPA of at least 2.0 in the student's declared major. Thus, students may find themselves suspended after one term of very poor academic performance. Academic suspension is not punitive; rather, it aims to prevent further damage to the student's GPA. Students whom the Board suspends must remain out of registration for at least one Fall or Winter semester and then request readmission through a written petition that they must submit at least 6 weeks prior to the term they hope to return.

The Board carefully reviews students' academic records at the end of each semester in order to determine the appropriate academic action to take on them. Records with poor or failing grades indicate that serious obstacles are preventing academic success, obstacles that students need to address before continuing their studies. Suspension will allow students the time to confront these obstacles so that they may return ready to perform successfully and ultimately to graduate. Board members are available to suspended students to help them plan their next best steps after learning about their suspension.

### Reinstatement

Suspended students are expected to be out of registration for at least one full fall or winter term following their suspension. Reinstatement is not automatic after that time; students must petition

to be readmitted. When they feel they are ready to return, students should make an appointment with a member of the Academic Standards Board by calling (734) 764-0332. This meeting or phone appointment should take place at least eight weeks before the start of the desired return term. The purpose of this appointment is to discuss the factors that led to the suspension, talk about what the student has been doing while away, and consider academic plans. During this conversation, the Board member will provide guidance about writing the reinstatement petition. Petitions are due at least six weeks before the start of the desired return term and should include the following:

- a thoughtful analysis of what went wrong before
- evidence that past problems have been resolved or eliminated (or a strategy for managing ongoing issues)
- a description of how the student has used the time away
- a viable academic plan for the student's remaining terms.

Students are strongly encouraged to complete academic work elsewhere during the suspension period; strong grades in such classes will greatly strengthen one's case for readmission. These students must consult with an LSA academic advisor or Board member *before* taking classes elsewhere, to make sure the courses are appropriate and transferable.

Relevant supporting documentation should be attached to all reinstatement petitions. Some examples of appropriate documentation are: statements from health care providers if academics were impacted by physical or mental health issues, transcript and/or instructor statements if taking classes elsewhere, letter from employer if working during suspension period, *etc.*

After reviewing the reinstatement petition, the Academic Standards Board will make a decision and will notify the student by e-mail.

### Reinstatement after Suspension

Students may be suspended from the College

1. for incurring a significant honor point deficit in a single term or half-term,
2. for failure to make satisfactory progress toward a degree, or
3. for any other reason deemed sufficient under the policies of the LSA Academic Standards Board.

Since first year students often experience problems adjusting to college, the Academic Standards Board maintains more liberal policies for them than for other students. As a general rule, unless there is a significant honor point deficit the first term, freshmen are placed on probation and are permitted a second term of enrollment to improve their level of academic performance. Similarly, transfer students are given special consideration unless the first term's work in residence shows marked inability to meet the academic standards of the College. ***However, there is no automatic, one-term probation period before a student may be suspended from the College.***

## Dismissal

Students may be permanently dismissed from the College if the Academic Standards Board determines that continuation in the College is unlikely to lead to a degree.

# Grade Grievance

## Grade Change Policy

"A grade change may be submitted by your instructor to correct an error on a Supplementary Grade Report which the instructor obtains from their department office. The request must be accompanied by a formal explanation by the faculty member in charge of the course outlining the circumstances surrounding the original error and justifying the grade change." (Faculty Code B5.07)

The Academic Standards Board cannot approve any Supplementary Grade Report for a grade change when "extra work is submitted," "student rewrote a paper," "student retook the final," or another special arrangement unless the instructor is able to provide the Board with a statement that the arrangement giving this one student the opportunity to raise his/her grade was an arrangement available to and known by every student in the course. If the grade is being changed because the work was submitted after grades were due and no "incomplete" grade was originally given, the grade will be posted with and "I" as long as the work was completed during the incomplete deadline period.

When the instructor is changing a grade from "incomplete", they must include the date the student submitted their completed work. Even if the course has lapsed to E the grade can still be approved for posting if the work completed by the student was within the incomplete deadline date or the extended deadline date.

## Grade Grievance Procedures

"The Office of Student Academic Affairs (formerly the LSA Administrative Board) shall insure that each department has an efficient procedure for dealing with student complaints regarding alleged unfair or improper grading, and shall insure that these procedures are followed in individual cases."

— Faculty Code A.205, 1984 edition

Grade appeals for departments without links listed below should be referred to the Chair of the Department in question.

## Afroamerican and African Studies (DAAS)

**Updated and Approved March 2012**

Within the College of Literature, Science, and the Arts, instructors are required to set fair and consistent grading procedures for their courses. The expectation is that instructors will evenly apply their grading rubrics to all students. Students may inquire about the accuracy of their final grade if they can provide evidence that the instructor has:

- 1) deviated from previously stated grading standards
- 2) applied such standards inconsistently
- 3) failed to take into full consideration all graded components of a course
- 4) assigned a grade based on criteria other than performance in the course. A student's belief that an instructor's grading standards are stricter than those of other instructors normally does not constitute grounds for grievance.

Within the Department of Afroamerican and African Studies, students who want to inquire about the accuracy of their final grade should pursue the following steps:

1) Consultation with Instructor:

As a first step, the student should consult with the lead instructor of the course. This initial inquiry should take place within the first fifteen University business days of the first full term following the term in which the disputed grade was issued. After this initial inquiry, if the student continues to dispute the final grade, s/he may choose to initiate a formal grade grievance procedure.

2) Formal Complaint to Director of Undergraduate Studies (DUS):

To initiate a formal grade grievance procedure, the student should contact the Director of Undergraduate Studies (DUS) before the end of the fifth week of classes in the first full term following the term in which the disputed grade was issued. The student must convey in writing the basis for the complaint. This written complaint should include: 1) specific evidence that the grade was given in error or was arbitrarily determined, 2) a summary of the student's initial consultation with the course instructor, and 3) a summary of the aspects of the case that remain in dispute. Upon receipt of the written complaint, the DUS will ask the instructor to provide a written summary explaining how the final grade was determined and respond to the specific claims made by the student.

After receiving this information from both the student and the instructor, the DUS will determine whether to convene the Department's Grade Grievance Committee. If the DUS determines that there is no evidence to support a grade grievance, the matter will be considered closed and the original grade will stand. If the DUS determines that the grade grievance should proceed, s/he will set a date for a formal hearing with the Grade Grievance Committee.

3) Grade Grievance Committee Hearing:

For undergraduate students, the DAAS Grade Grievance Committee will consist of the Director of Undergraduate Studies and two faculty members of the Curriculum Committee. For graduate students, the DAAS Grade Grievance Committee will consist of the Director of Undergraduate



Studies, the Associate Director of DAAS, and one faculty member of the Curriculum Committee. If the instructor in question is a member of the DAAS Grade Grievance Committee, s/he will be excused and another member of the Curriculum Committee will serve as substitute.

Before the Grade Grievance Committee convenes, both the student and the instructor will receive copies of the student's written complaint and the instructor's written response. During the formal hearing, the student will first present the basis of his or her complaint. The instructor will then explain how s/he determined the student's final grade. After an open period of discussion among the student, the instructor, and members of the Grade Grievance Committee, the hearing will be adjourned.

#### 4) Recommendation from Grade Grievance Committee:

The Grade Grievance Committee will have ten University business days to determine its recommendation.

If the committee decides that there is no basis for a grade change, the DUS will convey this fact in writing to the student and the instructor. The original grade will stand and the matter will be considered closed.

If the committee recommends a grade change, the DUS will ask the instructor to respond in writing within five University business days indicating whether or not s/he will abide by the Grade Grievance Committee's recommendation. If the instructor agrees to a grade change, the DUS will inform the student in writing, the student's final course grade will be changed, and the matter will be considered closed.

If an instructor does not accept the Grade Grievance Committee's recommendation to change the final grade, the original grade will stand. The DUS will inform the student in writing and the matter will be considered closed. By College policy, a final course grade rests solely with the instructor, and a course grade cannot be changed without the instructor's consent.

#### 5) Consultation with the Office of Student Academic Affairs:

Grade grievances end at the Department level. There is no appeal beyond the Department. The Office of the Assistant Dean for Student Academic Affairs is available for consultation and review of the process to ensure that all procedures have been followed.

American Culture Department

**Updated and Approved May 2012**

### **I. Preamble**

Within the College of Literature, Science, and the Arts, instructors are expected to set fair and consistent grading procedures for their respective courses. The key to implementing fair grading procedures in courses across the College is that individual instructors adhere to grading rubrics

that are applied evenly and consistently to all students within a respective course. If the grading rubric is used consistently for each student, then the final grade is assumed to be the correct grade. Nevertheless, students can inquire about a grade and subsequently initiate a grade grievance when they think that the grade was unfairly given.

## **II. Consultation with Instructor**

The first step in inquiring about the accuracy of a final grade should be directed to the lead instructor of the course. This initial inquiry should take place within the first fifteen University business days of the first full term following the term in which the disputed grade was issued. If, after this inquiry, the student is not satisfied with the instructor's response, the student may choose to initiate a formal grade grievance. To initiate a formal grade grievance, the student should contact the Director of Undergraduate Studies (DUS) of the home department of the course in question before the end of the fifth week of classes in the first full term following the term in which the disputed grade was issued.

## **III. Formal complaint to Director of Undergraduate Studies (DUS)**

To initiate the formal grade grievance process, the student must convey in writing the basis for the complaint, with specific evidence in support of the argument that the grade either was given in error or was unfairly determined. This formal complaint also should summarize the outcome of the initial inquiry to the course instructor, indicating what aspects are in dispute. Upon receipt of the written complaint, the AC Undergraduate Committee/DUS will ask the instructor to provide a written summary restating how the final grade was determined and to respond to the specific claims made by the student.

After receiving this information from both the student and the instructor, the DUS will then determine if sufficient evidence exists to convene the Department's Grade Grievance Committee. If the AC Undergraduate Committee/DUS determines that there is insufficient evidence for the grade grievance, the matter is considered closed, and the original grade stands.

If the AC Undergraduate Committee/DUS determines that the grade grievance should proceed, a date for a formal hearing with the Grade Grievance Committee will be set. The Grade Grievance Committee will consist of the DUS, at least one other faculty member (typically, a member of the Undergraduate Committee) and at least one undergraduate (to be selected by the DUS).

## **IV. Grade Grievance Hearing**

Once it has been determined that a formal hearing will be held, the DUS will empanel the appropriate Departmental Grade Grievance Committee. Both the student filing the grade grievance and the respective instructor will be provided with copies of the written student complaint and the instructor's summary in advance of the formal hearing. During the formal hearing, the student will be asked to first present the basis of his or her complaint; the instructor will then be asked to present his or her explanation for how grades were determined. Following an open period of questions to all parties, (i.e., the student, the instructor and the Grade Grievance committee members), the formal hearing will be adjourned.

## **V. Grade Grievance Committee's Recommendation**

The Grade Grievance Committee will then have ten University business days to determine its recommendation and submit a written report to the DUS.

If the Grade Grievance Committee decides that a grade change is not warranted, the DUS will convey this in writing to the student and the instructor. The original grade will stand and the matter is considered closed.

If the committee recommends a grade change, the DUS will communicate that decision directly to the instructor. The instructor will then be asked to respond in writing within five University business days to the DUS indicating whether or not he/she will abide by the Grade Grievance Committee's recommendation. If the instructor agrees to a grade change, the DUS will in writing inform the student of the instructor's decision and the student's final course grade will be changed. The matter is considered closed.

If an instructor does not accept the Grade Grievance Committee's recommendation to change the final grade, the original grade will stand. By College policy, a final course grade rests solely with the instructor and, as such, a course grade cannot be changed without the instructor's consent. When this occurs, the DUS will convey in writing this decision to the student. The matter is considered closed. There is no appeal beyond the Department.

[Anthropology Department](#)

## **Updated and Approved January 2012**

Within the College of Literature, Science, and the Arts, instructors are expected to set fair and consistent grading procedures for their respective courses. The key to implementing fair grading procedures in courses across the College is that individual instructors adhere to grading rubrics that are applied evenly and consistently to all students within a respective course. If the grading rubric is used consistently for each student, then the final grade is assumed to be the correct grade. Nevertheless, students can inquire about a grade and subsequently initiate a grade grievance when they think that the grade was unfairly given.

### **Consultation with Instructor**

The first step in inquiring about the accuracy of a final grade should be directed to the lead instructor of the course. This initial inquiry should take place within the first fifteen University business days of the first full term following the term in which the disputed grade was issued. If, after this inquiry, the student is not satisfied with the instructor's response, the student may choose to initiate a formal grade grievance. To initiate a formal grade grievance, the student should contact the Director of Undergraduate Studies (DUS) within the Department of Anthropology before the end of the fifth week of classes in the first full term following the term in which the disputed grade was issued.

### **Formal complaint to Director of Undergraduate Studies (DUS)**

To initiate the formal grade grievance process, the student must convey in writing the basis for the complaint, with specific evidence in support of the argument that the grade either was given in error or was unfairly determined. This formal complaint also should summarize the outcome of the initial inquiry to the course instructor, indicating what aspects are in dispute. Upon receipt of the written complaint, the DUS will ask the instructor to provide a written summary restating how the final grade was determined and to respond to the specific claims made by the student.

After receiving this information from both the student and the instructor, the DUS will then determine if sufficient evidence exists to convene the Department's Grade Grievance Committee. (In Anthropology, Grade Grievance Committee responsibilities are held by the Department's Curriculum Committee.) If the DUS determines that there is insufficient evidence for the grade grievance, the matter is considered closed, and the original grade stands.

If the DUS determines that the grade grievance should proceed, a date for a formal hearing with the Grade Grievance Committee will be set.

### **Grade Grievance Hearing**

Once it has been determined that a formal hearing will be held, the DUS will empanel the appropriate Departmental Grade Grievance Committee. The student filing the grade grievance will be provided with the instructor's summary in advance of the formal hearing, and the respective instructor will be provided with the student's written complaint in advance of the formal hearing. During the formal hearing, the student will be asked to first present the basis of his or her complaint. The instructor will then be asked to present his or her explanation for how grades were determined. If the instructor is not available (e.g. on leave) to respond in person, the instructor may provide a written statement. Following an open period of questions to all parties, i.e., the student, the instructor (if feasible) and the Grade Grievance committee members, the formal hearing will be adjourned.

### **Grade Grievance Committee's Recommendation**

The Grade Grievance Committee will then have ten University business days to determine its recommendation and submit a written report to the DUS.

If the Grade Grievance Committee decides that a grade change is not warranted, the DUS will convey this in writing to the student and the instructor. The original grade will stand and the matter is considered closed.

If the committee recommends a grade change, the DUS will communicate that decision directly to the instructor. The instructor will then be asked to respond in writing within five University business days to the DUS indicating whether or not he/she will abide by the Grade Grievance Committee's recommendation. If the instructor agrees to a grade change, the DUS will in writing inform the student of the instructor's decision and the student's final course grade will be changed. The matter is considered closed.

If an instructor does not accept the Grade Grievance Committee's recommendation to change the final grade, the original grade will stand. By College policy, a final course grade rests solely with the instructor and, as such, a course grade cannot be changed without the instructor's consent. When this occurs, the DUS will convey in writing this decision to the student. The matter is considered closed. There is no appeal beyond the Department.

## Applied Liberal Arts

### **Updated and Approved August 2012**

Within the College of Literature, Science, and the Arts, instructors are expected to set fair and consistent grading procedures for their respective courses. The key to implementing fair grading procedures in courses across the College is that individual instructors adhere to grading rubrics that are applied evenly and consistently to all students within a respective course. If the grading rubric is used consistently for each student, then the final grade is assumed to be the correct grade. Nevertheless, students can inquire about a grade and subsequently initiate a grade grievance when they think that the grade was unfairly given.

The Applied Liberal Arts Division is a unit of the Office of the LSA Associate Dean for Undergraduate Education. Students who want to inquire about the accuracy of their final grade in ALA courses should pursue the following steps:

#### **Consultation with Instructor**

The first step in inquiring about the accuracy of a final grade should be directed to the lead instructor of the course. This initial inquiry should take place within the first fifteen University business days of the first full term following the term in which the disputed grade was issued. If, after this inquiry, the student is not satisfied with the instructor's response, the student may choose to initiate a formal grade grievance. To initiate a formal grade grievance, the student should contact the Assistant Dean for Undergraduate Education before the end of the fifth week of classes in the first full term following the term in which the disputed grade was issued.

#### **Formal complaint to the Assistant Dean for Undergraduate Education**

To initiate the formal grade grievance process, the student must convey in writing the basis for the complaint, with specific evidence in support of the argument that the grade either was given in error or was unfairly determined. This formal complaint also should summarize the outcome of the initial inquiry to the course instructor, indicating what aspects are in dispute. Upon receipt of the written complaint, the Assistant Dean will ask the instructor to provide a written summary restating how the final grade was determined and to respond to the specific claims made by the student.

After receiving this information from both the student and the instructor, the Assistant Dean will then determine if sufficient evidence exists to convene the ALA Division's Grade Grievance Committee. If the Assistant Dean determines that there is insufficient evidence for the grade grievance, the matter is considered closed, and the original grade stands.

If the Assistant Dean determines that the grade grievance should proceed, a date for a formal hearing with the Grade Grievance Committee will be set.

### **Grade Grievance Hearing**

Once it has been determined that a formal hearing will be held, the Assistant Dean will empanel the appropriate Applied Liberal Arts Division Grade Grievance Committee. Both the student filing the grade grievance and the respective instructor will be provided with copies of the written student complaint and the instructor's summary in advance of the formal hearing. During the formal hearing, the student will be asked to first present the basis of his or her complaint; the instructor will then be asked to present his or her explanation for how grades were determined. Following an open period of questions to all parties, i.e., the student, the instructor and the Grade Grievance committee members, the formal hearing will be adjourned.

### **Grade Grievance Committee's Recommendation**

The Grade Grievance Committee will then have ten University business days to determine its recommendation and submit a written report to the Assistant Dean.

If the Grade Grievance Committee decides that a grade change is not warranted, the Assistant Dean will convey this in writing to the student and the instructor. The original grade will stand and the matter is considered closed.

If the committee recommends a grade change, the Assistant Dean will communicate that decision directly to the instructor. The instructor will then be asked to respond in writing within five University business days to the Assistant Dean indicating whether or not he/she will abide by the Grade Grievance Committee's recommendation. If the instructor agrees to a grade change, the Assistant Dean will in writing inform the student of the instructor's decision and the student's final course grade will be changed. The matter is considered closed.

If an instructor does not accept the Grade Grievance Committee's recommendation to change the final grade, the original grade will stand. By College policy, a final course grade rests solely with the instructor and, as such, a course grade cannot be changed without the instructor's consent. When this occurs, the Assistant Dean will convey in writing this decision to the student. The matter is considered closed. There is no appeal beyond the Applied Liberal Arts Division.

Asian Languages and Cultures Department

### **Updated and Approved October 2010**

The Department of Asian Languages and Cultures reviews grade grievances in order to insure that grades given in departmental courses are fairly assigned. Our procedures require students to put grievances in writing and ask instructors to provide a written response. While these procedures are directed toward producing a recommendation on whether or not a grade should be revised, they respect the College of LSA's Faculty Code B 5.01 policy that a grade given by a

faculty member may only be changed by that faculty member (or by the course supervisor in the case of a multi-section course). The department believes that instructors are in the best position to determine the quality of student work; merely disagreeing with a grade cannot constitute grounds for a grievance. Only a course grade can be grieved, not the grading on an individual assignment.

1. Before a formal grievance can be filed, a student must discuss the conflict with the instructor of the course (or with the course supervisor in the case of a multi-section course). Both parties must engage in an open discussion of grading policies and endeavor to reach an equitable solution.
2. If a satisfactory resolution is not reached, the student may file a grievance with the Chair of the department. This must be done within the first six weeks of the Fall or Winter Term following the semester in which the course generating the grievance was taught, or within six weeks after the submission of a grade replacing an Incomplete. The grievance takes the form of a statement, accompanied by relevant graded materials. The statement should detail the disagreements that remain after the discussion between the student and the instructor required above.
3. The Chair will convey the grievance to the Director of Undergraduate Studies (DUS) who, determining that the grievance has merit, will organize an ad hoc committee of at least two other members who may have expertise or knowledge in the subject matter of the course for which the grade is being grieved. In the event that the DUS is the instructor of the course in question, the Chair may appoint another faculty member to chair the review. The DUS will provide the instructor with the student's statement and request a written response. After reviewing the documents, the DUS and the assembled committee, if necessary, may speak with the student and the instructor to determine if further documentation needs to be elicited to aid in the decision-making process. The DUS will then issue a recommendation agreed upon by all committee members that is communicated in writing to the student and the instructor, and copied to the department's Chair. No further appeals are possible at the department level.
4. In the event that the instructor is no longer at the University of Michigan, a student may present a grievance to the department Chair without first discussing the conflict with the instructor. The DUS and the committee will make every effort to contact the instructor to elicit a response before arriving at a recommendation.

## Astronomy Department

### **Updated and Approved June 2012**

Within the College of Literature, Science and the Arts, and the Department of Astronomy, instructors are expected to set fair and consistent grading procedures for their respective courses. The key to implementing fair grading procedures in courses across the College of Literature, Science & the Arts is that individual instructors adhere to grading rubrics that are applied evenly and consistently to all students within a respective course. If the grading rubric is used consistently for each student, then the final grade is assumed to be the correct grade. Nevertheless, students can inquire about a grade and subsequently initiate a grade grievance when they think that the grade was unfairly given.

### **Consultation with Instructor**

The first step in inquiring about the accuracy of a final grade should be directed to the lead instructor of the course. This initial inquiry should take place within the first fifteen University business days of the first full term following the term in which the disputed grade was issued. If, after this inquiry, the student is not satisfied with the instructor's response, the student may choose to initiate a formal grade grievance. To initiate a formal grade grievance, the student should contact the Chairperson of the Astronomy Department before the end of the fifth week of classes in the first full term following the term in which the disputed grade was issued.

### **Formal complaint to Department Chair**

To initiate the formal grade grievance process, the student must convey in writing the basis for the complaint, with specific evidence in support of the argument that the grade either was given in error or was unfairly determined. This formal complaint also should summarize the outcome of the initial inquiry to the course instructor, indicating what aspects are in dispute. Upon receipt of the written complaint, the Chair will ask the instructor to provide a written summary restating how the final grade was determined and to respond to the specific claims made by the student.

After receiving this information from both the student and the instructor, the Chair will then determine if sufficient evidence exists to convene the Department's Grade Grievance Committee. If the Chair determines that there is insufficient evidence for the grade grievance, the matter is considered closed, and the original grade stands.

If the Chair determines that the grade grievance should proceed, a date for a formal hearing with the Grade Grievance Committee will be set.

### **Grade Grievance Hearing**

Once it has been determined that a formal hearing will be held, the Chair will empanel the appropriate Departmental Grade Grievance Committee. Both the student filing the grade grievance and the respective instructor will be provided with copies of the written student complaint and the instructor's summary in advance of the formal hearing. During the formal hearing, the student will be asked to first present the basis of his or her complaint; the instructor will then be asked to present his or her explanation for how grades were determined. Following an open period of questions to all parties, i.e., the student, the instructor and the Grade Grievance committee members, the formal hearing will be adjourned.

### **Grade Grievance Committee's Recommendation**

The Grade Grievance Committee will then have ten University business days to determine its recommendation and submit a written report to the Chair.

If the Grade Grievance Committee decides that a grade change is not warranted, the Chair will convey this in writing to the student and the instructor. The original grade will stand and the matter is considered closed.



If the committee recommends a grade change, the Chair will communicate that decision directly to the instructor. The instructor will then be asked to respond in writing within five University business days to the Chair indicating whether or not he/she will abide by the Grade Grievance Committee's recommendation. If the instructor agrees to a grade change, the Chair will in writing inform the student of the instructor's decision and the student's final course grade will be changed. The matter is considered closed.

If an instructor does not accept the Grade Grievance Committee's recommendation to change the final grade, the original grade will stand. By College policy, a final course grade rests solely with the instructor and, as such, a course grade cannot be changed without the instructor's consent. When this occurs, the Chair will convey in writing this decision to the student. The matter is considered closed. There is no appeal beyond the Department.

### Biology Programs

**(Updated and Approved September 2014; replaces previous version from May 1992)**

#### **Preamble**

Within the College of Literature, Science, and the Arts, instructors are expected to set fair and consistent grading procedures for their respective courses. The key to implementing fair grading procedures in courses across the College is that individual instructors adhere to grading rubrics that are applied evenly and consistently to all students within a respective course. If the grading rubric is used consistently for each student, then the final grade is assumed to be the correct grade. Nevertheless, students can inquire about a grade and subsequently initiate a grade grievance when they think that the grade was unfairly given.

Two principles should be clearly understood as part of the context of any grade grievance:

1. A grade given by a faculty member may be changed only by that faculty member (Faculty Code B 5.0.1).
2. While the Program wishes to see demonstrably unfair grades rectified, it will not automatically invoke the full procedure described below for every grievance. For example, a grievance based on the argument that one instructor's grading standards are stricter than those of others will normally not be pursued.

#### **Consultation with Instructor**

The student should first confer with his/her instructor (and with the course coordinator, if there is one) to make sure that both are aware of all the pertinent facts and to identify the issues that are in dispute. This initial inquiry should take place within the first fifteen\*University business days of the first full term following the term in which the disputed grade was issued. If, after this inquiry, the student is not satisfied with the instructor's response, the student may choose to initiate a formal grade grievance. To initiate a formal grade grievance, the student should contact the Director of the Program in Biology or the Associate Chair for Undergraduate Studies of the

home department of the course in question before the end of the fifth\* week of classes in the first full term following the term in which the disputed grade was issued.

If the course is cross-listed with another school or LS&A department, the affiliation of the person responsible for submitting the final grade report should determine the department or school in which the grade grievance is processed.

### **Formal complaint to the Director of the Program in Biology or the Associate Chair of Undergraduate Studies in EEB or MCDB.**

To initiate the formal grade grievance process, the student must convey in writing the basis for the complaint, with specific evidence in support of the argument that the grade either was given in error or was unfairly determined. This formal complaint also should summarize the outcome of the initial inquiry to the course instructor, indicating what aspects are in dispute. Upon receipt of the written complaint, the Program Director or Associate Chair for Undergraduate Studies will ask the instructor to provide a written summary restating how the final grade was determined and to respond to the specific claims made by the student.

After receiving this information from both the student and the instructor, the Program Director or Associate Chair will then determine if sufficient evidence exists to convene the Program's Grade Grievance Committee. If the Program Director or Associate Chair determines that there is insufficient evidence for the grade grievance, the matter is considered closed, and the original grade stands.

If the Program Director or Associate Chair for Undergraduate Studies determines that the grade grievance should proceed, a date for a formal hearing with the Grade Grievance Committee will be set. The Grade Grievance Committee shall consist of the Program in Biology steering committee members (the Program Director and the two departmental Associate Chairs) and a student. The student member will be an undergraduate if the grievant is an undergraduate, or a graduate student if the grievant is a graduate student.

If several appeals are being filed, all of which are derived from a common grievance, a single Grade Grievance committee will consider all of the appeals. If the grievants include both undergraduate and graduate students, the status of the student member of the Grade Grievance Committee shall be determined by the level of the course.

### **Grade Grievance Hearing**

Once it has been determined that a formal hearing will be held, the Program Director or Associate Chair will empanel the appropriate Grade Grievance Committee. Both the student filing the grade grievance and the respective instructor will be provided with copies of the written student complaint and the instructor's summary in advance of the formal hearing. During the formal hearing, the student will be asked to first present the basis of his or her complaint; the instructor will then be asked to present his or her explanation for how grades were determined. Following an open period of questions to all parties, i.e. the student, the instructor and the Grade Grievance committee members, the formal hearing will be adjourned.

## **V. Grade Grievance Committee's Recommendation**

The Grade Grievance Committee will then have ten\* University business days to determine its recommendation and submit a written report to the Program in Biology steering committee and appropriate departmental chair.

If the Grade Grievance Committee decides that a grade change is not warranted, the Program Director or Associate Chair will convey this in writing to the student and the instructor. The original grade will stand and the matter is considered closed.

If the committee recommends a grade change, the Program Director or Associate Chair will communicate that decision directly to the instructor. The instructor will then be asked to respond in writing within five\* University business days to the Program Director or Associate Chair indicating whether or not he/she will abide by the Grade Grievance Committee's recommendation. If the instructor agrees to a grade change, the Program Director or Associate Chair for Undergraduate Studies will in writing inform the student of the instructor's decision and the student's final course grade will be changed. The matter is considered closed.

If an instructor does not accept the Grade Grievance Committee's recommendation to change the final grade, the original grade will stand. By College policy, a final course grade rests solely with the instructor and, as such, a course grade cannot be changed without the instructor's consent. When this occurs, the Program Director or Associate Chair will convey in writing this decision to the student. The matter is considered closed. There is no appeal beyond the Department.

For further information, please contact the Student Services Manager at 734-764-2446.

\*All time frames are based on faculty availability and are subject to change without warning. Student should consult with the Program in Biology for specific timing.

[Biophysics Program](#)

**Updated and Approved June 2012**

### **Introduction**

The faculty of the Biophysics Program strongly believes that the determination of the grade for course work is the prerogative of the instructor in the course. Grades as a judgment of quality will always be in part inherently subjective, and it is recognized that the course instructor is by far in the best position to make this judgment. On the other hand, it is also recognized that the students and the program as a whole have a strong interest in ensuring that grades are assigned fairly, equitably, and without personal bias.

Therefore, the Biophysics Program adopts the following procedures to resolve disputes over course grades.

## **Grounds for Appeal**

A grade in a course can be appealed on grounds that it is unjust because of clerical error, capricious or biased judgment, ex post facto changes in course requirements or lack of uniformity in the application of standards within a class. Dissatisfaction with the grade alone is not sufficient for an appeal. This procedure is also not applicable to complaints stemming from differences in the level of difficulty from one course to another or to complaints arising from a misunderstanding of the basis for evaluations if that basis was described clearly in writing.

## **Informal Appeal**

The best way to resolve grade disputes is through direct communication with the course instructor. Therefore, the appeals process is initiated through a request from the student to meet with the instructor within two weeks after the final course grade is assigned. This request should be submitted by email and include the grounds for the appeal. The course instructor should meet with the student as soon as possible. Should off-campus duties prevent the instructor from meeting with the student within two weeks after the request is made, a meeting must be scheduled as soon as feasible, and the appropriate Associate Chair of the Program be informed. If the instructor is a Graduate Student Instructor (GSI), the faculty member in charge of the course will be included in all communications and the meeting. After the meeting, the instructor shall follow up with an email to the student and the relevant Associate Chair to confirm any decisions reached in the meeting. This informal appeal can be bypassed only with the permission of the Associate Chair, if the nature of the dispute is such that it would be unreasonable to expect the student to meet with the instructor directly.

## **Formal Appeal to Associate Chair**

If the grade dispute cannot be resolved through the informal appeal process above, a formal appeal can be filed with the Associate Chair for the Undergraduate/Graduate Program. If the Associate Chair is also the course instructor, the Program Chair will take his or her place in the appeals process. This formal appeal to the Associate Chair has to be filed in writing within one week after the meeting with the instructor, or within three weeks of the assignment of the final grade. The appeal must state the grounds for the appeal and the remedy sought.

This formal appeal process is intended to correct gross injustices, but not minor disagreements which are inherent to the grading process. Therefore, only appeals that would make a significant difference in the student's grade or affect his or her standing in the College or Program can be pursued through this process. As a rule, a dispute over one fractional grade (B+ instead of B, for instance) in the final course grade is not considered significant enough for the initiation of a formal appeal, unless overriding concerns of fairness warrant otherwise. The Associate Chair will make this determination.

Once the appeal is received and the determination of significance is made, the Associate Chair will contact the course instructor and request a written reply within two weeks. Based on the complaint and the reply, the Associate Chair will issue a recommendation in writing to the instructor and student, which may range from a request to the instructor change the grade, to

requirement for additional work, or to dismissal of the complaint. The instructor must acknowledge the receipt of the recommendation promptly and state whether he or she will abide by it.

### **Appeal to the Grade Grievance Committee**

If the student is not satisfied with the recommendation of the Associate Chair, or if the course instructor refuses to follow the recommendation, the student may request a hearing in front of an ad-hoc grade grievance committee. Such a hearing must be requested in writing within two weeks after the recommendation is issued or the instructor refused to comply. The Grade Grievance Committee is appointed by the Program Chair and consists of the appropriate Associate Chair who will chair the Committee, one additional instructional faculty member of the program, and a student representative. If the complainant is an undergraduate student, the student representative should be an upper-level biophysics major in good standing; if the complaint is filed by a graduate student the student representative should be a graduate student in the Biophysics program. The hearing will be scheduled as soon as possible. During the hearing, all sides should state their positions, and every attempt to reach a mutually agreeable resolution should be made. A student services associate will record minutes of the hearing and collect any documents that are presented for the files of the program. After the hearing, a written decision will be issued and certified by the Program Chair within two weeks of the hearing.

### **Resolution of the Case**

The decision of the Grade Grievance Committee is final and no further appeals are possible. This decision shall be reached within six months after the grade in question is assigned, at the latest. The program expects everyone involved to abide by the decision, even though it is recognized that the final authority for the determination of the grade still rests with the course instructor. If the committee recommends a grade change, the ACUS/DUS will communicate that decision directly to the instructor. The instructor will then be asked to respond in writing within five University business days to the ACUS/DUS indicating whether or not he/she will abide by the Grade Grievance Committee's recommendation. If the instructor agrees to a grade change, the ACUS/DUS will in writing inform the student of the instructor's decision and the student's final course grade will be changed. The matter is considered closed.

If an instructor does not accept the Grade Grievance Committee's recommendation to change the final grade, the original grade will stand. By College policy, a final course grade rests solely with the instructor and, as such, a course grade cannot be changed without the instructor's consent. When this occurs, the ACUS/DUS will convey in writing this decision to the student. The matter is considered closed. There is no appeal beyond the Department.

[Chemistry Department](#)

**Updated and Approved January 2013**

### **I. Preamble**

Within the College of Literature, Science, and the Arts, instructors are expected to set fair and consistent grading procedures for their respective courses. The key to implementing fair grading procedures in courses across the College is that individual instructors adhere to grading rubrics that are applied evenly and consistently to all students within a respective course. If the grading rubric is used consistently for each student, then the final grade is assumed to be the correct grade. Nevertheless, students can inquire about a grade and subsequently initiate a grade grievance when they think that the grade was unfairly given.

## **II. Consultation with Instructor**

The first step in inquiring about the accuracy of a final grade should be directed to the lead instructor of the course. This initial inquiry should take place within the first fifteen University business days of the first full term following the term in which the disputed grade was issued. If, after this inquiry, the student is not satisfied with the instructor's response, the student may choose to initiate a formal grade grievance. To initiate a formal grade grievance, the student should contact the Associate Chair of Undergraduate Studies (ACUS) of the home department of the course in question before the end of the fifth week of classes in the first full term following the term in which the disputed grade was issued.

## **III. Formal complaint to Associate Chair of Undergraduate Studies (ACUS)**

To initiate the formal grade grievance process, the student must convey in writing the basis for the complaint, with specific evidence in support of the argument that the grade either was given in error or was unfairly determined. This formal complaint also should summarize the outcome of the initial inquiry to the course instructor, indicating what aspects are in dispute. Upon receipt of the written complaint, the ACUS will ask the instructor to provide a written summary restating how the final grade was determined and to respond to the specific claims made by the student.

After receiving this information from both the student and the instructor, the ACUS will then determine if sufficient evidence exists to convene the Department's Grade Grievance Committee. If the ACUS determines that there is insufficient evidence for the grade grievance, the matter is considered closed, and the original grade stands.

If the ACUS/DUS determines that the grade grievance should proceed, a date for a formal hearing with the Grade Grievance Committee will be set.

## **IV. Grade Grievance Hearing**

Once it has been determined that a formal hearing will be held, the ACUS will empanel the appropriate Departmental Grade Grievance Committee. Both the student filing the grade grievance and the respective instructor will be provided with copies of the written student complaint and the instructor's summary in advance of the formal hearing. During the formal hearing, the student will be asked to first present the basis of his or her complaint; the instructor will then be asked to present his or her explanation for how grades were determined. Following an open period of questions to all parties, i.e., the student, the instructor and the Grade Grievance committee members, the formal hearing will be adjourned.

## **V. Grade Grievance Committee's Recommendation**

The Grade Grievance Committee will then have ten University business days to determine its recommendation and submit a written report to the ACUS.

If the Grade Grievance Committee decides that a grade change is not warranted, the ACUS will convey this in writing to the student and the instructor. The original grade will stand and the matter is considered closed.

If the committee recommends a grade change, the ACUS will communicate that decision directly to the instructor. The instructor will then be asked to respond in writing within five University business days to the ACUS indicating whether or not he/she will abide by the Grade Grievance Committee's recommendation. If the instructor agrees to a grade change, the ACUS will in writing inform the student of the instructor's decision and the student's final course grade will be changed. The matter is considered closed.

If an instructor does not accept the Grade Grievance Committee's recommendation to change the final grade, the original grade will stand. By College policy, a final course grade rests solely with the instructor and, as such, a course grade cannot be changed without the instructor's consent. When this occurs, the ACUS will convey in writing this decision to the student. The matter is considered closed. There is no appeal beyond the Department.

[Classical Studies Department](#)

Updated and Approved January 2016; replaces Reaffirmed Version: May 1992

## **I. Preamble**

Course instructors have the responsibility for awarding to students the grades that are most fit, both for the course itself and for all work in the course. The Department expects its instructors to exercise good judgment in grading, and in general presumes that they have done so. For this reason, the Department will not examine a grade unless a student files a grade grievance that raises reasonable doubt about the fairness of the grade. In all cases of reasonable doubt, the Department tries to consider and deal with such grievances in a fair and open-minded manner, so that the rights of the aggrieved students and instructors are both respected.

## **II. Consultation with Instructor**

The first step in inquiring about the accuracy of a final grade should be directed to the instructor of the course. If a GSI has had the responsibility for grading, the student should first discuss the problem with the GSI. If the issue cannot be settled between the student and the GSI, the student should discuss it with the faculty member in charge of the course. This initial inquiry should take place within the first fifteen University business days of the first full term following the term in which the disputed grade was issued. If, after this inquiry, the student is not satisfied with the response of the instructor, GSI, or faculty member in charge of the course, the student may choose to initiate a formal grade grievance. To initiate a formal grade grievance, the student

should contact the Director of Undergraduate Studies (DUS) before the end of the fifth week of classes in the first full term following the term in which the disputed grade was issued. In cases in which the DUS is not a Full Professor and the instructor is a Full Professor, the Chair of the Department may choose to appoint a Full Professor to serve in place of the DUS.

### **III. Formal complaint to the Director of Undergraduate Studies (DUS)**

To initiate the formal grade grievance process, the student must convey in writing the basis for the complaint, with specific evidence in support of the argument that the grade either was given in error or was unfairly determined. This formal complaint also should summarize the outcome of the initial inquiry to the course instructor, indicating what aspects are in dispute. Upon receipt of the written complaint, the DUS will ask the instructor to provide a written summary restating how the final grade was determined and to respond to the specific claims made by the student. If the complaint is against the DUS, the Chair will appoint a replacement.

After receiving this information from both the student and the instructor, the DUS will then determine if sufficient evidence exists to convene an ad hoc Grievance Committee to hear the complaint. If the DUS determines that there is insufficient evidence for the grade grievance, the matter is considered closed, and the original grade stands. If the DUS determines that there is sufficient evidence to move forward with the grade grievance process, she/he will appoint a Grade Grievance Committee. The Grievance Committee will consist of two faculty members of at least equal rank with the instructor against whom the grievance has been lodged, and either an undergraduate or a graduate student (depending on the complainant's status). The student member of the committee will be selected by the DUS. The role of the student member of the committee is to provide a student perspective on the case, and although the committee does not take a formal vote, it is expected that the view of the student member of the committee be weighted equally with those of the faculty members on the committee in determining the committee's recommendation.

If the DUS determines that the grade grievance should proceed, a date for a formal hearing with the ad hoc Grievance Committee will be set.

### **IV. Grade Grievance Hearing**

Before the formal hearing is held, the Chair of the Grade Grievance Committee will instruct the student member of the committee on confidentiality issues. In addition, in advance of the formal hearing, the student filing the grade grievance and the respective instructor will be provided with copies of the written student complaint and the instructor's summary. During the formal hearing, the student will be asked to first present the basis of his or her complaint; the instructor will then be asked to present his or her explanation for how grades were determined. A GSI against whom a grievance has been made may ask that the faculty supervisor attend the hearing. If the GSI is no longer at the university, the faculty supervisor may represent him or her. No other representatives may be present. Following an open period of questions to all parties, *i.e.*, the student, the instructor and the Grade Grievance committee members, the formal hearing will be adjourned.



## **V. Grade Grievance Committee's Recommendation**

The Grade Grievance Committee will then have ten University business days to determine its recommendation and submit a written report to the DUS.

If the Grade Grievance Committee decides that a grade change is not warranted, the DUS will convey this in writing to the student and the instructor. The original grade will stand and the matter is considered closed.

If the committee recommends a grade change, the DUS will communicate that decision directly to the instructor. The instructor will then be asked to respond in writing within five University business days to the DUS indicating whether or not he/she will abide by the Grade Grievance Committee's recommendation. If the instructor agrees to a grade change, the DUS will in writing inform the student of the instructor's decision and the student's final course grade will be changed. The matter is considered closed.

In the very rare cases in which an instructor refuses to change a grade in accordance with a panel's recommendation, the grade will stand, but the student should confer with the chair or chair's representative. The department may, for example, provide the student with a letter explaining the circumstances.

Communication Studies Department

### **Updated and Approved January 2012**

Within the College of Literature, Science, and the Arts, instructors are expected to set fair and consistent grading procedures for their respective courses. The key to implementing fair grading procedures in courses across the College is that individual instructors adhere to grading rubrics that are applied evenly and consistently to all students within a respective course. If the grading rubric is used consistently for each student, then the final grade is assumed to be the correct grade. By College policy, a final course grade rests solely with the instructor and, as such, a course grade cannot be changed without the instructor's consent. Nevertheless, students can inquire about a final grade and subsequently initiate a grade grievance when they think that the grade was unfairly given.

Students who have received a final grade they consider unjust from teachers in the Department should follow the steps below in seeking a review of the grade. These steps are designed to bring an understanding of the course standards and the grade, not to dispute the ultimate right of an instructor to make such evaluations.

#### **Step 1: Consultation with the Instructor**

Any student who believes a final grade is in error may ask to have it reviewed. This initial inquiry should take place no later than within the first ten University business days of the first full term following the term in which the disputed grade was issued. Grades are only changed in case of clerical error or if it can be demonstrated that the posted grading rubric was not

followed. In courses with GSIs, students should meet with the GSI first to discuss the grade. If the GSI and student cannot come to an agreement the student should then meet with the faculty supervisor of the course. In courses without GSIs, the student should contact the faculty member to discuss the grade. It is hoped that any dispute may be resolved at this meeting.

#### Step 2: Written Appeal to Department Chair

If the meeting between the student and instructor is not productive in resolving differences, the student should indicate the nature of the complaint in writing to the Department Chair. This document should include evidence supporting the student's claim, with specific evidence in support of the argument that the grade either was given in error or was unfairly determined. This formal complaint also should summarize the outcome of the initial inquiry to the course instructor, indicating what aspects are in dispute. Except for clerical errors or mistakes in following the posted grading rubric, the Chair is not authorized to change grades given by faculty members. Upon receipt of the written complaint, the chair will ask the instructor to provide a written summary restating how the final grade was determined and to respond to the specific claims made by the student. If the Chair determines the complaint is justified, s/he will refer the complaint to the department's Grade Grievance Committee. On the other hand, if it is concluded that the complaint is not justified, the student will be so informed, the matter is considered closed, and the original grade stands.

#### Step 3: Grade Grievance Hearing

If the Chair determines that the grade grievance should proceed, a date for a formal hearing with the Grade Grievance Committee will be set. Both the student filing the grade grievance and the respective instructor will be provided with copies of the written student complaint and the instructor's summary in advance of the formal hearing. During the formal hearing, the student will be asked to first present the basis of his or her complaint; the instructor will then be asked to present his or her explanation for how grades were determined. Following an open period of questions to all parties, i.e., the student, the instructor and the Grade Grievance committee members, the formal hearing will be adjourned.

#### Step 4: Grade Grievance Committee's Recommendation

The Grade Grievance Committee will then have ten University business days to determine its recommendation and submit a written report to the Chair. If the Grade Grievance Committee decides that a grade change is not warranted, the Chair will convey this in writing to the student and the instructor. The original grade will stand and the matter is considered closed.

If the committee recommends a grade change, the Chair will communicate that decision directly to the instructor. The instructor will then be asked to respond in writing within five University business days to the Chair indicating whether or not he/she will abide by the Grade Grievance Committee's recommendation. If the instructor agrees to a grade change, the Chair will in writing inform the student of the instructor's decision and the student's final course grade will be changed. The matter is considered closed.

If an instructor does not accept the Grade Grievance Committee's recommendation to change the final grade, the original grade will stand. By College policy, a final course grade rests solely with the instructor and, as such, a course grade cannot be changed without the instructor's consent. When this occurs, the Chair will convey in writing this decision to the student. The matter is considered closed. There is no appeal beyond the Department.

Comparative Literature Department

**Approved January 2013**

## **I. Introduction**

The Department of Comparative Literature strives to set fair and consistent grading procedures for its courses. Nevertheless, students may inquire about a grade and subsequently initiate a grade grievance when they think that a grade has been unfairly given.

There are two principles which should be clearly understood as part of the context of any grade grievance:

1. A grade given by a faculty member may be changed only by that faculty member (Faculty Code B 5.01). A grade given in a class taught by a teaching assistant may be changed only by the faculty supervisor of the course. Departmental grievance procedures are intended to issue a recommendation, for or against a change, to the appropriate faculty member.
2. While the Department wishes to see demonstrably unfair grades rectified, it will not automatically invoke the full procedure described below for every grievance. Grievances must be based on substantive grounds; merely disagreeing with the grade does not constitute grounds for a grievance. Grievances based on the argument that one instructor's grading standards are stricter than those of others will normally not be pursued.

## **II. Consultation with Instructor**

The first step in inquiring about the accuracy of a final grade should be directed to the instructor (and faculty supervisor of the course, if there is one), to make the instructor(s) aware of all the pertinent facts and to identify the issues in dispute. This initial inquiry should take place within the first fifteen University business days of the first full term following the term in which the disputed grade was issued.

## **III. Formal complaint to Director of Undergraduate Studies (DUS) or Director of Graduate Studies**

If the first step does not lead to a resolution, the student must convey in writing the basis for the complaint, with specific evidence in support of the argument that the grade either was given in error or was unfairly determined. The student must be prepared to make available any written work from the course, if requested. The formal complaint also should summarize the outcome of the initial inquiry to the course instructor, indicating what aspects are in dispute. Grievances

should be filed by the end of the fifth week of classes in the first full term following the term in which the disputed grade was issued.

Upon receipt of the written complaint, the DUS (for undergraduate grade grievances)/DGS (for graduate grade grievances) will ask the instructor to provide a written summary restating how the final grade was determined and to respond to the specific claims made by the student.

After receiving this information from both the student and the instructor, the DUS/DGS will then determine if sufficient evidence exists to convene the Department's Grade Grievance Committee. If the DUS/DGS determines that there is insufficient evidence for the grade grievance, the matter is considered closed, and the original grade stands.

If the DUS/DGS determines that the grade grievance should proceed, a date for a formal hearing with the Grade Grievance Committee will be set.

#### **IV. Grade Grievance Hearing**

Once it has been determined that a formal hearing will be held, the DUS/DGS will empanel the appropriate Departmental Grade Grievance Committee. The Grade Grievance Committee is comprised of either the DUS and at least two members of the Undergraduate Committee or the DGS and at least two members of the Graduate Committee.

Both the student filing the grade grievance and the respective instructor will be provided with copies of the written student complaint and the instructor's summary in advance of the formal hearing. During the formal hearing, the student will be asked to first present the basis of his or her complaint; the instructor will then be asked to present his or her explanation for how grades were determined. Following an open period of questions to all parties, i.e., the student, the instructor and the Grade Grievance committee members, the formal hearing will be adjourned.

#### **V. Grade Grievance Committee's Recommendation**

The Grade Grievance Committee will then have ten University business days to determine its recommendation and submit a written report to the DUS/DGS.

If the Grade Grievance Committee decides that a grade change is not warranted, the DUS/DGS will convey this in writing to the student and the instructor. The original grade will stand and the matter is considered closed.

If the committee recommends a grade change, the DUS will communicate that decision directly to the instructor. The instructor will then be asked to respond in writing within five University business days to the DUS/DGS indicating whether or not he/she will abide by the Grade Grievance Committee's recommendation. If the instructor agrees to a grade change, the DUS/DGS will in writing inform the student of the instructor's decision and the student's final course grade will be changed. The matter is considered closed.

If an instructor does not accept the Grade Grievance Committee's recommendation to change the final grade, the original grade will stand. By College policy, a final course grade rests solely with the instructor and, as such, a course grade cannot be changed without the instructor's consent. When this occurs, the DUS/DGS will convey in writing this decision to the student. The matter is considered closed. There is no appeal beyond the Department.

If a grade change is permitted, a Supplemental Grade Report must be submitted by the professor so the student can have the grade reported on his/her academic record.

## Complex Systems Program

### **Updated and Approved July 2012**

#### **I. Preamble**

Within the College of Literature, Science, and the Arts, instructors are expected to set fair and consistent grading procedures for their respective courses. The key to implementing fair grading procedures in courses across the College is that individual instructors adhere to grading rubrics that are applied evenly and consistently to all students within a respective course. If the grading rubric is used consistently for each student, then the final grade is assumed to be the correct grade. Nevertheless, students can inquire about a grade and subsequently initiate a grade grievance when they think that the grade was unfairly given.

#### **II. Consultation with Instructor**

The first step in inquiring about the accuracy of a final grade should be directed to the lead instructor of the course. This initial inquiry should take place within the first fifteen University business days of the first full term following the term in which the disputed grade was issued. If, after this inquiry, the student is not satisfied with the instructor's response, the student may choose to initiate a formal grade grievance. To initiate a formal grade grievance, the student should contact the Director of the Center for the Study of Complex Systems before the end of the fifth week of classes in the first full term following the term in which the disputed grade was issued. If the Director is the instructor of the course, an alternate faculty member will be appointed to serve in place of the Director.

#### **III. Formal complaint to Director of the Center for the Study of Complex Systems (CSCS)**

To initiate the formal grade grievance process, the student must convey in writing the basis for the complaint, with specific evidence in support of the argument that the grade either was given in error or was unfairly determined. This formal complaint also should summarize the outcome of the initial inquiry to the course instructor, indicating what aspects are in dispute. Upon receipt of the written complaint, the Director will ask the instructor to provide a written summary restating how the final grade was determined and to respond to the specific claims made by the student.

If the Director is the instructor of the course for which the grade is disputed, the Director will not participate in the complaint process except as instructor for the course. A faculty member from the Center will be appointed to serve in place of the Director.

After receiving this information from both the student and the instructor, the Director will then determine if sufficient evidence exists to convene the Department's Grade Grievance Committee. If the Director determines that there is insufficient evidence for the grade grievance, the matter is considered closed, and the original grade stands.

If the Director determines that the grade grievance should proceed, a date for a formal hearing with the Grade Grievance Committee will be set.

#### **IV. Grade Grievance Hearing**

Once it has been determined that a formal hearing will be held, the Director will empanel the appropriate Departmental Grade Grievance Committee. Both the student filing the grade grievance and the respective instructor will be provided with copies of the written student complaint and the instructor's summary in advance of the formal hearing. During the formal hearing, the student will be asked to first present the basis of his or her complaint; the instructor will then be asked to present his or her explanation for how grades were determined. Following an open period of questions to all parties, i.e., the student, the instructor and the Grade Grievance committee members, the formal hearing will be adjourned.

#### **V. Grade Grievance Committee's Recommendation**

The Grade Grievance Committee will then have ten University business days to determine its recommendation and submit a written report to the Director.

If the Grade Grievance Committee decides that a grade change is not warranted, the Director will convey this in writing to the student and the instructor. The original grade will stand and the matter is considered closed.

If the committee recommends a grade change, the Director will communicate that decision directly to the instructor. The instructor will then be asked to respond in writing within five University business days to the Director indicating whether or not he/she will abide by the Grade Grievance Committee's recommendation. If the instructor agrees to a grade change, the Director will in writing inform the student of the instructor's decision and the student's final course grade will be changed. The matter is considered closed.

If an instructor does not accept the Grade Grievance Committee's recommendation to change the final grade, the original grade will stand. By College policy, a final course grade rests solely with the instructor and, as such, a course grade cannot be changed without the instructor's consent. When this occurs, the Director will convey in writing this decision to the student. The matter is considered closed. There is no appeal beyond the Department.

## **I. Preamble**

Within the College of Literature, Science, and the Arts, instructors are expected to set fair and consistent grading procedures for their respective courses. The key to implementing fair grading procedures in courses across the College is that individual instructors adhere to grading rubrics that are applied evenly and consistently to all students within a respective course. If the grading rubric is used consistently for each student, then the final grade is assumed to be the correct grade. Nevertheless, students can inquire about a grade and subsequently initiate a grade grievance when they think that the grade was unfairly given.

## **II. Consultation with Instructor**

The first step in inquiring about the accuracy of a final grade should be directed to the lead instructor of the course. This initial inquiry should take place within the first fifteen University business days of the first full term following the term in which the disputed grade was issued. If, after this inquiry, the student is not satisfied with the instructor's response, the student may choose to initiate a formal grade grievance. To initiate a formal grade grievance, the student should contact the Associate Chair of Undergraduate Studies (ACUS) or the Director of Undergraduate Studies (DUS) of the home department of the course in question before the end of the fifth week of classes in the first full term following the term in which the disputed grade was issued.

## **III. Formal complaint to the Associate Director of Instruction in Comprehensive Studies**

To initiate the formal grade grievance process, the student must convey in writing the basis for the complaint, with specific evidence in support of the argument that the grade either was given in error or was unfairly determined. This formal complaint also should summarize the outcome of the initial inquiry to the course instructor, indicating what aspects are in dispute. Upon receipt of the written complaint, the Associate Director of Instruction will ask the instructor to provide a written summary restating how the final grade was determined and to respond to the specific claims made by the student.

After receiving this information from both the student and the instructor, the Associate Director of Instruction will then determine if sufficient evidence exists to convene the Department's Grade Grievance Committee. If the Associate Director of Instruction determines that there is insufficient evidence for the grade grievance, the matter is considered closed, and the original grade stands.

If the Associate Director of Instruction determines that the grade grievance should proceed, a date for a formal hearing with the Grade Grievance Committee will be set.

## **IV. Grade Grievance Hearing**

Once it has been determined that a formal hearing will be held, the Associate Director of Instruction will empanel the appropriate Departmental Grade Grievance Committee which will include the Director of the Comprehensive Studies Program. Both the student filing the grade grievance and the respective instructor will be provided with copies of the written student complaint and the instructor's summary in advance of the formal hearing. During the formal hearing, the student will be asked to first present the basis of his or her complaint; the instructor will then be asked to present his or her explanation for how grades were determined. Following an open period of questions to all parties, i.e., the student, the instructor and the Grade Grievance committee members, the formal hearing will be adjourned.

## **V. Grade Grievance Committee's Recommendation**

The Grade Grievance Committee will then have ten University business days to determine its recommendation and submit a written report to the Associate Director of Instruction.

If the Grade Grievance Committee decides that a grade change is not warranted, the Associate Director of Instruction will convey this in writing to the student and the instructor. The original grade will stand and the matter is considered closed.

If the committee recommends a grade change, the Associate Director of Instruction will communicate that decision directly to the instructor. The instructor will then be asked to respond in writing within five University business days to the Associate Director of Instruction indicating whether or not he/she will abide by the Grade Grievance Committee's recommendation. If the instructor agrees to a grade change, the Associate Director of Instruction will in writing inform the student of the instructor's decision and the student's final course grade will be changed. The matter is considered closed.

If an instructor does not accept the Grade Grievance Committee's recommendation to change the final grade, the original grade will stand. By College policy, a final course grade rests solely with the instructor and, as such, a course grade cannot be changed without the instructor's consent. When this occurs, the Associate Director of Instruction will convey in writing this decision to the student. The matter is considered closed. There is no appeal beyond the Department.

[Ecology and Evolutionary Biology](#)

see Biology Programs above

[Economics Department](#)

## **Updated and Approved May 2011**

The University of Michigan vests ultimate grading authority in the teacher. (In this context, "the teacher" is the person, or group of persons, with ultimate pedagogical responsibility for the course as a whole.) Accordingly, students should endeavor to resolve any concerns directly and



informally with their teachers. Students unable to resolve their concerns in that manner may invoke the following Grade Grievance Procedure.

1. Within the time limits set forth at the end of this document, the student shall submit a written grievance to the Director of Undergraduate Studies (DUS). This document shall contain specific complaints, supporting evidence, and a description of the student's attempts to resolve the issue directly with the teacher.
2. The DUS shall convene the Undergraduate Program Committee (UPC) for a hearing. Normally, the hearing shall occur no later than one week after the DUS receives the grievance. At least one day before the hearing, the DUS shall distribute to each member of the UPC, and to the teacher, a copy of the written grievance. Both student and teacher shall be invited to participate in the entire hearing. The parties shall be invited to make opening and/or closing statements. The UPC may question the parties. The DUS may invite one or more of the course's Graduate Student Instructors (GSIs) to speak.
3. After deliberating privately, the UPC shall issue a recommendation to the teacher. The student shall receive a copy of this recommendation. The UPC shall send this recommendation to the teacher and to the student no later than one day after the hearing.
4. If any party to the grievance is a member of the UPC, that party shall not participate in the deliberation and decision-making described in paragraph 3.
5. The teacher shall decide whether or not to modify the grade. The teacher shall communicate this decision in writing to the student and to the DUS. The teacher shall send these communications no later than three days after the teacher receives the UPC's recommendation. If the student does not appeal, the Department's procedure ends here.
6. The student may appeal to the Chair of Economics (the Chair). Only the process of the decision-making to this point in the Grade Grievance Procedure, by the UPC and/or by the teacher, may be appealed. The appeal must be filed in writing, with a copy to the DUS, no later than one week after the communication mentioned in the previous paragraph is sent to the student. The appeal shall include the original grievance and specific claims regarding violation of the process specified in this Grade Grievance Procedure.
7. If the student does appeal to the Chair, the Chair shall issue a recommendation to the teacher. The student and the DUS shall receive copies of this recommendation. Normally, the Chair shall send the recommendation and the copies no later than three days after the Chair receives the student's appeal.
8. The teacher shall decide whether or not to modify the grade. The teacher shall notify the student, the Chair, and the DUS in writing of this decision. The teacher shall send these notifications no later than three days after the teacher receives the Chair's recommendation. If the student appealed to the Chair, the Department's procedure ends here.

9. According to the Handbook for Faculty and Instructional Staff (LSA, Office of Student Academic Affairs, September 2010, p. 23), the decision resulting from this Grade Grievance Procedure is final.

## **TIME LIMITS FOR FILING GRADE GRIEVANCES IN ECONOMICS UNDERGRADUATE COURSES**

<b>Term</b>	<b>Last day to file</b>
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<b>Fall</b>	January 31 of the subsequent term or two weeks after the Registrar posts the student's grade, whichever occurs later.
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<b>Winter</b>	May 31 of the subsequent term or two weeks after the Registrar posts the student's grade, whichever occurs later.
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<b>Spring</b>	July 31 of the subsequent term or two weeks after the Registrar posts the student's grade, whichever occurs later.
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<b>Summer</b>	September 30 of the subsequent term or two weeks after Registrar posts the student's grade, whichever occurs later.
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English Language and Literature Department

**Updated April 2016**

### **English Department Grade Grievance Policy**

The Department of English Language and Literature expects instructors to set fair and consistent grading procedures. Students may inquire about a grade and initiate a grade grievance if they have grounds to believe that an instructor has deviated from previously stated grading standards or applied such standards inconsistently.

Two principles should be clearly understood as part of the context of any grade grievance:

- A grade given by a faculty member may be changed only by that faculty member (Faculty Code B 5.01). A grade given in a class taught by a teaching assistant may be changed only by the faculty supervisor of the course.
- While the Department wishes to see demonstrably unfair grades rectified, it will not automatically invoke the full procedure described below for every grievance. For example, a grievance based on the argument that one instructor's grading standards are stricter than those of others will not be pursued.

## **I. Consultation with Instructor**

The student should first confer with his/her instructor (and with the course supervisor, if there is one) to make sure that both are aware of all the pertinent facts and to identify the issues that are in dispute. This initial inquiry should take place within the first fifteen University business days of the first full term following the term in which the disputed grade was issued.

## **II. Formal Complaints to Grade Grievance Officer and Director of Undergraduate Studies (DUS)**

If the first step does not lead to a resolution, the student should then write a letter of complaint and append to it all the written work for the course. The letter of complaint should include: 1. specific evidence that the grade was given in error or was arbitrarily determined, 2. a summary of the student's initial consultation with the course instructor, and 3. a summary of aspects of the case that remain in dispute. If the grievance pertains to English 124 or English 125, these materials should be submitted to the EDWP Director, who serves as grade grievance officer. For all other courses, the materials should be submitted to the Director of Undergraduate Studies, who will forward them to the English Department grade grievance officer. Grievances must be filed by end of the fifth week of classes in the first full term following the term in which the disputed grade was issued.

The grade grievance officer will forward the student's letter to the instructor and invite the instructor to explain in writing how the final grade was determined and respond to the specific claims made by the student. Any such communication will be made available to the student.

If the grievance cannot be resolved in conversations between the instructor, the student, and the grade grievance officer, the case goes forward to the Director of Undergraduate Studies (DUS) in the English department. All pertinent written documents will be forwarded to the DUS, and the DUS will also meet separately with the officer, the instructor, and the student to obtain their accounts of the case. The DUS will determine whether sufficient evidence exists to convene the Department's Grade Grievance Committee to review the case. If the DUS determines that there is insufficient evidence for the grade grievance, the matter is considered closed, and the original grade stands.

## **III. Review of the case by the Grade Grievance Committee**

Once it has been determined that a Departmental Grade Grievance Committee will review the case, the committee will be empaneled and a date set on which the committee will meet. Committee members will be provided with copies of the student's complaint and the instructor's reply; the student and the instructor may also submit a written response to these materials in advance of the meeting.

After the meeting at which they review the case, the Grade Grievance Committee will have ten University business days to determine its recommendation and submit a written report to the DUS. If the Grade Grievance Committee decides that a grade change is not warranted, the DUS will convey this in writing to the student and the instructor. The original grade will stand and

the matter is considered closed. If the committee recommends a grade change, the DUS will communicate that decision directly to the instructor. The instructor will then be asked to respond in writing within five University business days to the DUS indicating whether or not he/she will abide by the Grade Grievance Committee's recommendation. If the instructor agrees to a grade change, the DUS will inform the student in writing of the instructor's decision, and the student's final course grade will be changed. The matter is considered closed.

If an instructor does not accept the Grade Grievance Committee's recommendation to change the final grade, the original grade will stand. By College policy, a final course grade rests solely with the instructor and, as such, a course grade cannot be changed without the instructor's consent. When this occurs, the DUS will provide to the student written notification of the committee's recommendation and the instructor's decision. The matter is considered closed; there is no appeal beyond the Department.

If a grade change is permitted, a Supplemental Grade Report must be submitted by the instructor so the student can have the grade reported on his/her academic record.

For further information please contact the Undergraduate Administrator at 734-764-6330.

[English Language Institute](#)

### **Updated and Approved March 2012**

Students who believe they have received an unfair grade in an English Language Institute (ELI) course are encouraged to discuss the issue with their instructor in an effort to resolve the issue. Such discussion should take place as soon as practical following receipt of the grade. Discussion between the student and the instructor regarding a grade does not necessarily constitute a step in the grievance process. The student and the instructor may reach a resolution that is acceptable to them both without launching a formal grievance process. If such mutually satisfactory resolution is not reached, students have the right to file a grievance and should follow the procedures described below.

1. The student must first contact the instructor who assigned the grade and explain the particular grievance within two weeks of the beginning of the term following the semester when the grade was given. The instructor should respond to the student within 2 weeks of receiving the student's complaint and schedule a meeting with the student if necessary. If the grade disagreement is not resolved, the student may file a formal grievance.
2. To grieve a grade, the student must file a written appeal and submit it to the ELI Grade Grievance Committee, addressed to the ELI Director. This letter must be received no later than two weeks following the instructor's response in Step 1. If the ELI Director is the instructor in question, the letter should be addressed to the Director of the Instructional Division. The student must clearly explain the nature of the dispute and attach copies of all relevant graded materials. The instructor will receive a copy of the letter and will have the opportunity to respond.

The ELI Grade Grievance Committee will consider the appeal and the instructor's response at the next meeting after the letter is received. The student and instructor have the option of

appearing before the Committee and may appear without the other being present if they so request.

1. If the Committee judges the original grade to have been reasonable, a statement shall be drafted stating that an appeal had been made and outlining the reasons for the rejection of the appeal.
2. If the Committee recommends that the grade be changed, a document will be drafted stating the reasons for the recommendation and specifying the recommended new grade. The Committee will then determine whether the instructor is willing to change the grade, or if some alternative action is acceptable. If these efforts fail, the Committee will state its findings in a letter that is placed in the ELI's grievance file, and in the instructor's and student's files. The student will also receive a copy of the letter.
3. The Committee will notify the student in writing of the final decision. At this point, there shall be no further hearing of the matter within the English Language Institute.

The ELI wishes to see a demonstrably unfair grade changed and provides through review by a faculty committee, a procedure for grade review. Nevertheless, the ELI believes that the instructor of the course is the most qualified person to assess the student's work. The review committee does not share the instructor's familiarity with the subject matter of the course, nor does it know the range of excellence of students in the class. While the review committee may recommend that the instructor change the grade, our procedures conform to the traditional policy that confers responsibility for assignment of a grade on the instructor of the course.

Grievances must be based on substantive grounds, and the burden of proof in challenging a grade rests on the student. Normally a student must provide evidence that the grade is not consistent with the stated grading procedure, fails to give full consideration to all graded material, or otherwise deviates from previously stated standards. Because there is some imprecision in grading, the difference between an A and an A-, for instance, should not become a matter for grievance. In cases where there is reasonable doubt, the grade assigned by the instructor will be maintained.

Earth and Environmental Sciences Department

## **Updated and Approved March 2012**

### **Preamble**

Within the College of Literature, Science, and the Arts, instructors are expected to set fair and consistent grading procedures for their respective courses. The key to implementing fair grading procedures in courses across the College is that individual instructors adhere to grading rubrics that are applied evenly and consistently to all students within a respective course. If the grading rubric is used consistently for each student, then the final grade is assumed to be the correct grade. Nevertheless, students can inquire about a grade and subsequently initiate a grade grievance when they think that the grade was unfairly given. The procedure discussed in this document is for courses in the Earth and Environmental Sciences Department (EARTH).

### **Consultation with Instructor**

The first step in inquiring about the accuracy of a final grade should be directed to the lead instructor of the course. This initial inquiry should take place within the first fifteen University business days of the first full term following the term in which the disputed grade was issued. If, after this inquiry, the student is not satisfied with the instructor's response, the student may choose to initiate a formal grade grievance.

### **Formal complaint to Associate Chair of Undergraduate Affairs**

To initiate a formal grade grievance, the student should contact the Associate Chair for Curriculum before the end of the fifth week of classes in the first full term following the term in which the disputed grade was issued. If the Associate Chair is the instructor of the course in which the disputed grade was issued, the Chair of the Department will take his/her role. To initiate the formal grade grievance process, the student must convey in writing the basis for the complaint, with specific evidence in support of the argument that the grade either was given in error or was unfairly determined. This formal complaint also should summarize the outcome of the initial inquiry to the course instructor, indicating what aspects are in dispute. Upon receipt of the written complaint, the Associate Chair will ask the instructor to provide a written summary restating how the final grade was determined and to respond to the specific claims made by the student.

After receiving this information from both the student and the instructor, the Associate Chair will then determine if sufficient evidence exists to convene the Department's Grade Grievance Committee. If the Associate Chair determines that there is insufficient evidence for the grade grievance, the matter is considered closed, and the original grade stands.

If the Associate Chair determines that the grade grievance should proceed, a date for a formal hearing with the Grade Grievance Committee will be set.

### **Grade Grievance Hearing**

Once it has been determined that a formal hearing will be held, the Associate Chair will empanel the appropriate Departmental Grade Grievance Committee. Both the student filing the grade grievance and the respective instructor will be provided with copies of the written student complaint and the instructor's summary in advance of the formal hearing. During the formal hearing, the student will be asked to first present the basis of his or her complaint; the instructor will then be asked to present his or her explanation for how grades were determined. Following an open period of questions to all parties, i.e., the student, the instructor and the Grade Grievance committee members, the formal hearing will be adjourned.

### **Grade Grievance Committee's Recommendation**

The Grade Grievance Committee will then have ten University business days to determine its recommendation and submit a written report to the Associate Chair.

If the Grade Grievance Committee decides that a grade change is not warranted, the Associate Chair will convey this in writing to the student and the instructor. The original grade will stand and the matter is considered closed.

If the committee recommends a grade change, the Associate Chair will communicate that decision directly to the instructor. The instructor will then be asked to respond in writing within five University business days to the Associate Chair indicating whether or not he/she will abide by the Grade Grievance Committee's recommendation. If the instructor agrees to a grade change, the Associate Chair will in writing inform the student of the instructor's decision and the student's final course grade will be changed. The matter is considered closed.

If an instructor does not accept the Grade Grievance Committee's recommendation to change the final grade, the original grade will stand. By College policy, a final course grade rests solely with the instructor and, as such, a course grade cannot be changed without the instructor's consent. When this occurs, the Associate Chair will convey in writing this decision to the student. The matter is considered closed. There is no appeal beyond the Department.

Film, Television, and Media Department

## **Updated and Approved September 2012**

### **Preamble**

Within the College of Literature, Science, and the Arts, instructors are expected to set fair and consistent grading procedures for their respective courses. The key to implementing fair grading procedures in courses across the College is that individual instructors adhere to grading rubrics that are applied evenly and consistently to all students within a respective course. If the grading rubric is used consistently for each student, then the final grade is assumed to be the correct grade. Nevertheless, students can inquire about a grade and subsequently initiate a grade grievance when they think that the grade was unfairly given.

### **Consultation with Instructor**

The first step in inquiring about the accuracy of a final grade should be directed to the lead instructor of the course. This initial inquiry should take place within the first fifteen University business days of the first full term following the term in which the disputed grade was issued. If, after this inquiry, the student is not satisfied with the instructor's response, the student may choose to initiate a formal grade grievance. To initiate a formal grade grievance within the Department of Film, Television, and Media, the student should contact the department's Associate Chair before the end of the fifth week of classes in the first full term following the term in which the disputed grade was issued.

### **Formal complaint to Associate Chair**

To initiate the formal grade grievance process, the student must convey in writing the basis for the complaint, with specific evidence in support of the argument that the grade either was given

in error or was unfairly determined. This formal complaint also should summarize the outcome of the initial inquiry to the course instructor, indicating what aspects are in dispute. Upon receipt of the written complaint, the Associate Chair will ask the instructor to provide a written summary restating how the final grade was determined and to respond to the specific claims made by the student.

After receiving this information from both the student and the instructor, the Associate Chair will then determine if sufficient evidence exists to convene the department's Grade Grievance Committee. If the Associate Chair determines that there is insufficient evidence for the grade grievance, the matter is considered closed, and the original grade stands.

If the Associate Chair determines that the grade grievance should proceed, a date for a formal hearing with the Grade Grievance Committee will be set.

### **Grade Grievance Hearing**

Once it has been determined that a formal hearing will be held, the Associate Chair will empanel the appropriate Departmental Grade Grievance Committee. Both the student filing the grade grievance and the respective instructor will be provided with copies of the written student complaint and the instructor's summary in advance of the formal hearing. During the formal hearing, the student will be asked to first present the basis of his or her complaint; the instructor will then be asked to present his or her explanation for how grades were determined. Following an open period of questions to all parties, i.e., the student, the instructor and the Grade Grievance committee members, the formal hearing will be adjourned.

### **Grade Grievance Committee's Recommendation**

The Grade Grievance Committee will then have ten University business days to determine its recommendation and submit a written report to the Associate Chair.

If the Grade Grievance Committee decides that a grade change is not warranted, the Associate Chair will convey this in writing to the student and the instructor. The original grade will stand and the matter is considered closed.

If the committee recommends a grade change, the Associate Chair will communicate that decision directly to the instructor. The instructor will then be asked to respond in writing within five University business days to the Associate Chair indicating whether or not he/she will abide by the Grade Grievance Committee's recommendation. If the instructor agrees to a grade change, the Associate Chair will, in writing, inform the student of the instructor's decision and the student's final course grade will be changed. The matter is considered closed.

If an instructor does not accept the Grade Grievance Committee's recommendation to change the final grade, the original grade will stand. By College policy, a final course grade rests solely with the instructor and, as such, a course grade cannot be changed without the instructor's consent. When this occurs, the Associate Chair will convey in writing this decision to the student. The matter is considered closed. There is no appeal beyond the Department.



## **Updated and Approved August 2012**

Within the College of Literature, Science, and the Arts, instructors are expected to set fair and consistent grading procedures for their respective courses. The key to implementing fair grading procedures in courses across the College is that individual instructors adhere to grading rubrics that are applied evenly and consistently to all students within a respective course. If the grading rubric is used consistently for each student, then the final grade is assumed to be the correct grade. Nevertheless, students can inquire about a grade and subsequently initiate a grade grievance when they think that the grade was unfairly given.

Geography is a unit of the Office of the LSA Associate Dean for Undergraduate Education. Its grade grievance procedures fall under the University Courses Division's policy. Students who want to inquire about the accuracy of their final grade in UC courses should pursue the following steps:

### **Consultation with Instructor**

The first step in inquiring about the accuracy of a final grade should be directed to the lead instructor of the course. This initial inquiry should take place within the first fifteen University business days of the first full term following the term in which the disputed grade was issued. If, after this inquiry, the student is not satisfied with the instructor's response, the student may choose to initiate a formal grade grievance. To initiate a formal grade grievance, the student should contact the Assistant Dean for Undergraduate Education before the end of the fifth week of classes in the first full term following the term in which the disputed grade was issued.

### **Formal complaint to the Assistant Dean for Undergraduate Education**

To initiate the formal grade grievance process, the student must convey in writing the basis for the complaint, with specific evidence in support of the argument that the grade either was given in error or was unfairly determined. This formal complaint also should summarize the outcome of the initial inquiry to the course instructor, indicating what aspects are in dispute. Upon receipt of the written complaint, the Assistant Dean will ask the instructor to provide a written summary restating how the final grade was determined and to respond to the specific claims made by the student.

After receiving this information from both the student and the instructor, the Assistant Dean will then determine if sufficient evidence exists to convene the UC Division's Grade Grievance Committee. If the Assistant Dean determines that there is insufficient evidence for the grade grievance, the matter is considered closed, and the original grade stands.

If the Assistant Dean determines that the grade grievance should proceed, a date for a formal hearing with the Grade Grievance Committee will be set.

### **Grade Grievance Hearing**

Once it has been determined that a formal hearing will be held, the Assistant Dean will empanel the appropriate University Courses Division Grade Grievance Committee. Both the student filing the grade grievance and the respective instructor will be provided with copies of the written student complaint and the instructor's summary in advance of the formal hearing. During the formal hearing, the student will be asked to first present the basis of his or her complaint; the instructor will then be asked to present his or her explanation for how grades were determined. Following an open period of questions to all parties, i.e., the student, the instructor and the Grade Grievance committee members, the formal hearing will be adjourned.

### **Grade Grievance Committee's Recommendation**

The Grade Grievance Committee will then have ten University business days to determine its recommendation and submit a written report to the Assistant Dean.

If the Grade Grievance Committee decides that a grade change is not warranted, the Assistant Dean will convey this in writing to the student and the instructor. The original grade will stand and the matter is considered closed.

If the committee recommends a grade change, the Assistant Dean will communicate that decision directly to the instructor. The instructor will then be asked to respond in writing within five University business days to the Assistant Dean indicating whether or not he/she will abide by the Grade Grievance Committee's recommendation. If the instructor agrees to a grade change, the Assistant Dean will in writing inform the student of the instructor's decision and the student's final course grade will be changed. The matter is considered closed.

If an instructor does not accept the Grade Grievance Committee's recommendation to change the final grade, the original grade will stand. By College policy, a final course grade rests solely with the instructor and, as such, a course grade cannot be changed without the instructor's consent. When this occurs, the Assistant Dean will convey in writing this decision to the student. The matter is considered closed. There is no appeal beyond the University Courses Division.

[Germanic Languages and Literatures Department](#)

### **Updated and Approved February 2012**

The faculty of the Department of Germanic Languages and Literatures recognizes that instances may arise where a student feels that his or her academic performance has been unfairly or improperly graded due to prejudice, capricious changes in course requirements, inconsistency in the criteria applied to judge the student's work, or clerical error. Although an unfair or improper grade should certainly be changed, the following principles must be understood: (1) a grade given by a faculty member can be changed only by that faculty member (Faculty Code B 5.07); (2) a grade given by a Graduate Student Instructor (GSI) can only be changed by that GSI, or by the faculty supervisor of that course; (3) these grievance procedures are intended to result in a recommendation to change or not to change a grade, and will not supersede the faculty member's judgment of a student's performance.

If a student believes that he or she has received an unfair or improper grade for a course in this department, these steps should be taken:

1. Within two weeks of the subsequent term of receiving the grade in question, the student should confer with the instructor and attempt to resolve the issue. The student will be expected to write a thorough rationale (calculation) for what s/he expected his/her grade to be and submit this calculation to the instructor. If the student is not satisfied with the outcome of this meeting, the instructor or supervisor must make available to the student a copy of these procedures, in order that the student may proceed with the grievance properly and promptly.
2. If the first step does not produce a solution that is agreeable to the student, and if the instructor is a German 101-232 Graduate Student Instructor or Lecturer, the student is to submit a written appeal to the language program coordinator. The student must initiate this appeal no later than ten days after the meeting with the instructor. If this does not produce a solution that is agreeable to the student, then the language coordinator, student, and instructor will involve the Chair of the Department. The student is to submit to the department's Chair a written appeal, citing all relevant factors, and attach papers, homework assignments, tests, and other supporting evidence. The student must initiate this appeal (to the Chair) no later than one week after the meeting with the language program coordinator. If the issue is not resolved at this point, the process continues with step (4) below.
3. For a student in a class other than German 101-232, or a course taught by a Visiting, Assistant, Associate, or Full Professor, the student is to submit to the Chair of the Department a written appeal, citing all relevant factors, and attach papers, homework assignments, tests, and other supporting evidence. The student must initiate this appeal no later than ten days after the meeting with the instructor. If the issue is not resolved at this point, the process continues with step (4) below.
4. If the Chair, instructor, and student cannot produce a solution, the Chair of the Department will appoint a Grievance Committee to review the appeal. The committee will consist of the Department Chair, one additional professor, one department advisor, and a student from the Student Advisory Committee.
5. The Chair of the Department will ask the instructor to respond to the appeal in writing; this response should be submitted no later than two weeks after the student's initial appeal to the Chair. The Chair will distribute copies of this response, of the student's letter of appeal, and of all other relevant documents, to the members of the Grievance Committee; the Department's Chair will also make a copy of the instructor's response available to the student.
6. Within two weeks after the committee has been appointed, the committee will conduct a hearing at which the instructor, the course supervisor (if any), and the student must be present, and at which they may present their cases orally. The time and place of the hearing will be announced at least one week in advance. If the instructor is off campus, the Chair of the Department will solicit a letter from him/her in which the instructor's position is set forth.
7. Immediately after the hearing, the committee will consider the matter and arrive at its recommendation. The recommendation will be delivered in writing to the instructor, with copies to the course supervisor (if any), and to the student. The committee may recommend:
  1. that the grade be changed;
  2. that the grade not be changed; or
  3. that some other solution be sought, e.g., additional time to write a paper.
  4. If the instructor refuses to follow a recommendation to change the grade, then the grade will stand. The student, however, may request that the Chair of the Department provide him or her with a letter recording the decision of the Grievance Committee, and

the faculty member's refusal to follow its recommendation. The student may request to have a copy of the letter retained by the Office of the Assistant Dean.

## History Department

### **Updated and Approved August 2012**

Instructors in the History Department are expected to set fair and consistent grading procedures for their respective courses. If the grading rubric is used consistently for each student, then the final grade is assumed to be the correct grade. However, students can inquire about a grade and subsequently initiate a grade grievance when they think that the grade was unfairly given.

To appeal any grade (or other course-related matter), students must follow these steps:

I. Consultation with the Instructor. The first step in inquiring about the accuracy of a final grade or any other course-related matter should be directed to the lead instructor of the course. This initial inquiry should take place within the first fifteen University business days of the first full term following the term in which the disputed grade was issued. In general, the student should communicate the concerns to the instructor in writing and then schedule an appointment if necessary. Many instructors spell out specific procedures for grade appeals in their syllabi, which should be followed as long as they do not conflict with this Departmental policy.

II. Filing a Grievance. If, after this inquiry, the student is not satisfied with the instructor's response, the student may choose to initiate a formal grade grievance. To start this process, the student should contact the Director of Undergraduate Studies (if an undergraduate) or the Director of Graduate Studies (if a doctoral student) before the end of the fifth week of classes in the first full term following the term in which the disputed grade was issued.

To initiate the formal grade grievance process, the student must convey in writing the basis for the complaint, with specific evidence in support of the argument that the grade either was given in error or was unfairly determined. This formal complaint also should summarize the outcome of the initial inquiry to the course instructor, indicating what aspects are in dispute. Upon receipt of the written complaint, the DUGS/DGS will ask the instructor to provide a written summary restating how the final grade was determined and to respond to the specific claims made by the student.

After receiving this information from both the student and the instructor, the DUGS/DGS will then determine if sufficient evidence exists to convene the Department's Grade Grievance Board. The DUGS/DGS should also consult with the Associate Chair about the case.

If the DUGS/DGS determine that there is insufficient evidence for the grade grievance, the matter is considered closed, and the original grade stands. If the DUGS/DGS determines that the grade grievance should proceed, a date for a formal hearing with the grievance board will be set. The DUGS/DGS should communicate this decision in writing to the student, the instructor, and the Associate Chair.

III. **Grievance Board Hearing.** In the event of a formal hearing, the DUGS/DGS will appoint a 4-person grievance board from among the members of the relevant committee. In a case involving an undergraduate student, the grievance board will consist of two faculty members and the two undergraduate members of the Undergraduate Committee. In a case involving a graduate student, the grievance board will consist of two faculty members of the Graduate Committee and two graduate students executives from GOSH (Graduate Organization of Students in History). The grievance board will not include the DUGS, DGS, Associate Chair, or anyone else with a potential conflict of interest in the case.

The grievance board will receive the written student complaint and the instructor's summary in advance of the formal hearing, and both the student and the instructor will also receive these records as well. During the formal hearing, the student will be asked to first present the basis of his or her complaint; the instructor will then be asked to present his or her explanation for how grades were determined. Following an open period of questions to all parties, i.e., the student, the instructor and the Grade Grievance committee members, the formal hearing will be adjourned.

IV. **Grievance Board Recommendation.** The grievance board will then have ten University business days to determine its recommendation and submit a written report to the DUGS/DGS.

If the grievance board decides that a grade change is not warranted, the DUGS/DGS will convey this in writing to the student and the instructor. The original grade will stand and the matter is considered closed.

If the grievance board recommends a grade change, the DUGS/DGS will communicate that decision directly to the instructor. The instructor will then be asked to respond in writing within five University business days to the DUGS/DGS indicating whether or not he/she will abide by the grievance board's recommendation. If the instructor agrees to a grade change, the DUGS/DGS will inform the student in writing of the instructor's decision and the student's final course grade will be changed. The matter is considered closed.

If an instructor does not accept the grievance board's recommendation to change the final grade, the original grade will stand. By College policy, a final course grade rests solely with the instructor and, as such, a course grade cannot be changed without the instructor's consent. When this occurs, the DUGS/DGS will convey this decision in writing to the student. The matter is considered closed.

There is no grade appeal beyond the Department. If, however, the student or the DUGS/DGS has concerns about the unfolding of the process itself, rather than the specific grade, these should be communicated to the Associate Chair as the representative of the Executive Committee.

[History of Art Department](#)

**Updated and Approved July 2012**

**I. Preamble**

Within the College of Literature, Science, and the Arts, instructors are expected to set fair and consistent grading procedures for their respective courses. The key to implementing fair grading procedures in courses across the College is that individual instructors adhere to grading rubrics that are applied evenly and consistently to all students within a respective course. If the grading rubric is used consistently for each student, then the final grade is assumed to be the correct grade. Nevertheless, students can inquire about a grade and subsequently initiate a grade grievance when they think that the grade was unfairly given.

## **II. Consultation with Instructor**

The first step in inquiring about the accuracy of a final grade should be directed to the lead instructor of the course. This initial inquiry should take place within the first fifteen University business days of the first full term following the term in which the disputed grade was issued. If, after this inquiry, the student is not satisfied with the instructor's response, the student may choose to initiate a formal grade grievance. To initiate a formal grade grievance, the student should contact the Director of Undergraduate Studies (DUS) of the Department of the History of Art before the end of the fifth week of classes in the first full term following the term in which the disputed grade was issued.

## **III. Formal complaint to Director of Undergraduate Studies (DUS)**

To initiate the formal grade grievance process, the student must convey in writing the basis for the complaint, with specific evidence in support of the argument that the grade either was given in error or was unfairly determined. This formal complaint also should summarize the outcome of the initial inquiry to the course instructor, indicating what aspects are in dispute. Upon receipt of the written complaint, the DUS will ask the instructor to provide a written summary restating how the final grade was determined and to respond to the specific claims made by the student.

After receiving this information from both the student and the instructor, the DUS will then determine if sufficient evidence exists to convene the Department's Grade Grievance Committee. If the DUS determines that there is insufficient evidence for the grade grievance, the matter is considered closed, and the original grade stands.

If the DUS determines that the grade grievance should proceed, a date for a formal hearing with the Grade Grievance Committee will be set.

## **IV. Grade Grievance Hearing**

Once it has been determined that a formal hearing will be held, the DUS will empanel the appropriate Departmental Grade Grievance Committee. The Grade Grievance Committee will consist of the DUS, at least one other faculty member (typically, a member of the Undergraduate Committee) and at least one undergraduate (to be selected by the DUS). Both the student filing the grade grievance and the respective instructor will be provided with copies of the written student complaint and the instructor's summary in advance of the formal hearing. During the formal hearing, the student will be asked to first present the basis of his or her complaint; the instructor will then be asked to present his or her explanation for how grades were

determined. Following an open period of questions to all parties, i.e., the student, the instructor and the Grade Grievance committee members, the formal hearing will be adjourned.

## **V. Grade Grievance Committee's Recommendation**

The Grade Grievance Committee will then have ten University business days to determine its recommendation and submit a written report to the DUS.

If the Grade Grievance Committee decides that a grade change is not warranted, the DUS will convey this in writing to the student and the instructor. The original grade will stand and the matter is considered closed.

If the committee recommends a grade change, the DUS will communicate that decision directly to the instructor. The instructor will then be asked to respond in writing within five University business days to the DUS indicating whether or not he/she will abide by the Grade Grievance Committee's recommendation. If the instructor agrees to a grade change, the DUS will in writing inform the student of the instructor's decision and the student's final course grade will be changed. The matter is considered closed.

If an instructor does not accept the Grade Grievance Committee's recommendation to change the final grade, the original grade will stand. By College policy, a final course grade rests solely with the instructor and, as such, a course grade cannot be changed without the instructor's consent. When this occurs, the DUS will convey in writing this decision to the student. The matter is considered closed. There is no appeal beyond the Department.

[Honors Program](#)

## **Updated and Approved May 2012**

### **I. Preamble**

Within the College of Literature, Science, and the Arts, instructors are expected to set fair and consistent grading procedures for their respective courses. The key to implementing fair grading procedures in courses across the College is that individual instructors adhere to grading rubrics that are applied evenly and consistently to all students within a respective course. If the grading rubric is used consistently for each student, then the final grade is assumed to be the correct grade. Nevertheless, students can inquire about a grade and subsequently initiate a grade grievance when they think that the grade was unfairly given.

### **II. Consultation with Instructor**

The first step in inquiring about the accuracy of a final grade should be directed to the lead instructor of the course. This initial inquiry should take place within the first fifteen University business days of the first full term (Fall or Winter) following the term in which the disputed grade was issued. If, after this inquiry, the student is not satisfied with the instructor's response, the student may choose to initiate a formal grade grievance. To initiate a formal grade grievance,

the student should contact the Associate Director or the Director of the home department of the course in question before the end of the fifth week of classes in the first full term following the term in which the disputed grade was issued.

### **III. Formal complaint to Associate Director or Director**

To initiate the formal grade grievance process, the student must convey in writing the basis for the complaint, with specific evidence in support of the argument that the grade either was given in error or was unfairly determined. This formal complaint also should summarize the outcome of the initial inquiry to the course instructor, indicating what aspects are in dispute. Upon receipt of the written complaint, the Associate Director or Director will ask the instructor to provide a written summary restating how the final grade was determined and to respond to the specific claims made by the student.

After receiving this information from both the student and the instructor, the Associate Director or Director will then determine if sufficient evidence exists to convene the Honors Academic Board (HAB). If the Associate Director or Director determines that there is insufficient evidence for the grade grievance, the matter is considered closed, and the original grade stands.

If the Associate Director or Director determines that the grade grievance should proceed, a date for a formal hearing with the Honors Academic Board will be set.

### **IV. Grade Grievance Hearing**

Once it has been determined that a formal hearing will be held, the Associate Director or Director will empanel the Honors Academic Board. Both the student filing the grade grievance and the respective instructor will be provided with copies of the written student complaint and the instructor's summary in advance of the formal hearing. During the formal hearing, the student will be asked to first present the basis of his or her complaint; the instructor will then be asked to present his or her explanation for how grades were determined. Following an open period of questions to all parties, i.e., the student, the instructor and the Honors Academic Board members, the formal hearing will be adjourned.

### **V. Honors Academic Board's Recommendation**

The HAB will then have ten University business days to determine its recommendation and submit a written report to the Associate Director or Director.

If the HAB decides that a grade change is not warranted, the Associate Director or Director will convey this in writing to the student and the instructor. The original grade will stand and the matter is considered closed.

If the HAB recommends a grade change, the Associate Director or Director will communicate that decision directly to the instructor. The instructor will then be asked to respond in writing within five University business days to the Associate Director or Director indicating whether or not he/she will abide by the HAB's recommendation. If the instructor agrees to a grade change,



the Associate Director or Director will in writing inform the student of the instructor's decision and the student's final course grade will be changed. The matter is considered closed.

If an instructor does not accept the HAB's recommendation to change the final grade, the original grade will stand. By College policy, a final course grade rests solely with the instructor and, as such, a course grade cannot be changed without the instructor's consent. When this occurs, the Associate Director or Director will convey in writing this decision to the student. The matter is considered closed. There is no appeal beyond the Honors Program.

### International Studies Programs

Normally students accept an instructor's evaluation of their work. Nevertheless, there are instances when a student feels that his or her academic performance has been unfairly or improperly graded. Typical complaints include prejudice, capricious changes in the course requirements, and lack of uniformity in judgment applied. When these charges arise, discussion and arbitration can bring out the facts to ascertain if there is a wrong that should be righted. However, such hearings are not intended to dispute the instructor's right to make his or her own evaluation of a student's work.

## **GROUND FOR A GRADE CHANGE**

For a change in grade to be recommended, a student must make the case that the grade originally given was unjustly awarded. Dissatisfaction with a grade alone is not sufficient for an appeal.

Grade appeal procedures are available only for review of alleged capricious grading, and not for review of the judgment of an instructor in assessing the quality of a student's work. Capricious grading, as that term is used herein, constitute any of the following: (1) the assignment of a grade to a particular student on some basis other than performance in the course; (2) the assignment of a grade to a particular student by resorting to more exacting or demanding standards than were applied to other students in that course; (3) the assignment of a grade by a substantial departure from the instructor's previously announced standards. Correction of clerical errors does not require grade appeal procedures; the instructor simply fills out a Supplementary Grade Report.

We recognize that an unjust grade should be changed, and that students need and deserve a means of redress. The establishment of a grade appeal procedure provides this means. However, the committee that is called upon to hear an appeal by a student must acknowledge that it cannot possibly share the instructor's familiarity with the subject matter of the course or with the specific material used in it. The committee must also acknowledge that there is an inevitable minimum of imprecision in grading, and that the difference between a C and a B-, for instance, is hardly one that can, or should, become a matter for detailed litigation. The committee, in judging a single case, cannot know the range of excellence of the students in the class, and it should be cautious about raising the grade of one individual. Otherwise, it may thereby diminish the apparent achievements of other student who may have done better and whose original grade may have been higher. A grievance based on the argument that one instructor's grading standards are stricter than those of others will not be pursued.

For all these reasons, students contemplating appeals should be warned that the review committee will not, and must not, place their judgment over that of the instructor involved except in clear cases. The burden of proof in challenging a grade once given must rest on the student. In all cases of a reasonable doubt, the grade once given will be approved. The department's obligation to handle a grade complaint is limited to a maximum of one term after the course in question.

## **ADJUDICATION PROCESS**

1. Within two weeks after the start of the following semester, the student should convey his or her concerns about the grade in writing to the instructor or professor who assigned the grade and request a meeting to discuss the matter. At this meeting, the instructor/professor should explain the basis upon which the grade was conferred and give the student an opportunity to point out any apparent errors or misjudgments. If the instructor conferring the grade is a Graduate Student Instructor (GSI), the GSI should be consulted first. If agreement is not reached with the GSI, the student should then contact the faculty member in charge of the course. If the instructor/professor is not available to respond to the student's concerns, then the student should proceed directly to step 2. It is expected that Step 1 will be completed by January 30th of the following year for a grade given in fall term or by September 30th for a grade given in spring, summer, or winter term. Only in extenuating circumstances will a grievance beyond this time frame be heard.
2. In the event that the conference with the instructor does not resolve the difficulty, the student should discuss the problem with the Director of the IS program, and should submit to him/her a letter detailing the nature of the complaint. The Director of the IS Program shall solicit a response from the instructor and shall then determine whether any basis for a committee hearing exists. If the Director of the IS Program is a party to the grievance, his/her role shall be assumed by the Director of the International Institute.
3. If the Director of the IS Program concludes that there is no basis for a committee hearing, he/she will inform the student. If the student is not satisfied with the explanation, he/she may still insist upon a committee hearing.
4. If the basis for a formal hearing is found to exist in the review described in item 2, or if the student insists upon a review in spite of the advice of the Director of the IS Program, the grievance shall be referred to an ad hoc review committee.
5. The review committee shall consist of three persons to be appointed by the Director of the IS Program (or the Director of the International Institute, if the Director of the IS Program is a party to the grievance or if he/she has decided there is no basis for a formal hearing): two faculty members and one student. The student member of the review committee will be an undergraduate if the grievant is an undergraduate or a graduate student if the grievant is a graduate student.
6. The review committee will submit a written summary of its findings and recommendations to the instructor and the Director of the International Studies Program.

7. If the review committee concludes that the assigned grade should stand, the Director of the IS Program (or the Director of the International Institute) will inform the student in writing that the grade will not be changed, and that no further appeal within the International Studies Program is possible.

8. If the review committee concludes that the instructor did not act fairly, properly or judiciously, the Director of the IS Program shall attempt to persuade the instructor to follow the recommendations of the committee.

9. If the instructor refuses to change a grade in spite of the recommendations of the review committee and the urgings of the Director of the IS Program, the instructor shall provide the student and the Director of the IS Program with a written explanation for his/her refusal to change the grade, and the Director of the IS Program shall provide the student with a written statement summarizing the procedures followed in processing the appeal, noting the recommendations of the review committee, adding his/her own evaluation of the review committee's findings, and noting the refusal of the instructor to change the grade. There is no appeal beyond the International Studies Program.

10. These procedures describe the full appeal mechanism available in the International Studies Program to deal with grade grievances. When these procedures have run their course, no further appeal within the Program is possible.

The only exception we envisage would be when the instructor is no longer at the University of Michigan. In that case a student may present a grievance to the committee without first discussing the conflict with the instructor. The committee will try to contact the instructor to elicit a response and arrive at a recommendation. If this attempt is unsuccessful, the Director of the International Studies Program may approve a grade change in consultation with the committee.

[Judaic Studies Program](#)

**Updated and Approved March 2012**

## **Preamble**

The Program upholds the principle that the instructor in a course is always in the best position to determine the quality of students' work. The Program in Judaic Studies also has confidence in the qualifications and good judgment of its faculty. The key to implementing fair grading procedures in courses across the Program is that individual instructors adhere to grading rubrics that are applied evenly and consistently to all students within a particular course. Where it can be proven that a clerical error, a procedural fault, or a capricious or biased appraisal has resulted in the awarding of an unfair grade, the Program will do everything in its power to correct the error. It must be understood, however, that only the instructor of a course can determine the substantive value of a student's performance in that course and only the instructor can change the grade.

Furthermore, while the Program wishes to see demonstrably unfair grades rectified, it will not automatically invoke the full procedure described below for every grievance. For example, a grievance based on the argument that one instructor's grading standards are stricter than those of others will normally not be pursued. Nor will minor imprecision in grading, such as between a B- and B, normally be considered an appropriate grievance.

### **Grievance Procedure**

1. A student who feels that he or she has been unfairly graded should first consult with the instructor of the course, in an effort to resolve the disagreement. This initial inquiry should take place within the first fifteen University business days of the first full term following the term in which the disputed grade was issued.
2. If the student is not satisfied by the explanation(s) offered by the instructor of the course, the student may submit to the Director of the Program a written appeal, citing the factors which bear explicitly upon the specific grievance. The grievance takes the form of a written statement, accompanied by relevant graded materials. The statement should detail the disagreements that remain after the discussion between the student and the instructor required above. These materials and the appeal should be submitted before the end of the fifth week of classes in the first full term following the term in which the disputed grade was issued. Exceptions to this rule will be allowed only in extraordinary circumstances.
3. Upon receipt of these materials, the Director of the Program will appoint an ad hoc committee to review the appeal and will name its Chair. This committee will consist of the undergraduate or graduate advisor (depending upon the status of the student), one additional faculty member and one student chosen from the suitable peer group (undergraduate majors or graduate students).
4. The Director of the Program will ask the instructor involved to respond to the appeal in writing no later than three weeks after the filing of the appeal with the Director. This response, together with the appeal and all relevant materials will be put into the hands of the committee.
5. The committee will meet no later than one week after receiving all the aforementioned materials. Both the student filing the grade grievance and the respective instructor will be provided with copies of the written student complaint and the instructor's summary in advance of the formal hearing.
6. During the formal hearing, the student will be asked to first present the basis of his or her complaint; if the instructor chooses to attend he or she will be asked to present his or her explanation for how grades were determined. Following an open period of questions to all parties, i.e., the student, the instructor and the Grade Grievance committee members, the formal hearing will be adjourned.

### **Committee's Recommendation**

1. The committee will then have ten University business days for deliberation. If it is the consensus of the committee that the grade awarded was unfair, the committee will inform the instructor of this opinion and suggest that the grade be changed. It will be possible to suggest a lower grade as well as a higher one. If the consensus is that the grade should not be changed, the committee will convey this in writing to the student and the instructor. The appeal procedure will terminate at this point.

2. If the instructor involved is asked by the committee to change the grade and declines to do so, the grade will stand. However, in this case the Director of the Program or a representative will place a letter recording the decision of the grievance committee and the refusal of the faculty member to change the grade in the student's permanent academic record, unless the student requests this not be done.
3. In the event that the instructor is no longer at the University of Michigan, a student may present a grievance to the Director of the program without first discussing the conflict with the instructor. The Director and the committee will make every effort to contact the instructor to elicit a response before arriving at a recommendation.
4. If the Program declines to appoint a hearing committee, or if the instructor refuses to follow the Committee's decision, the Director of the program will prepare a letter of recommendation, which the student could then opt to have retained by the LSA Office of Student Academic Affairs.

Linguistics Department

**Updated October 2013**

**Approved August 2014**

### **Preamble**

Within the College of Literature, Science, and the Arts, instructors are expected to set fair and consistent grading procedures for their respective courses. The key to implementing fair grading procedures in courses across the College is that individual instructors adhere to grading rubrics that are applied evenly and consistently to all students within a respective course. If the grading rubric is used consistently for each student, then the final grade is assumed to be the correct grade. Nevertheless, students can inquire about a grade and subsequently initiate a grade grievance when they think that the grade was unfairly given.

### **1) Consultation with Instructor**

The first step in inquiring about the accuracy of a final grade should be directed to the lead instructor of the course. This initial inquiry should take place within the first fifteen University business days of the first full term following the term in which the disputed grade was issued. If, after this inquiry, the student is not satisfied with the instructor's response, the student may choose to initiate a formal grade grievance. To initiate a formal grade grievance for a course for which Linguistics is the home department, the student should contact the Linguistics Undergraduate Chair before the end of the fifth week of classes in the first full term following the term in which the disputed grade was issued.

### **2) Formal complaint to the Linguistics Undergraduate Chair**

To initiate the formal grade grievance process, the student must convey in writing the basis for the complaint, with specific evidence in support of the argument that the grade either was given in error or was unfairly determined. This formal complaint also should summarize the outcome of the initial inquiry to the course instructor, indicating what aspects are in dispute. Upon receipt

of the written complaint, the Undergraduate Chair will ask the instructor to provide a written summary restating how the final grade was determined and to respond to the specific claims made by the student.

After receiving this information from both the student and the instructor, the Undergraduate Chair will then determine if sufficient evidence exists to convene the Department's Executive Committee. If the Undergraduate Chair determines that there is insufficient evidence for the grade grievance, the matter is considered closed, and the original grade stands.

If the Undergraduate Chair determines that the grade grievance should proceed, a date for a formal hearing with the Linguistics Department Executive Committee will be set.

### **3) Grade Grievance Hearing**

In advance of the formal hearing, both the student filing the grade grievance and the respective instructor will be provided with copies of the written student complaint and the instructor's summary in advance of the formal hearing. During the formal hearing, the student will be asked to first present the basis of his or her complaint; the instructor will then be asked to present his or her explanation for how grades were determined. Following an open period of questions to all parties, i.e., the student, the instructor and the Executive Committee members, the formal hearing will be adjourned.

### **4) Executive Committee's Recommendation**

The Executive Committee will then have ten University business days to determine its recommendation and submit a written report to the Undergraduate Chair.

If the Executive Committee decides that a grade change is not warranted, the Undergraduate Chair will convey this in writing to the student and the instructor. The original grade will stand and the matter is considered closed.

If the committee recommends a grade change, the Undergraduate Chair will communicate that decision directly to the instructor. The instructor will then be asked to respond in writing within five University business days to the Undergraduate Chair indicating whether or not he/she will abide by the Executive Committee's recommendation. If the instructor agrees to a grade change, the Undergraduate Chair will inform the student, in writing, of the instructor's decision and the student's final course grade will be changed. The matter is considered closed.

If an instructor does not accept the Executive Committee's recommendation to change the final grade, the original grade will stand. By College policy, a final course grade rests solely with the instructor and, as such, a course grade cannot be changed without the instructor's consent. When this occurs, the Undergraduate Chair will convey in writing this decision to the student. The matter is considered closed. There is no appeal beyond the Department.

## Mathematics Department

### Grade Grievance Procedures for the Department of Mathematics (August 2016)

The Department upholds the principle that the instructor in a course is always in the best position to determine the quality of students' work. The Department of Mathematics also has confidence in the qualifications and good judgment of its faculty. Nonetheless, where it can be proven that a clerical error, a procedural fault, or a capricious or biased appraisal has resulted in the awarding of an unfair grade, the Department will do everything in its power to correct the error. It must be understood, however, that only the instructor of a course can determine the substantive value of a student's performance in that course and only the instructor can change the grade.

Furthermore, while the Department wishes to see demonstrably unfair grades rectified, it will not automatically invoke the full procedure described below for every grievance. For example a grievance based on the argument that one instructor's grading standards are stricter than those of others will normally not be pursued. Nor will minor imprecision in grading, such as between a B- and a B, normally be considered an appropriate grievance.

The first step in inquiring about the accuracy of a final grade should be directed to the lead instructor of the course. "Lead instructor" is to be understood as the student's classroom instructor, except in the case of the large multi-section courses math 105,115,116. For these courses the lead instructor is the course coordinator. The initial inquiry into the accuracy of the grade should take place before the fifteenth University business day of the first full term (Fall or Winter) following the term in which the disputed grade was issued. If, after this inquiry, the student is not satisfied with the instructor's response, the student may choose to initiate a formal grade grievance.

To initiate the formal grade grievance process, the student should contact the Associate Chair for Education of the Mathematics Department. The appeal should be filed (a) by the end of the first eight weeks of classes of the first full term (Fall or Winter) following the completion of the course, or (b) within eight weeks of the issuance of the grade received by making up a grade of "Incomplete." Requests to file complaints at later times will be considered in unusual circumstances.

The student must convey in writing the basis for the complaint, with specific evidence in support of the argument that the grade either was given in error or was unfairly determined. This formal complaint also should summarize the outcome of the initial inquiry to the course instructor, indicating what aspects are in dispute. Upon receipt of the written complaint, the Associate Chair will ask the instructor to provide a written summary restating how the final grade was determined and to respond to the specific claims made by the student.

After receiving this information from both the student and the instructor, the Associate Chair will then determine if sufficient evidence exists to convene the Department's Grade Grievance Committee. If the Associate Chair determines that there is insufficient evidence for the grade grievance, the matter is considered closed, and the original grade stands. In the case when the

Associate Chair determines that sufficient evidence does exist, a two-step procedure will be followed:

#### *Step 1*

A discussion is held between the student and the instructor in the presence of the Associate Chair. If the discussion results in a mutually agreed resolution of the problem (i.e. retention of the current grade or change of grade), the Associate Chair will convey in writing the content of the agreed resolution to both instructor and student. If the problem is not resolved, Step 2 is taken.

#### *Step 2*

A review committee is appointed by the Associate Chair. The Committee will consist of the Associate Chair and

- Two other recent instructors of the course in question. If the course was taught by a Graduate Student Instructor (GSI), then one instructor should be a GSI and the other should be a faculty member, preferably a mentor in the case of a mentored course. [L] [SEP]
- Two students from the complainant's peer group; the students ordinarily will have completed the course in question. [L] [SEP]

The review committee meets together with the complainant and the instructor (if in residence). The Associate Chair chairs the review session. Both the student filing the grade grievance and the respective instructor will be provided with copies of the written student complaint and the instructor's summary in advance of the formal [L] [SEP] hearing. During the formal hearing, the student will be asked to first present the basis of his or her complaint; the instructor will then be asked to present his or her explanation for how grades were determined. Following an open period of questions to all parties, i.e., the student, the instructor and the Grade Grievance committee members, the formal hearing will be adjourned. [L] [SEP]

The Grade Grievance Committee will then have ten University business days to determine its recommendation and submit a written report. The Associate Chair has a vote only in the case of a tie. The recommendation may be for no change in grade or for a specified increase or decrease in grade. [L] [SEP]

If the Grade Grievance Committee decides that a grade change is not warranted, the Associate Chair will convey this in writing to the student and the instructor. The original grade will stand and the matter is considered closed. [L] [SEP]

If the committee recommends a grade change, the Associate Chair will communicate that decision directly to the instructor. The instructor will then be asked to respond in writing within five University business days to the Associate Chair indicating whether or not he/she will abide by the Grade Grievance Committee's recommendation. If the instructor agrees to a grade change, the Associate Chair will inform the student in writing of the instructor's decision and the student's final course grade will be changed. The matter is considered closed. [L] [SEP]



If an instructor does not accept the Grade Grievance Committee's recommendation to change the final grade, the original grade will stand. By LSA College policy, a final course grade rests solely with the instructor and, as such, a course grade cannot be changed without the instructor's consent. When this occurs, the Associate Chair will convey in writing this decision to the student. The matter is considered closed. There is no appeal beyond the Department.

Middle East Studies Department

**Updated March 2013**

**Approved August 2014**

Instructors in the Department of Middle East Studies are expected to set fair and consistent grading procedures for their respective courses. If the grading rubric has been used consistently for each student, then the final grade is assumed to be the correct grade. However, students may inquire about a grade and, if they think that their grade has been assigned unfairly, they may subsequently initiate a grade grievance .

To appeal any grade, students must follow these steps:

Consultation with Instructor

The first step in inquiring about the accuracy of a final grade should be directed to the course instructor. In a multi-sectioned course, the inquiry should be made to the student's GSI, who will then consult with the course's faculty supervisor. This initial inquiry should take place no later than three weeks after the beginning of the first full term following the term in which the disputed grade was issued.

### **Filing a Grievance**

If, after this inquiry, the student disputes the instructor's response regarding the student's grade, the student may choose to initiate a formal grade grievance. To start this process, the student should contact the Department Chair before the end of the fifth week of classes in the first full term following the term in which the disputed grade was issued, or within five weeks after the submission of a grade that replaces a grade of Incomplete.

To initiate a formal grievance, the student must convey in writing the basis for the complaint, with specific evidence in support of the student's argument that the grade was given in error or determined arbitrarily. This formal complaint should also summarize the outcome of the student's initial inquiry to the course instructor, indicating the matters that remain in dispute. Upon receipt of the written complaint, the Chair will then ask the instructor to provide a written summary restating how the instructor determined the final grade, and responding to the student's specific claims.

After receiving this information from both the student and the instructor, the Department Chair will then determine if sufficient evidence exists to convene the Department's Executive

Committee. If the Chair determines that there is no evidence for the grade grievance, the matter is considered closed, and the original grade stands. If the Chair determines that the grievance can proceed, then a date will be set for a hearing with the Department Executive Committee.

### **Grade Grievance Hearing**

The Department Executive Committee will receive the student's written complaint and the instructor's summary in advance of the formal hearing; the student and the instructor will receive these documents as well. During the formal hearing, the student will be asked first to present the basis of his or her complaint. The instructor will then be asked to present his or her explanation for how grades were determined. Following an open period of questions to all parties, i.e. the student, the instructor and the Executive Committee members, the formal hearing will be adjourned.

### **Executive Committee's Recommendation**

The Executive Committee will then have ten University business days to determine its recommendation. If the Executive Committee decides there is no basis for a grade change, the Executive Committee Chair will convey this in writing to the student and the instructor. The original grade will stand and the matter will be considered closed. If the committee recommends a change in the grade—whether up or down—the instructor will be asked to respond in writing within five University business days to the Executive Committee Chair, indicating whether or not he or she will abide by the Executive Committee's recommendation. If the instructor agrees to a grade change, the Executive Committee Chair will inform the student in writing of the instructor's decision and the student's final course grade will be changed. The matter will then be considered closed.

If an instructor does not accept the Executive Committee's recommendation to change the final grade, the original grade will stand. By College policy, a final course grade rests solely with the instructor and, as such, cannot be changed without the instructor's consent. When this occurs, the Executive Committee Chair will convey this decision to the student in writing. The matter is then considered closed.

[Molecular, Cellular, and Developmental Biology](#)

see Biology Programs above

[Organizational Studies Program](#)

**Updated and Approved September 2019**

### **I. Preamble**

Within the College of Literature, Science, and the Arts, instructors are expected to set fair and consistent grading procedures for their respective courses. The key to implementing fair grading procedures in courses across the College is that individual instructors adhere to grading rubrics

that are applied evenly and consistently to all students within a respective course. If the grading rubric is used consistently for each student, then the final grade is assumed to be the correct grade. Nevertheless, students can inquire about a grade and subsequently initiate a grade grievance when they think that the grade was unfairly given.

## **II. Consultation with Instructor**

The first step in inquiring about the accuracy of a final grade should be directed to the lead instructor of the course. This initial inquiry should take place within the first fifteen (15) University business days of the first full term following the term in which the disputed grade was issued. If, after this inquiry, the student is not satisfied with the instructor's response, the student may choose to initiate a formal grade grievance. To initiate a formal grade grievance, the student should contact the Organizational Studies Faculty Curriculum Coordinator or Program Director before the end of the fifth week of classes in the first full term following the term in which the disputed grade was issued.

## **III. Formal complaint to OS Faculty Curriculum Coordinator or Program Director**

To initiate the formal grade grievance process, the student must convey in writing the basis for the complaint, with specific evidence in support of the argument that the grade either was given in error or was unfairly determined. This formal complaint also should summarize the outcome of the initial inquiry to the course instructor, indicating what aspects are in dispute. Upon receipt of the written complaint, the OS Faculty Curriculum Coordinator or Program Director will ask the instructor to provide a written summary restating how the final grade was determined and to respond to the specific claims made by the student.

After receiving this information from both the student and the instructor, the OS Faculty Curriculum Coordinator or Program Director will then determine if sufficient evidence exists to convene Organizational Studies Grade Grievance Committee. If the OS Faculty Curriculum Coordinator or Program Director determines that there is insufficient evidence for the grade grievance, the matter is considered closed, and the original grade stands.

If the OS Faculty Curriculum Coordinator or Program Director determines that the grade grievance should proceed, a date for a formal hearing with the OS Grade Grievance Committee will be set.

## **IV. Grade Grievance Hearing**

Once it has been determined that a formal hearing will be held, the OS Director will empanel the appropriate OS Grade Grievance Committee. Both the student filing the grade grievance and the respective instructor will be provided with copies of the written student complaint and the instructor's summary in advance of the formal hearing. During the formal hearing, the student will be asked to first present the basis of his or her complaint; the instructor will then be asked to present his or her explanation for how grades were determined. Following an open period of questions to all parties, i.e., the student, the instructor and the Grade Grievance committee members, the formal hearing will be adjourned.

## **V. Grade Grievance Committee's Recommendation**

The Grade Grievance Committee will then have ten University business days to determine its recommendation and submit a written report to the OS Faculty Curriculum Coordinator or Program Director.

If the Grade Grievance Committee decides that a grade change is not warranted, the OS Faculty Curriculum Coordinator or Program Director will convey this in writing to the student and the instructor. The original grade will stand and the matter is considered closed.

If the committee recommends a grade change, the OS Faculty Curriculum Coordinator or Program Director will communicate that decision directly to the instructor. The instructor will then be asked to respond in writing within five University business days to the OS Faculty Curriculum Coordinator or Program Director indicating whether or not he/she will abide by the Grade Grievance Committee's recommendation. If the instructor agrees to a grade change, the OS Faculty Curriculum Coordinator or Program Director will in writing inform the student of the instructor's decision and the student's final course grade will be changed. The matter is considered closed.

If an instructor does not accept the Grade Grievance Committee's recommendation to change the final grade, the original grade will stand. By College policy, a final course grade rests solely with the instructor and, as such, a course grade cannot be changed without the instructor's consent. When this occurs, the OS Faculty Curriculum Coordinator or Program Director will convey in writing this decision to the student. The matter is considered closed. There is no appeal beyond the Program.

In the event that the OS Faculty Curriculum Coordinator or Program Director is the instructor whose grade is being disputed, an appropriate alternate designee will be determined by the Organizational Studies administration.

[Philosophy Department including Program in Philosophy, Politics, and Economics](#)

**Updated and Approved February 2012**

### **I. Preamble**

Instructors are expected to set fair and consistent grading procedures for their respective courses. The key to implementing fair grading procedures in courses across the College is that individual instructors adhere to grading rubrics that are applied evenly and consistently to all students within a respective course. If the grading rubric is used consistently for each student, then the final grade is presumed to be the correct grade. Because instructors are in the best position to determine the quality of student work, a grievance cannot be grounded on a mere disagreement with a grade, nor can it normally be based on the claim that one instructor's grading standards are stricter than those of others. For a grievance to be considered, a student must normally provide evidence that the grading has deviated from previously stated standards,

or applied such standards inconsistently, or failed to take into full consideration all graded components of a course, or assigned a grade on a basis other than course performance.

## **II. Consultation with Instructor**

The first step in inquiring about the fairness of a final grade should be directed to the lead instructor of the course. This initial inquiry should take place within the first fifteen University business days of the first full term following the term in which the disputed grade was issued. The student must confer with the lead instructor to make sure that both parties are aware of all pertinent facts and to identify the issues in dispute. Both parties must engage in an open-minded discussion of these issues and try to reach a solution both regard as equitable. If, after this inquiry, the student is not satisfied with the instructor's response, the student may choose to initiate a formal grade grievance. To initiate a formal grade grievance, the student should contact the Chair of Undergraduate Studies (CUS) of Philosophy before the end of the fifth week of classes in the first full term following the term in which the disputed grade was issued (or within five weeks after the submission of a grade replacing an Incomplete, if that time period lies within a full term). The initial contact may involve a preliminary oral discussion of the basis of the student's complaint. If, after this discussion, the student still believes that a formal grade grievance is warranted, the student must proceed in writing.

## **III. Formal complaint to Chair of Undergraduate Studies (CUS)**

To initiate the formal grade grievance process, the student must convey in writing the basis for the complaint, with specific evidence in support of the argument that the grade either was given in error or was unfairly determined. This formal complaint should summarize the outcome of the initial inquiry to the course instructor, indicating what aspects are in dispute. The student should accompany this letter with any relevant graded materials and all written grading rubrics provided by the instructor during the term. Upon receipt of the written complaint, the CUS will provide this complaint to the instructor and ask the instructor to provide a written summary stating how the final grade was determined and to respond to the specific claims made by the student. Normally the instructor will be expected to respond within two weeks.

After receiving this information from both the student and the instructor, the CUS will then determine if sufficient evidence exists to convene the Department's Grade Grievance Appeal Board. If the CUS determines that there is insufficient evidence for the grade grievance, the matter is considered closed, and the original grade stands. The CUS shall inform the student and instructor of this decision in writing.

If the CUS determines that the grade grievance should proceed, a date for a formal hearing with the Grade Grievance Appeal Board will be set in consultation with all parties.

## **IV. Grade Grievance Hearing**

The CUS shall convey all written materials to the Philosophy Department Grade Grievance Appeal Board. For Undergraduates, the Board shall consist of the CUS, one other faculty member on that committee (appointed by the CUS), and one student, selected randomly from a

group of volunteer undergraduate majors. For graduate students the Appeal Board will consist of the Chair of the Graduate Studies Committee, one other faculty member on that committee (appointed by the Committee chair), and one student, selected randomly from a group of volunteer Ph.D. students. If the instructor in question is a member of the Appeal Board, then she/he will be excused and the relevant committee chair will appoint a substitute faculty member. The Appeal Board may, at its discretion, ask another faculty member to act as a consultant on the issue.

Both the student filing the grade grievance and the respective instructor will be provided with copies of the written student complaint and the instructor's written response in advance of the formal hearing. During the formal hearing, the student will be asked to first present the basis of his or her complaint; the instructor will then be asked to present his or her explanation for how grades were determined. Following an open period of questions to all parties, i.e., the student, the instructor and the Grade Grievance Appeal Board members, the formal hearing will be adjourned.

## **V. Grade Grievance Appeal Board's Recommendation**

The Grade Grievance Appeal Board will then have ten University business days to determine its recommendation and submit a written report to the CUS.

If the Grade Grievance Appeal Board decides that a grade change is not warranted, the CUS will convey this in writing to the student and the instructor. The original grade will stand and the matter is considered closed.

If the Appeal Board recommends a grade change, the CUS will communicate that decision directly to the instructor. The instructor will then be asked to respond in writing within five University business days to the CUS indicating whether or not he/she will abide by the Grade Grievance Appeal Board's recommendation. If the instructor agrees to a grade change, the CUS will in writing inform the student of the instructor's decision and the student's final course grade will be changed. The matter is considered closed.

If an instructor does not accept the Grade Grievance Appeal Board's recommendation to change the final grade, the original grade will stand. By College policy (Faculty Code B 5.01), a final course grade rests solely with the instructor and, as such, a course grade cannot be changed without the primary instructor's consent. [1] When this occurs, the CUS will convey in writing this decision to the student. The matter is considered closed. There is no appeal beyond the Department. However, the Appeal Board may, at its discretion, prepare a letter setting forth its view of the instructor's conduct and forward the letter to the Department Chair for inclusion in the instructor's personnel file. The Board may also prepare a letter for the student; the student may request to have a copy of the letter retained by the Office of the Assistant Dean.

[1] An exception may occur when the instructor is no longer at the University of Michigan. In that case, if the CUS has been unable to elicit a response from the instructor, the CUS may approve a grade change in consultation with the Appeal Board and the Chair of the Department.

## Physics Department

### **Updated and Approved March 2012**

Instructors in the Physics Department are expected to set fair and consistent grading procedures for their respective courses. By College of LSA policy, assignment of final course grades rests solely with the instructor of record. As such, a course grade cannot be changed without the instructor's consent.

If a student believes that his/her academic performance has been unfairly or improperly graded, the following appeal procedures may be followed.

#### **Step 1. Consultation with the Instructor**

A discussion between the student and instructor of the course regarding the accuracy of the final grade should take place, preferably no later than fifteen (15) days after the grade is posted.

#### **Step 2. Formal grievance to Associate Chair for Undergraduate Studies**

If there is no resolution after this consultation, the student may choose to initiate a formal grade grievance. The student should contact the Associate Chair for the Undergraduate Program (hereafter, AC) in Physics regarding the grade in question before the end of the fifth (5th) week of classes in the next full term in which the student is active following the term/course in question.

To initiate the formal grade grievance process, the student must convey in writing the basis for the complaint, with specific evidence in support of the argument that the grade either was given in error or was unfairly determined. This formal complaint also should summarize the outcome of the initial inquiry to the course instructor, indicating what aspects are in dispute.

Upon receipt of the written complaint, the AC will ask the instructor to provide a written statement that responds to the specific claims made by the student.

After receiving this information from both the student and the instructor, the AC will determine if sufficient evidence exists to convene a departmental Grade Grievance Committee. If the AC

determines that there is insufficient evidence for the grade grievance, the matter is considered closed and the original grade stands.

### **Step 3. Grade Grievance Hearing**

Once it has been determined that a formal hearing will be held, the AC will set a hearing date and empanel an ad hoc departmental Grade Grievance Committee consisting of two other recent instructors of the course in question. Both the student filing the grade grievance and the respective instructor will be provided with copies of the written student complaint and the instructor's summary in advance of the formal hearing. During the formal hearing, the student will be asked to first present the basis of his or her complaint; the instructor will then be asked to present his or her explanation for how grades were determined for the class in general and this student in particular. Following an open period of discussion among all parties, i.e., the student, instructor and the Grade Grievance committee members, the formal hearing will be adjourned.

### **Step 4. Grade Grievance Committee's Recommendation**

The Grade Grievance Committee will then have ten (10) University business days to determine its recommendation and submit a written report to the AC.

If the Grade Grievance Committee decides that a grade change is not warranted, the AC will convey this in writing to the student and the instructor. The original grade will stand and the matter will be considered closed.

If the committee recommends a grade change, the AC will communicate that decision directly to the instructor. The instructor will then be asked to respond in writing within five (5) University business days to AC indicating whether or not he/she will abide by the Grade Grievance Committee's recommendation. If the instructor agrees to a grade change, the instructor will enact this change and the matter will be considered closed.

If the instructor does not accept the Grade Grievance Committee's recommendation to change the final grade, the original grade will stand and the matter will be considered closed.

In either outcome, the AC will convey in writing the decision to the student.

[Political Science Department](#)

### **Updated and Approved February 2012**

This document outlines procedures to be followed in cases of grade disputes between students taking undergraduate political science courses and their instructors.

Grading complaints should be referred initially to the faculty member who assigned the grade. This initial inquiry must take place within the first fifteen University business days of the first full term following the term in which the disputed grade was issued.



Every effort should be made to gain agreement between the student and the faculty member without further intervention. In extraordinary cases, where the issues cannot be resolved in this manner, a student may initiate formal grade grievance procedures. Departmental grievance procedures are intended to result in a recommendation, for or against change, to the appropriate faculty member. A grade given by a faculty member may be changed only by that faculty member. A grade given by a Graduate Student Instructor may be changed by that instructor or by the faculty supervisor of the course.

A student may invoke the departmental grievance procedures within the first five weeks of classes of the first regular full term (Fall or Winter) following the completion of the course, or within five weeks of the issuance of a grade removing an "Incomplete."

In cases where a student wishes to submit a grade complaint to grievance procedures, the following steps are to be followed in sequential order:

1. The student may petition the Department's Director of Undergraduate Studies (DUS) for a hearing before the Undergraduate Affairs Committee (UAC). The student must convey in writing the basis for the complaint, with specific evidence in support of the argument that the grade either was given in error or was unfairly determined. This formal complaint also should summarize the outcome of the initial inquiry to the course instructor, indicating which aspects are in dispute. Within three weeks of receiving the petition the DUS will inform the student and the UAC whether an appeal will be heard.
2. If the DUS allows the appeal to be heard, both parties to the dispute will be encouraged to participate. No additional persons will be permitted at the hearing without the advance approval of the hearing committee. If the Undergraduate Affairs Committee assents to the presence of any such persons, it will see to it that same privileges are extended to both sides.
3. The Undergraduate Affairs Committee will arrive at a recommendation within ten days, suggesting what action (if any) it feels should be taken. Copies of the recommendation will be sent to the student, the instructor who assigned the contested grade, the course supervisor (if the former is a GSI), and the Department Chair.
4. If the DUS declines to provide a hearing before the UAC, or if the student is dissatisfied with the Subcommittee's decision, any further appeal that the student may wish to pursue should be directed in writing to the departmental Executive Committee within two week of receiving notice of the above decisions.
5. Per College policy, there is no appeal beyond the Department.
6. In unusual circumstances, the time limits specified above may be extended by the Department Chair.

[Program in the Environment](#)

**Updated and Approved August 2012**

## **Preamble**

Normally students agree with an instructor's evaluation of their work. Nevertheless, there are instances when a student feels that his or her academic performance has been unfairly or improperly graded. Examples of unfair or improper grading include prejudice, capricious

changes in the course requirements, and lack of uniformity in applied judgment. When these complaints arise, discussion and arbitration reviews can bring out the factual basis for the situation and ascertain if there is a wrong that should be righted. However, such review is not intended to dispute the instructor's right to make his or her own evaluation of a student's work.

The following procedures have been established by the Program in the Environment (hereafter, the Program) in compliance with Section A.2.05 of the Faculty Code in order to deal efficiently with student complaints regarding alleged unfair or improper grading.

### **Appeal Structure**

1. A) The student must communicate with the instructor of the course in question, in writing within 15 working days after the posting of final grades, stating his/her reasons for requesting a change in grade.

1. B) The instructor must reply promptly (within 15 working days). She/he must reply in writing that is dated, stating his/her reasons for the assignment of the grade in question.

1. C) A student's complaint will be considered for review by the Program only after the student and his or her instructor have discussed the matter together as described in 1A & B.

2. If a student is unable to obtain resolution of an alleged unfair or improper grade through discussions with his or her instructor, the student may seek redress by filing a written complaint with the Program Associate Director. The written complaint must be made within seven working days after the student receives the explanation by the instructor stating his/her reasons for the assignment of the grade in question. If the Program Associate Director is included in an appeal, the Associate Director will delegate administering the subsequent appeals process to the Director.

3. A) The Associate Director or the Director of the Program will appoint a Review Committee on Grading Appeals (hereafter, Review Committee). The Review Committee shall consist of at least three members. It shall be chaired by the Associate Director or the Director of the Program. The remaining two members shall be named ad hoc for each case that arises; one shall be chosen from among the current members of the Program's Advisory Committee or faculty with at least a 25% appointment in PitE, and the other shall be a peer representative. The peer representative shall be an undergraduate selected by the Review Committee Chair from among students in the Program volunteering to serve on a panel from which Review Committee members would be chosen when needed.. If there are no student volunteers or panel members available, a representative will be selected by the Associate Director or the Director of the Program.

3. B) Initial arrangements regarding time and place for any meetings with the Review Committee and the instructor and/or student may be made by telephone or in person, but the Chair of the Review Committee shall confirm such understandings in writing.

3. C) Meetings with the Review Committee and the instructor and/or student shall be held at a time convenient for all parties concerned.

3. D) The Review Committee will have the final responsibility for promptly initiating and conducting an adequate investigation of student complaints regarding alleged unfair or improper grading.

4. At the discretion of the Chair of the Review Committee, an informal meeting may be held between an arbitrator appointed by the Chair and the two concerned parties in order to seek resolution of their differences of opinion. If the differences cannot be resolved in this manner, or if the Review Committee Chair believes the allegations are of a more serious nature, the Chair may proceed with a formal review by the whole Review Committee.

5. A) The Chair of the Review Committee will notify the student and instructor of the date and time of the formal hearing in writing at least two weeks before the hearing date. The student and instructor will be provided an opportunity to submit supportive documentation for review by the Review Committee. The Review Committee will provide each party with copies of all documents that it has received at least 3 business days before the formal hearing.

5. B) For a formal review, all available course work should be available to the student, instructor, and members of the Review Committee. The student is responsible for presenting work which was turned back to him/ her.

5. C) At any meeting held before the Review Committee, both the student and the instructor shall appear at the same time.

5. D) The student has the burden of establishing that the grade that he/she received was inappropriate.

6. If the Review Committee finds that the Instructor has not acted fairly or properly, it should attempt to persuade the instructor to change the grade. Should this attempt prove unsuccessful, the committee may at its discretion prepare a letter setting forth its view of the instructors conduct and forward the letter as a matter of record to the LSA Dean's office noting the instructor refused to change the grade. The letter will be filed with the LSA Dean's office, with a copy for the instructors file.

7. The Review Committee will notify the student and instructor in writing of its decision, within five business days of the hearing. The decisions of the Review Committee with regard to the validity of the grade grievance and any appropriate remedy are final.

8. A report stating what procedures were followed and what decision were reached will be sent to the LSA Assistant Dean of Student Academic Affairs within five business days after the conclusion of the review process.

Psychology Department

**Updated and Approved February 2012**

**Preamble**

Within the College of Literature, Science, and the Arts, instructors are expected to set fair and consistent grading procedures for their respective courses. The key to implementing fair grading procedures in courses across the College is that individual instructors adhere to grading rubrics that are applied evenly and consistently to all students within a respective course. If the grading rubric is used consistently for each student, then the final grade is assumed to be the correct grade. Nevertheless, students can inquire about a grade and subsequently initiate a grade grievance when they think that the grade was unfairly given.

### **Consultation with Instructor**

The first step in inquiring about the accuracy of a final grade should be directed to the lead instructor of the course. This initial inquiry should take place within the first fifteen University business days of the first full term following the term in which the disputed grade was issued. If, after this inquiry, the student is not satisfied with the instructor's response, the student may choose to initiate a formal grade grievance. To initiate a formal grade grievance, the student should contact the Associate Chair of Undergraduate Studies (ACUS) or the Director of Undergraduate Studies (DUS) of the home department of the course in question before the end of the fifth week of classes in the first full term following the term in which the disputed grade was issued. In Psychology, students need to contact the Student Academic Affairs Office, 1343 East Hall, [psych.saa@umich.edu](mailto:psych.saa@umich.edu).

### **Formal complaint to Associate Chair of Undergraduate Studies (ACUS) or Director of Undergraduate Studies (DUS)**

To initiate the formal grade grievance process, the student must convey in writing the basis for the complaint, with specific evidence in support of the argument that the grade either was given in error or was unfairly determined. This formal complaint also should summarize the outcome of the initial inquiry to the course instructor, indicating what aspects are in dispute. Upon receipt of the written complaint, the ACUS/DUS will ask the instructor to provide a written summary restating how the final grade was determined and to respond to the specific claims made by the student.

After receiving this information from both the student and the instructor, the ACUS/DUS will then determine if sufficient evidence exists to convene the Department's Grade Grievance Committee. If the ACUS/DUS determines that there is insufficient evidence for the grade grievance, the matter is considered closed, and the original grade stands.

If the ACUS/DUS determines that the grade grievance should proceed, a date for a formal hearing with the Grade Grievance Committee will be set.

### **Grade Grievance Hearing**

Once it has been determined that a formal hearing will be held, the ACUS/DUS will empanel the appropriate Departmental Grade Grievance Committee. Both the student filing the grade grievance and the respective instructor will be provided with copies of the written student complaint and the instructor's summary in advance of the formal hearing. During the formal

hearing, the student will be asked to first present the basis of his or her complaint; the instructor will then be asked to present his or her explanation for how grades were determined. Following an open period of questions to all parties, i.e., the student, the instructor and the Grade Grievance committee members, the formal hearing will be adjourned.

### **Grade Grievance Committee's Recommendation**

The Grade Grievance Committee will then have ten University business days to determine its recommendation and submit a written report to the ACUS/DUS.

If the Grade Grievance Committee decides that a grade change is not warranted, the ACUS/DUS will convey this in writing to the student and the instructor. The original grade will stand and the matter is considered closed.

If the committee recommends a grade change, the ACUS/DUS will communicate that decision directly to the instructor. The instructor will then be asked to respond in writing within five University business days to the ACUS/DUS indicating whether or not he/she will abide by the Grade Grievance Committee's recommendation. If the instructor agrees to a grade change, the ACUS/DUS will in writing inform the student of the instructor's decision and the student's final course grade will be changed. The matter is considered closed.

If an instructor does not accept the Grade Grievance Committee's recommendation to change the final grade, the original grade will stand. By College policy, a final course grade rests solely with the instructor and, as such, a course grade cannot be changed without the instructor's consent. When this occurs, the ACUS/DUS will convey in writing this decision to the student. The matter is considered closed. There is no appeal beyond the Department.

[Residential College](#)

**Approved August 2012**

### **I. Preamble**

Within the Residential College (RC) in the College of Literature, Science, and the Arts, instructors are expected to set fair and consistent grading procedures for their respective courses. The key to implementing fair grading procedures in courses across the College is that individual instructors adhere to grading rubrics that are applied evenly and consistently to all students within a respective course. If the grading rubric is used consistently for each student, then the final grade is assumed to be the correct grade. Nevertheless, students can inquire about a grade and subsequently initiate a grade grievance when they think that the grade was unfairly given. The guidelines below shall serve to advise students in RC classes, faculty, and administration as to RC grade grievance procedures.

### **II. Consultation with Instructor**

The first step in inquiring about the accuracy of a final grade should be directed to the lead instructor of the RC course. The student's initial inquiry should take place within the first fifteen University business days of the first full term following the term in which the disputed grade was issued. If, after this inquiry, the student is not satisfied with the instructor's response, the student may choose to initiate a formal grade grievance. To initiate a formal grade grievance, the student should contact the RC Director of Academic Services (currently Jennifer Myers, [jeniferm@umich.edu](mailto:jeniferm@umich.edu)).

### **III. Formal complaint to the RC Director of Academic Services (RCDAS)**

To initiate the formal grade grievance process, the student must convey in writing the basis for the complaint, with specific evidence in support of the argument that the grade either was given in error or was unfairly determined. This formal complaint also should summarize the outcome of the initial inquiry to the course instructor, indicating what aspects are in dispute. Upon receipt of the written complaint, the Director of Academic Services will ask the instructor to provide a written summary restating how the final grade was determined and to respond to the specific claims made by the student.

After receiving this information from both the student and the instructor, the RCDAS will then determine if sufficient evidence exists to convene the Department's Grade Grievance Committee. If the RCDAS determines that there is insufficient evidence for the grade grievance, the matter is considered closed, and the original grade stands.

If the RCDAS determines that the grade grievance should proceed, a date for a formal hearing with the Grade Grievance Committee will be set.

### **IV. Grade Grievance Hearing**

Once it has been determined that a formal hearing will be held, the RCDAS will empanel the RC Grade Grievance Committee – comprised of the Director of Academic Services (ex officio), an advisor from the Board on Academic Standing, an outside faculty member, the Residential College Director, the program head of the course in question, and, if possible 1 or 2 students who have taken the course, chosen at random. Both the student filing the grade grievance and the respective instructor will be provided with copies of the written student complaint and the instructor's summary in advance of the formal hearing. During the formal hearing, the student will be asked to first present the basis of his or her complaint; the instructor will then be asked to present his or her explanation for how grades were determined. Following an open period of questions to all parties, i.e., the student, the instructor and the Grade Grievance committee members, the formal hearing will be adjourned.

### **V. Grade Grievance Committee's Recommendation**

The Grade Grievance Committee will then have ten University business days to determine its recommendation and submit a written report to the RCDAS.

If the Grade Grievance Committee decides that a grade change is not warranted, the RCDAS will convey this in writing to the student and the instructor. The original grade will stand and the matter is considered closed.

If the committee recommends a grade change, the RCDAS will communicate that decision directly to the instructor. The instructor will then be asked to respond in writing within five University business days to the RCDAS indicating whether or not he/she will abide by the Grade Grievance Committee's recommendation. If the instructor agrees to a grade change, the RCDAS will, in writing, inform the student of the instructor's decision and the student's final course grade will be changed. The matter is considered closed.

If an instructor does not accept the Grade Grievance Committee's recommendation to change the final grade, the original grade will stand. By College policy, a final course grade rests solely with the instructor and, as such, a course grade cannot be changed without the instructor's consent. When this occurs, the RCDAS will convey in writing this decision to the student. The matter is considered closed.

***Once this procedure has been exhausted, there is no other appeal procedure in the Residential College or in the College of LSA or at the University of Michigan at large.***

Romance Languages and Literatures Department

**Updated and Approved July 2017**

### **Preamble**

Within the College of Literature, Science, and the Arts, instructors are expected to set fair and consistent grading procedures for their respective courses. The key to implementing fair grading procedures in courses across the College is that individual instructors adhere to grading rubrics that are applied evenly and consistently to all students within a respective course. If the grading rubric is used consistently for each student, then the final grade is assumed to be the correct grade. Nevertheless, students can inquire about a grade and subsequently initiate a grade grievance when they think that the grade was unfairly given.

### **Consultation with Instructor**

In the Department of Romance Languages and Literatures the first step in inquiring about the accuracy of a final grade should be directed to the lead instructor of the course. This initial inquiry should take place within the first fifteen University business days of the first full term following the term in which the disputed grade was issued. If, after this inquiry, the student is not satisfied with the instructor's response, the student may choose to initiate a formal grade grievance. To initiate a formal grade grievance, the student should contact the RLL Grievance Officer before the end of the fifth week of classes in the first full term following the term in which the disputed grade was issued.

### **Formal Complaint to the Grievance Officer**



To initiate the formal grade grievance process, the student must convey in writing the basis for the complaint, with specific evidence in support of the argument that the grade either was given in error or was unfairly determined. This formal complaint also should summarize the outcome of the initial inquiry to the course instructor, indicating what aspects are in dispute. All materials related to the complaint should be sent to [rll.grade grievance@umich.edu](mailto:rll.grade grievance@umich.edu). Upon receipt of the written complaint, the Grievance Officer will ask the instructor to provide a written summary restating how the final grade was determined and to respond to the specific claims made by the student.

After receiving this information from both the student and the instructor, the Grievance Officer will then determine if sufficient evidence exists to convene the Department's Grade Grievance Committee, which in Romance Languages and Literatures is the Executive Committee. If the Grievance Officer determines that there is insufficient evidence for the grade grievance, the matter is considered closed, and the original grade stands.

If the Grievance Officer determines that the grade grievance should proceed, a date for a formal hearing with the Grade Grievance Committee will be set.

### **Grade Grievance Hearing**

Once it has been determined that a formal hearing will be held, the Grievance Officer will empanel the Departmental Grade Grievance Committee, which is the Executive Committee. Both the student filing the grade grievance and the respective instructor will be provided with copies of the written student complaint and the instructor's summary in advance of the formal hearing. During the formal hearing, the student will be asked to first present the basis of his or her complaint; the instructor will then be asked to present his or her explanation for how grades were determined. Following an open period of questions to all parties, i.e., the student, the instructor and the Grade Grievance committee members, the formal hearing will be adjourned.

### **Grade Grievance Committee's Recommendation**

The Grade Grievance Committee (the Executive Committee) will then have ten University business days to determine its recommendation and submit a written report to the Grievance Officer.

If the Grade Grievance Committee decides that a grade change is not warranted, the Grievance Officer will convey this in writing to the student and the instructor. The original grade will stand and the matter is considered closed.

If the committee recommends a grade change, the Grievance Officer will communicate that decision directly to the instructor. The instructor will then be asked to respond in writing within five University business days to the Grievance Officer indicating whether or not he/she will abide by the Grade Grievance Committee's recommendation. If the instructor agrees to a grade change, the Grievance Officer will in writing inform the student of the instructor's decision and the student's final course grade will be changed. The matter is considered closed.



If an instructor does not accept the Grade Grievance Committee's recommendation to change the final grade, the original grade will stand. By College policy, a final course grade rests solely with the instructor and, as such, a course grade cannot be changed without the instructor's consent. When this occurs, the Grievance Officer will convey in writing this decision to the student. The matter is considered closed. There is no appeal beyond the Department.

## Slavic Languages and Literatures Department

### **I. Preamble**

It is the intent of the Slavic Department that all instructors are expected to set fair and consistent grading procedures for their courses. Grading criteria are applied evenly and consistently for all students in a course and the final grade is assumed to be the correct grade. Nevertheless, students can inquire about a grade and subsequently initiate a grade grievance when they think that the grade was unfairly given.

### **II. Consultation with Instructor**

A student who believes that an unfair grade has been given to him/her in a particular course should consult with the course instructor within the first fifteen University business days of the first full term following the term in which the disputed grade was issued. If this meeting fails to resolve the issue satisfactorily, the student may choose to initiate a formal grade grievance. To initiate a formal grade grievance, the student should contact the Department Chair before the end of the fifth week of classes in the first full term following the term in which the disputed grade was issued.

### **III. Formal complaint to Department Chair**

To initiate the formal grade grievance process, the student must convey in writing the basis for the complaint, with specific evidence in support of the argument that the grade either was given in error or was unfairly determined. This formal complaint also should summarize the outcome of the initial inquiry to the course instructor, indicating what aspects are in dispute. Upon receipt of the written complaint, the Department Chair will ask the instructor to provide a written summary restating how the final grade was determined and to respond to the specific claims made by the student.

After receiving this information from both the student and the instructor, the Department Chair will then determine if sufficient evidence exists to convene the Department's Grade Grievance Committee. If the Department Chair determines that there is insufficient evidence for the grade grievance, the matter is considered closed, and the original grade stands.

If the Department Chair determines that the grade grievance should proceed, a date for a formal hearing with a Grade Grievance Committee will be set.

### **IV. Grade Grievance Hearing**

Once it has been determined that a formal hearing will be held, the Department Chair will empanel a Departmental Grade Grievance Committee. The Grade Grievance Committee will be comprised of the Chair, two members of the Department Executive Committee, and two other students from the course (graduate or undergraduate, depending upon the level of the complaining student), selected by the student. In advance of the formal hearing, both the student filing the grade grievance and the instructor in question will be provided with copies of the written student complaint, the instructor's response statement and all coursework for which grades are being disputed. During the formal hearing, the student will be asked to first present the basis of his or her complaint; the instructor will then be asked to present his or her explanation for how grades were determined. Following an open period of questions to all parties, i.e., the student, the instructor and the Grade Grievance committee members, the formal hearing will be adjourned.

## **V. Grade Grievance Committee's Recommendation**

The Grade Grievance Committee will then have ten University business days to determine its recommendation and submit a written report. The report submitted must be approved by a majority of those voting, with the Chair's vote as a tie-breaker, if necessary.

If the Grade Grievance Committee decides that a grade change is not warranted, the Department Chair will convey this in writing to the student and the instructor. The original grade will stand and the matter will be considered closed.

If the committee recommends a grade change, the Department Chair will communicate that decision directly to the instructor. The instructor will then be asked to respond in writing within five University business days to the Department Chair indicating whether or not he/she will abide by the Grade Grievance Committee's recommendation. If the instructor agrees to a grade change, the Department Chair will in writing inform the student of the instructor's decision and the student's final course grade will be changed. The matter will be then considered closed.

If an instructor does not accept the Grade Grievance Committee's recommendation to change the final grade, the original grade will stand. By College policy, a final course grade rests solely with the instructor and, as such, a course grade cannot be changed without the instructor's consent. When this occurs, the Department Chair will convey in writing this decision to the student. The matter will be considered closed. There is no appeal beyond the Department.

## **Sociology Department**

### **I. Preamble**

The Department of Sociology believes that an instructor is in the best position to determine the quality of a student's work in their course. The department also has confidence in the qualifications and good judgment of its faculty. Nevertheless, there are instances when a student feels that his or her academic performance has been unfairly or improperly graded. When such charges arise, discussion and arbitration can help ascertain if there is a wrong which should be

righted. However, it is ultimately only the course instructor who can determine the substantive value of a student's performance in that course, and only the instructor can change the grade.

To submit a grade grievance, the student must make the case that the grade received was unjust and substantially different from the grade that was justified. The difference between an A- and a B+ is not, for example, a substantial difference. Dissatisfaction with a grade alone is not sufficient for a grade grievance nor will appeals be heard where a student has not attended class regularly or turned in all required work.

A grade grievance is available only for review of alleged capricious grading, not an instructor's judgment in assessing the quality of a student's work. Capricious grading includes any of the following: the assignment of a grade to a particular student on some basis other than course performance; the assignment of a grade to a particular student by more exacting or demanding standards than were applied to other students in that course; or the assignment of a grade by a substantial departure from the instructor's previously announced standards. A change in course or examination requirements that applies equally to all students is not grounds for an individual student's grievance.

## **II. Consultation with Instructor**

The first step in inquiring about the fairness of a final grade should be directed to the lead instructor of the course. This initial inquiry should take place within the first fifteen University business days of the first full term following the term in which the disputed grade was issued. If, after this inquiry, the student is not satisfied with the instructor's response, the student may choose to initiate a formal grade grievance. To initiate a formal grade grievance, the student should contact the department's undergraduate program director before the end of the fifth week of classes in the first full term following the term in which the disputed grade was issued.

## **III. Formal Complaint to Undergraduate Program Director**

To initiate the formal grade grievance process, the student must convey in writing the basis for the complaint, with specific evidence in support of the argument that the grade was unfairly determined. This formal complaint also should summarize the outcome of the initial inquiry to the course instructor, indicating what aspects are in dispute. The student should also submit all papers and examinations written for the course to which the student has access. Upon receipt of the written complaint and within three weeks, the undergraduate program director will ask the instructor to provide a written summary restating how the final grade was determined and to respond to the specific claims made by the student.

After receiving this information from both the student and the instructor, the undergraduate program director will then determine if sufficient evidence exists for a grade grievance.

If the undergraduate program director determines that there is insufficient evidence for the grade grievance, the matter is considered closed, and the original grade stands.

If the undergraduate program director determines that the grade grievance should proceed, he/she will convene an ad hoc committee (hereafter the Grade Grievance Committee) and set a date for a formal hearing. The hearing should be scheduled within two weeks of the Committee's receipt of materials from the student and instructor. This committee will consist of the department chair, two additional faculty members, the undergraduate department advisor, and two sociology majors chosen by the undergraduate director.

#### **IV. Grade Grievance Hearing**

Before the formal hearing the undergraduate program director will supply both the student filing the grade grievance and the respective instructor with copies of the written student complaint and the instructor's summary. During the hearing, the student will be asked to first present the basis of his or her complaint; the instructor will then be asked to present his or her explanation for how grades were determined. Following an open period of questions to all parties, i.e., the student, the instructor and the Grade Grievance Committee members, the formal hearing will be adjourned.

#### **V. Grade Grievance Committee's Recommendation**

The Grade Grievance Committee will have ten University business days from the date of the hearing to determine its recommendation and submit a written report to the undergraduate program director.

If the Grade Grievance Committee decides that a grade change is not warranted, the undergraduate program director will convey this in writing to the student and the instructor. The original grade will stand and the matter is considered closed.

If the committee recommends a grade change, the undergraduate program director will communicate that decision directly to the instructor. The instructor will then be asked to respond in writing within five University business days to the undergraduate program director indicating whether or not he/she will abide by the Grade Grievance Committee's recommendation. If the instructor agrees to a grade change, the undergraduate program director will in writing inform the student of the instructor's decision and the student's final course grade will be changed. The matter is considered closed.

If an instructor does not accept the Grade Grievance Committee's recommendation to change the final grade, the original grade will stand. By College policy, a final course grade rests solely with the instructor and, as such, a course grade cannot be changed without the instructor's consent. When this occurs, the undergraduate program director will convey in writing this decision to the student. The matter is considered closed. There is no appeal beyond the department.

[Statistics Department](#)

**Updated and Approved August 2012**

#### **I. Preamble**

The Department of Statistics sets high standards for students and maintains a high standard of fairness in grading. Problem sets can often be measured against model solutions with little ambiguity as to the correct score. With open ended or writing-focused assignments, grading standards are articulated in assignment sheets and, where appropriate, in grading rubrics. When these standards are consistently applied throughout a course, then the final grade is assumed to be the correct grade.

Nevertheless, students can inquire about a grade and subsequently initiate a grade grievance when they think that the grade was unfairly given.

## **II. Consultation with Instructor**

The student's first recourse is to contact the instructor assigning the grade. Any student who believes a final grade is unfair must meet with the instructor of the course (a) by the end of the first six weeks of classes of the first regular term (Fall or Winter) following completion of the course, or (b) within six weeks of the issuance of a grade received by making up a grade of "incomplete". Grade appeals at later times will be considered only in extraordinary circumstances. If the instructor of the course is no longer employed at the University, however, the student may bypass this step and immediately initiate a formal complaint.

## **III. Formal Complaint to Department Chair**

If the outcome of the instructor consultation is not satisfactory to the student, he or she can make a formal complaint. The complaint should take the form of a letter describing the student's grievance and presenting specific evidence that the grade either was given in error or was unfairly determined. Relevant graded work and assignment sheets may be included as appendices. The letter should also summarize the outcome of the initial inquiry with the course instructor and indicate what aspects of the grievance remain in dispute.

The letter should be addressed to the Chair of the home department of the course in question, and must be delivered within two weeks of the student's consultation with the instructor or, if the instructor indicates during the consultation that she or he will convey a decision afterwards, within two weeks of the instructor's communicating her or his response to the student. (If the student waits more than two weeks without receiving the instructor's response, he or she can initiate a formal complaint before hearing from the instructor, and has an additional three weeks within which to do so.) If the letter or accompanying appendices are delivered in paper form, the student should also notify its intended recipient of its delivery by e-mail.

If the instructor is the Chair, the formal complaint should be submitted to the Associate Chair, who will oversee the steps in IV.

## **IV. Department Review of Grade**

Timely receipt of a letter of complaint initiates a formal peer review, administered by a Grade Review Committee appointed by the Chair. The Grade Review Committee may, at its discretion:

(a) issue a recommendation upon its review of the complaint; or (b) solicit a response from the instructor and upon receipt of the response issue a recommendation to the Department Chair.

If the Grade Review Committee decides that a grade change is not warranted, the Chair will convey this in writing to the student and the instructor. The original grade will stand and the matter is considered closed.

If the Grade Review Committee recommends a grade change, the Chair will communicate that decision directly to the instructor. The instructor will consider the recommendation and make a final decision. If the instructor agrees to a grade change, the Chair will in writing inform the student of the instructor's decision and the student's final course grade will be changed. The matter is considered closed.

If the instructor does not accept the Grade Review Committee's recommendation to change the final grade, the original grade will stand. By College policy, a final course grade rests solely with the instructor and, as such, a course grade cannot be changed without the instructor's consent. When this occurs, the Chair will convey in writing this decision to the student. The matter is considered closed. There is no appeal beyond the Department.

The student can expect a final decision within three month of filing a letter of complaint.

[Sweetland Center for Writing](#)

## **Updated and Approved August 2012**

Two principles should be clearly understood as part of the context of any grade grievance:

1. A grade given by a faculty member may be changed only by that faculty member (Faculty Code B 5.01). Sweetland's grade grievance procedures are intended to result in a recommendation, for or against a change, to the appropriate faculty member.
2. While Sweetland wishes to see demonstrably unfair grades rectified, it will not automatically invoke the full procedure described below for every grade grievance. For example, a grade grievance based on the argument that one instructor's grading standards are stricter than those of others will normally not be pursued.

When a student believes a grade is unfair and wishes to invoke the Sweetland grade grievance procedure, these steps are to be followed:

### **1. Meet with the Instructor**

The student should first confer with her/his instructor within the first 15 University business days of the first full term (i.e. Fall or Winter) following the term in which the disputed grade was issued to make sure that both are aware of all the pertinent facts and to identify the issues that are in dispute. For example, if a student is challenging a grade received in winter term 2012, the student must meet with the instructor before the end of the fifth week of fall term 2012.

## **2. Write an appeal to the Associate Director**

If the first step does not lead to a resolution, the student should then write a letter to Naomi Silver, Associate Director of Sweetland, detailing her/his objections and send it with both clean copies and original graded copies of all her/his written work for the course, and any other relevant work (e.g., new media assignments), to Michael Zakalik, Sweetland Center for Writing, 1310 North Quad, 1285, or [zakalikm@umich.edu](mailto:zakalikm@umich.edu). These materials must be received before the end of the fifth week of classes in the first full term following the term in which the disputed grade was issued.

## **3. Sweetland's Associate Director requests written response from the Instructor**

Upon receipt of the written grade grievance, the Associate Director will ask the instructor to provide a written summary restating how the final grade was determined and to respond to the specific claims made by the student.

## **4. Sweetland's Associate Director reviews materials**

If the Associate Director determines there is insufficient evidence for the grade grievance, the matter is closed and the original grade stands.

If the Associate Director determines that the objections presented by the student point to possible unfairness, she will recommend to the Director of the Sweetland Center for Writing that a Grade Grievance Committee be appointed. Such a committee normally will consist of the Associate Director, at least one other faculty member, and at least one undergraduate.

## **5. Hearing with the Grade Grievance Committee, when necessary**

Within two weeks of the appointment of the Grade Grievance Committee, the committee will arrange a hearing at which both parties to the dispute will be asked to appear. No additional persons will be permitted at the hearing without the advance approval of the committee, which, if it agrees to such persons, will see to it that the same privileges are extended to both sides. Prior to this hearing, both the student filing the grade grievance and the respective instructor will be provided with copies of the written student complaint and the instructor's summary.

The purpose of the hearing will be to allow the committee to inform itself as fully as possible. The student will first be asked to present the basis of her/his complaint, the instructor will then be asked to explain how grades were determined, followed by an open period for questions to all parties.

## **6. Grade Grievance Committee Decisions**

After the hearing, the Grade Grievance Committee will have ten University business days to arrive at a recommendation.

If the committee decides that a grade change is not warranted, the Associate Director will inform the student and the instructor in writing and the matter is considered closed.

If the committee recommends a grade change, the Associate Director will inform the instructor. The instructor will be asked to respond in writing within five University business days to the Associate Director indicating whether or not she/he will abide by the recommendation from the committee. If the instructor agrees to a grade change, the Associate Director will inform the student in writing of the instructor's decision and the student's final grade will be changed.

If the instructor does not accept the recommendation to change the grade, the original grade stands. The Associate Director will inform the student in writing of this decision and the matter is considered closed.

## University Courses

### **Updated and Approved August 2012**

Within the College of Literature, Science, and the Arts, instructors are expected to set fair and consistent grading procedures for their respective courses. The key to implementing fair grading procedures in courses across the College is that individual instructors adhere to grading rubrics that are applied evenly and consistently to all students within a respective course. If the grading rubric is used consistently for each student, then the final grade is assumed to be the correct grade. Nevertheless, students can inquire about a grade and subsequently initiate a grade grievance when they think that the grade was unfairly given.

The University Courses Division is a unit of the Office of the LSA Associate Dean for Undergraduate Education. Students who want to inquire about the accuracy of their final grade in UC courses should pursue the following steps:

#### **Consultation with Instructor**

The first step in inquiring about the accuracy of a final grade should be directed to the lead instructor of the course. This initial inquiry should take place within the first fifteen University business days of the first full term following the term in which the disputed grade was issued. If, after this inquiry, the student is not satisfied with the instructor's response, the student may choose to initiate a formal grade grievance. To initiate a formal grade grievance, the student should contact the Assistant Dean for Undergraduate Education before the end of the fifth week of classes in the first full term following the term in which the disputed grade was issued.

#### **Formal complaint to the Assistant Dean for Undergraduate Education**

To initiate the formal grade grievance process, the student must convey in writing the basis for the complaint, with specific evidence in support of the argument that the grade either was given in error or was unfairly determined. This formal complaint also should summarize the outcome of the initial inquiry to the course instructor, indicating what aspects are in dispute. Upon receipt of the written complaint, the Assistant Dean will ask the instructor to provide a written summary



restating how the final grade was determined and to respond to the specific claims made by the student.

After receiving this information from both the student and the instructor, the Assistant Dean will then determine if sufficient evidence exists to convene the UC Division's Grade Grievance Committee. If the Assistant Dean determines that there is insufficient evidence for the grade grievance, the matter is considered closed, and the original grade stands.

If the Assistant Dean determines that the grade grievance should proceed, a date for a formal hearing with the Grade Grievance Committee will be set.

### **Grade Grievance Hearing**

Once it has been determined that a formal hearing will be held, the Assistant Dean will empanel the appropriate University Courses Division Grade Grievance Committee. Both the student filing the grade grievance and the respective instructor will be provided with copies of the written student complaint and the instructor's summary in advance of the formal hearing. During the formal hearing, the student will be asked to first present the basis of his or her complaint; the instructor will then be asked to present his or her explanation for how grades were determined. Following an open period of questions to all parties, i.e., the student, the instructor and the Grade Grievance committee members, the formal hearing will be adjourned.

### **Grade Grievance Committee's Recommendation**

The Grade Grievance Committee will then have ten University business days to determine its recommendation and submit a written report to the Assistant Dean.

If the Grade Grievance Committee decides that a grade change is not warranted, the Assistant Dean will convey this in writing to the student and the instructor. The original grade will stand and the matter is considered closed.

If the committee recommends a grade change, the Assistant Dean will communicate that decision directly to the instructor. The instructor will then be asked to respond in writing within five University business days to the Assistant Dean indicating whether or not he/she will abide by the Grade Grievance Committee's recommendation. If the instructor agrees to a grade change, the Assistant Dean will in writing inform the student of the instructor's decision and the student's final course grade will be changed. The matter is considered closed.

If an instructor does not accept the Grade Grievance Committee's recommendation to change the final grade, the original grade will stand. By College policy, a final course grade rests solely with the instructor and, as such, a course grade cannot be changed without the instructor's consent. When this occurs, the Assistant Dean will convey in writing this decision to the student. The matter is considered closed. There is no appeal beyond the University Courses Division.

## Women's Studies Department

Instructors have the responsibility and authority to assign grades to students in their courses. While instructors may have different standards in grading, grading should not be capricious or biased, but reflect the standards operative in the course. This document outlines the procedure to follow if a student in a Women's Studies course disputes a grade.

### **I. Required Informal Process**

1. Students are required to present the dispute to the instructor and obtain a response. While the process may begin with a GSI, the student must have had a meeting or other communication with the instructor before moving proceeding to the next step.
2. If the grievance is against the department Chair or the Director of Undergraduate Studies (DUS) in her capacity as an instructor, another faculty member shall be designated to handle the grievance.
3. If the student and the instructor are unable to resolve the complaint they must meet with the Women's Studies Department Director of Undergraduate Studies or designate and discuss the complaint. The DUS or designate shall mediate between the student and the instructor, either via email or in person, and resolve the matter if possible. If mediation is not successful, the student may file a formal grade grievance with the Women's Studies Department.

### **II. Formal Grade Grievance Process**

1. Students may not begin the formal grievance process until a final grade has actually been assigned in a course.
2. The student may decide to drop the grievance at any time in the process.
3. All proceedings of the grade grievance process will be treated as strictly confidential by all concerned.
4. The formal grievance process begins with a written complaint from the student, which must be filed with the instructor and the Women's Studies Department office within a month after receipt of the grade or a month into the following full term. The written complaint must explain the student's reasons for requesting a change in grade.
5. The instructor must reply in writing within three weeks of receipt of the complaint and file the reply in the Department Office. If the instructor is on leave or away from campus, all reasonable attempts should be made to contact her/him. If the instructor is off campus the director may solicit a letter from her/him, in which s/he describes his/her position. This letter must state reasons for the assignment of the grade in question.
6. After receiving this information from both the student and the instructor, the Director of Undergraduate Studies (DUS) will then determine if sufficient evidence exists to convene a formal review by a departmental committee. If the DUS determines that there is insufficient evidence for the grade grievance, the matter is considered closed, and the original grade stands.

7. If there is sufficient evidence to proceed, the DUS will then promptly arrange a formal review. The review committee will be drawn from the Women's Studies Executive Committee and will include two student representatives, two instructors, and the DUS or designate. Alternates may be chosen at the discretion of the Director of Undergraduate Studies. An effort will be made to ensure that the review committee is fair in the eyes of both parties. The committee should not include students in the class in question or a class currently taught by the instructor. At least one person at the same level as the complainant (undergraduate or graduate student) should be on the committee.
8. The Director of Undergraduate Studies shall schedule the hearing in consultation with the student and set a date and time agreeable to all. Alternates may be used for the student and instructor representatives if any of them are unable to attend. Hearings may be rescheduled for emergencies or other critical scheduling problems only. If a student complainant does not appear for the hearing on the scheduled date and there is no such reason for rescheduling, the hearing will not be rescheduled.
9. Should the departmental review take place during the summer months and student representatives are not available, the student placing the grievance has the option of waiving the presence of student representatives at their level or of asking that the committee wait until the fall term when students are available.
10. The Director of Undergraduate Studies or designate will chair the hearing.
11. Only the grievance stated in the written complaint will be considered by the grade grievance committee.
12. The instructor and the student should appear before the committee at the same time. They will each present an oral statement in addition to the written statement. Committee members may ask questions of both. The student and faculty member will each be allowed one rebuttal after the complete statement of the other is given. Each may call a reasonable number of witnesses who may make brief statements after the oral statement of the person they are supporting. Witnesses must leave the hearing after they make their statement. Advisors or counselors may not be present for either party.
13. All disputed course work and correspondence will be made available to the complainant, the instructor, and members of the review hearing. It is the student's responsibility to produce the original copy of all disputed course work. If the original work has not been returned to the student, it is the responsibility of the instructor to produce the original work. In addition, it is the responsibility of the instructor to produce all grading records and grading policies. The committee is free to hear any evidence that will help them decide the grievance. The committee may call for other evidence as it pertains to the case.
14. The sole ground for disputing a grade within the Women's Studies Department is that it reflects inequitable conduct on the part of the instructor of the course. The grade grievance panel is tasked solely with deciding whether the instructor displayed inequitable conduct in the situation presented.
15. If the committee determines that the instructor has displayed inequitable conduct, it should issue a written recommendation to the instructor to change the grade.
16. If the instructor refuses, the review committee will prepare a letter setting forth its view to be entered in the student's file.
17. If the review committee finds that the instructor has not displayed inequitable conduct, then the grade stands.
18. A faculty member on the committee shall communicate the decision to the student and the instructor separately at the end of the proceedings.

# Honors and Awards

## Term Specific Honors and Awards

### *James B. Angell Scholars*

Students who achieve an “A” record (all grades of A+, A, or A-) for two or more consecutive terms are recognized as James B. Angell Scholars. The student must have taken a minimum of 14 credit hours each term, including at least 12 credits elected on a graded (A-E) basis. Recipients of this award are recognized during Honors Convocation according to the number of consecutive terms they have earned the Angell Scholar designation.

If a student earns all A’s in a non-qualifying term, it will be ignored in the consecutive term count, but it will not break the Angell sequence. If the student receives a grade other than A+, A, A-, CR, P, S, W, or Y (regardless of the number of credit hours elected), the consecutive term sequence is broken.

The names of all James B. Angell Scholars will appear in the Honors Convocation printed program, and the award designation will appear on the student’s transcript on the day of the Honors Convocation.

### *University Honors Designation*

The University Honors designation is awarded to students who earned a 3.5 grade point average or higher during a term. The student must have taken a minimum of 14 credit hours during the term, including at least 12 credits elected on a graded (A-E) basis. Students who achieve University Honors designation for both the winter term and fall term are recognized at Honors Convocation. Seniors who achieve University Honors for at least one of these two terms are recognized at the Honors Convocation.

### *William J. Branstrom Award*

First-term freshmen who rank in the upper five percent of their class within their school or college are awarded the William J. Branstrom Freshman Prize. The student must have taken at least 14 graded (A-E) credits during the fall term to be eligible for this award. Advanced placement credit does not disqualify a student for consideration of this award. Recipients of this award are recognized during Honors Convocation.

The names of all William J. Branstrom Award winners will appear in the Honors Convocation printed program, and the award designation will appear on the student’s transcript on the day of the Honors Convocation. Recipients of this award will also receive a book prize. For details regarding book prize selection, please visit the [Branstrom Book Prize Detail page](#).

## *Honors Convocation*

[Honors Convocation](#) is an annual celebration where undergraduate students who have received one or more of the three awards above are recognized for their distinguished academic achievements. It is one of the University's most important academic traditions.

## *Honors at Graduation*

### *Distinction*

The College acknowledges the superior academic achievement of its students in a variety of ways. These include the awarding of departmental academic awards, university honors, honors at graduation, election to national honor societies, the LSA Current Student Scholarships, and special awards. Transfer credit does not count for honors.

Distinction is the LSA equivalent of what many other colleges and universities refer to as a "Dean's List." Degrees with distinction are awarded on the basis of rank in class. Students who have completed at least 58 credits in residence, at least 45 of which are "graded" (A+ to D-), and rank in the top three percent of their class are recommended for a degree "with Highest Distinction." Those students who rank in the top 10 percent of their class but not in the top three percent are recommended for a degree "with High Distinction." Those students who rank in the top 25 percent of their class but not in the top 10 percent are recommended for a degree "with Distinction." A notation is made on the diploma and the transcript. [The GPA ranges for the distinction notations](#) are determined each May, based on the cumulative GPAs of LSA graduates of the May degree period. Those same numbers are used for the August and December degree periods of that calendar year. A [record of historical distinction levels](#) is also maintained by the Newnan Academic Advising Center.

### **2019 Distinction Ranges for Winter, Summer, and Fall Term Graduates:**

- Highest Distinction: 3.957 – 4.000
- High Distinction: 3.865 – 3.956
- Distinction: 3.722 – 3.864

### *Highest Honors, High Honors, Honors*

Students who have completed at least 58 credits in residence and have demonstrated high academic achievement and capacity for independent work in a departmental Honors concentration program may be recommended for a degree "with Highest Honors," "with High Honors," or "with Honors" in the major. Capacity for independent work must be demonstrated in part by superior performance in an Honors program or some achievement of equivalent character. A minimum overall grade point average of 3.4 is required. A notation is made on the diploma and the transcript.

## Other Honors and Awards

### *Department Awards*

Department Awards recognize superior academic performance in the major. Consult the website of the department of your major.

### *National Honor Societies*

Honor Societies are organizations that exist in order to encourage and recognize excellence in student scholarship and leadership. A notation is posted on a student's transcript by the Registrar's Office for induction to [Phi Beta Kappa](#), [Phi Kappa Phi](#), and [Tau Beta Pi](#). Induction into other honor societies on the U-M Ann Arbor campus is not noted on a student's transcript.

### *Student Honor Societies*

The [University of Michigan's Maize Pages](#) include listings of Student Honor Societies.

### *LSA Returning Student Scholarship*

LSA's Scholarship Office provides information about eligibility and requirements for LSA [Returning Student Scholarships](#).

### *Scholarships Requiring U-M Endorsement*

These national scholarship programs accept applications only from students who have been endorsed by the University of Michigan. There is an internal competition for most of these awards and the UM deadlines are set considerably earlier than the national deadlines to accommodate this process. For detailed information regarding these scholarships, see the [Provost's Council for Student Honors website](#). Information about awards specifically for LSA Honors students is available [on the LSA Honors Program website](#).

***Please Note:*** The honors and awards for superior academic achievement described on this page should not be confused with the LSA Honors Program. Information about that program can be found [on their website](#).

## Historical Distinction Levels

### *May, August, and December 2019 graduates:*

Highest Distinction: 3.957 – 4.000

High Distinction: 3.865 – 3.956

Distinction: 3.722 – 3.864

*May, August, and December 2018 graduates:*

Highest Distinction: 3.950 – 4.000

High Distinction: 3.856 – 3.949

Distinction: 3.708 – 3.855

*May, August, and December 2017 graduates:*

Highest Distinction: 3.949 – 4.000

High Distinction: 3.857 – 3.948

Distinction: 3.705 – 3.856

*May, August, and December 2016 graduates:*

Highest Distinction: 3.941 - 4.000

High Distinction: 3.838- 3.940

Distinction: 3.685 - 3.837

*May, August, and December 2015 graduates:*

Highest Distinction: 3.951 - 4.000

High Distinction: 3.845 - 3.950

Distinction: 3.692 - 3.844

*May, August, and December 2014 graduates:*

Highest Distinction: 3.931 - 4.000

High Distinction: 3.824 - 3.930

Distinction: 3.669 - 3.823

*May, August, and December 2013 graduates:*

Highest Distinction: 3.940 - 4.000

High Distinction: 3.847 - 3.939

Distinction: 3.686 - 3.846

*May, August, and December 2012 graduates:*

Highest Distinction: 3.940 - 4.000

High Distinction: 3.837 - 3.939

Distinction: 3.688 - 3.836

*May, August, and December 2011 graduates:*

Highest Distinction: 3.924 - 4.000

High Distinction: 3.837 - 3.923

Distinction: 3.682 - 3.836

*May, August, and December 2010 graduates:*

Highest Distinction: 3.928 - 4.000

High Distinction: 3.825 - 3.927

Distinction: 3.670 - 3.824

*May, August and December 2009 graduates:*

Highest Distinction: 3.927 - 4.000

High Distinction: 3.809 - 3.926

Distinction: 3.644 - 3.808

*May, August and December 2008 graduates:*

Highest Distinction: 3.917 - 4.000

High Distinction: 3.819 - 3.916

Distinction: 3.664 - 3.818

*May, August and December 2007 graduates:*

Highest Distinction: 3.930 - 4.000

High Distinction: 3.821 - 3.929

Distinction: 3.649 - 3.820

*May, August and December 2006 graduates:*

Highest Distinction: 3.925 - 4.000

High Distinction: 3.819 - 3.924

Distinction: 3.671 - 3.818

*May, August, and December 2005 graduates:*

Highest Distinction: 3.917 - 4.000

High Distinction: 3.794 - 3.916

Distinction: 3.621 - 3.793



*May, August, and December 2004 graduates:*

Highest Distinction: 3.920 - 4.000

High Distinction: 3.782 - 3.919

Distinction: 3.593 - 3.781

*May, August, and December 2003 graduates:*

Highest Distinction: 3.908 - 4.000

High Distinction: 3.768 - 3.907

Distinction: 3.584 - 3.767

*May, August, and December 2002 graduates:*

Highest Distinction: 3.907 - 4.000

High Distinction: 3.771 - 3.906

Distinction: 3.598 - 3.770

*May, August, and December 2001 graduates:*

Highest Distinction: 3.908 - 4.000

High Distinction: 3.775 - 3.907

Distinction: 3.574 - 3.774

*May, August, and December 2000 graduates:*

Highest Distinction: 3.889 to 4.000

High Distinction: 3.755 to 3.888

Distinction: 3.551 to 3.754

*May, August, and December 1999 graduates:*

Highest Distinction: 3.907 to 4.000

High Distinction: 3.778 to 3.906

Distinction: 3.582 to 3.777

## **Dean's Certification Forms**

A "dean's letter" might be called a dean's recommendation, or certification, or letter of good standing. Dean's letters are sometimes required by professional schools or professional associations, as well as by prospective employers. Some transfer or study abroad applications require them as well. The forms usually say something like: "To be filled out by college dean or official."

If the form requires the evaluation of intended course elections elsewhere — for example if you are applying to a study abroad program which asks how your elections there might fulfill degree requirements here — you need to see an academic advisor in the Advising Center to discuss your program goals and plans. Otherwise, click [here](#) for the form.

Note, as the form tells you, that processing can take up to two weeks at periods of peak demand. Also remember to include a **stamped, addressed envelope** for each form you want sent out. Failure to do so will cause a significant delay in processing and mailing, especially during high-volume periods.

## LSA International Travel Policy

The University of Michigan has set forth basic international travel requirements as part of the [UM SPG 601.31](#). In November 2016, the College of Literature, Science, and the Arts set forth additional provisions as part of the “LSA International Travel Policy.” All members of the LSA community must comply with this policy. Any person (whether UM-affiliated or not) who may receive funding from an LSA unit or participates on an LSA-organized experience is also encompassed under this policy.

Students, faculty, and staff may not travel **nor can funds be released from LSA departments** until all requirements of the LSA Travel Policy have been met.

These provisions go beyond those elaborated in the UM International Travel Policy and are intended to facilitate communication with and locating our travelers in an emergency, such as a natural or political critical incident. The full text of the LSA Travel Policy can be found at the link below:

[LSA International Travel Policy](#) (*last revised October 2018*)

### Additional Information

Travel compliance and international health & safety concerns for the College of LSA will be coordinated by the LSA International Travel team, who are stationed within the CGIS office (200 Weiser Hall).

Please visit the new LSATravel website (<http://lsa.umich.edu/lsatravel>) for more information and resources. Please note this page is live but still under construction. If you have any questions, please feel free to contact [LSATravel@umich.edu](mailto:LSATravel@umich.edu)

# LSA Departments and Programs: Majors and Minors

This document is an unofficial representation of the information available on the LSA website. For official and updated information, please view the LSA website: <http://lsa.umich.edu/lsa/academics/majors-minors>

# Majors and Minors

Over 75 academic units in LSA combine to provide over 85 majors, subplans, and other degree programs as well as over 100 minors. Use the list below to get more information on majors, minors, and the departments and programs that administer them.

In addition to the [Bachelor of Arts or Bachelor of Science programs](#) listed below, the College offers a [Bachelor of Science in Chemistry](#) and a [Bachelor in General Studies \(BGS\)](#).

Academic policies governing [majors](#), [minors](#), and [supplemental studies](#) can be found in the [Degrees and Requirements](#) section of this website.

Curious about how your major might effect your career possibilities? Visit "[What Will You Do with an LSA Degree?](#)" to see what LSA alums are up to now and the how their choice of major—or majors—ultimately impacted their careers.

[Prospective Students](#): If you are planning to visit campus and would like to schedule an appointment with an academic department, please contact the department directly by phone. Click the Website button in the program descriptions below; phone numbers can then be found in the footer of each department website. Appointments will typically run up to 30 minutes. Please request an appointment at least two weeks in advance. For more information on how to make the most of your appointment, review the Visit Campus page.

Archive copies of past LSA bulletins can be found [here](#).

## Actuarial Mathematics submajor

The **Actuarial Mathematics** Program is designed to provide broad training in the mathematics underlying the operations of private and social insurance and employee benefit plans. The courses provide background for several of the examinations of the Casualty Actuarial Society and the Society of Actuaries. It is strongly recommended that students pass some of these exams before graduation. Summer internships are an important component of the educational program and students are encouraged to seek an internship no later than the conclusion of their junior year. Actuarial advisors can provide guidance on the professional examinations and on summer internships.

[Mathematics \(Major\)](#)

*Effective Winter 2014*

[Advising](#)

Appointments are scheduled online at: [lsa.umich.edu/math/undergraduates](http://lsa.umich.edu/math/undergraduates). Students are strongly urged to consult with a department advisor each term before selecting courses for the following term.

## Grade Policies

All prerequisite courses must be satisfied with a grade of C– or above. Students with lower grades in prerequisite courses must receive special permission of the instructor to enroll in subsequent courses.

## Major GPA Calculation

For purposes of calculating grade point average, the term "field of the major" means the following:

1. All MATH courses.
2. All courses used to meet requirements for the major.
3. All required cognate courses (if any).
4. All mandatory prerequisites.
5. EECS 183
6. ECON 101 and ECON 102 (actuarial mathematics submajor only).

## Prerequisites

Most programs require completion of one of the sequences ending with MATH 215-217, 256-217, 285-217, or 395-396. A working knowledge of a high-level computer language such as C++ or a computer algebra system (such as Maple or Mathematica), at a level equivalent to completion of a course of three or more credits, and eight credits of PHYSICS, preferably PHYSICS 140/141 and 240/241, are recommended for all programs and required for some. (A grade of C- or better is strongly suggested for MATH 217.)

## Requirements

A student considering a major in Mathematics should consult a mathematics department advisor in the Undergraduate Mathematics Office as early as possible and certainly by the first term of the sophomore year. The department offers many different submajors with varying requirements; failure to meet some of these at the intended time may delay completion of the program and graduation. A plan for the major must be designed with and approved by a department advisor.

- [Pure Mathematics](#)
- [Mathematical Sciences](#)
- [Actuarial Mathematics](#)
- [Mathematics of Finance and Risk Management](#)
- [Honors Mathematics](#)
- [Secondary Mathematics Teaching Certificate](#)

## Residency

**Minimum number of courses taken in residence for transfer students majoring in Mathematics** (applies to all sub-plans) Students should take a minimum of 18 credits at the University of Michigan, Ann Arbor campus. Six of these credits must come from the basic courses and nine from the core courses and/or cognate courses. The 18 credits may include pre-requisites taken in Math.

## Actuarial Mathematics (Sub-Major)

*Effective Winter 2020*

## Advising

Appointments are scheduled online at: [lsa.umich.edu/math/undergraduates](https://lsa.umich.edu/math/undergraduates). Students are strongly urged to consult with a department advisor each term before selecting courses for the following term.

## Grade Policies

All prerequisite courses must be satisfied with a grade of C– or above. Students with lower grades in prerequisite courses must receive special permission of the instructor to enroll in subsequent courses.

For purposes of calculating grade point average, the term "field of the major" means the following:

1. All MATH courses.
2. All courses used to meet requirements for the major.
3. All required cognate courses (if any).
4. All mandatory prerequisites.
5. ECON 101, ECON 102, and EECS 183

## Prerequisites

### Prerequisites for all Mathematics Majors

Completion of one of the sequences ending with MATH 215-217, 256-217, 285-217, or 395-396. A working knowledge of a high-level computer language such as C++ or a computer algebra system (such as Maple or Mathematica), at a level equivalent to completion of a course of three or more credits, and eight credits of PHYSICS, preferably PHYSICS 140/141 and 240/241, are recommended for all programs and required for some. (A grade of C- or better is strongly suggested for MATH 217.)

### Additional prerequisites for the Actuarial Mathematics Submajor

MATH 215&217, 255&217, 285&217 or MATH 295&296. Each student must also complete: ECON 101 and 102 and EECS 183 all elected on a graded basis. The grade for ECON 101, ECON 102, and EECS 183 will be included in the major GPA.

### Requirements

A minimum of 11 courses, selected from the following:

- A. **Four basic courses** (one from each of the following four groups), completed with a grade of at least C-:
  - *Differential Equations*: MATH 286 or 316
  - *Probability*: MATH 425
  - *Statistics*: STATS 426
  - *Analysis*: MATH 351 or 451
- B. **Five special courses for Actuarial Mathematics**:  
MATH 423, MATH 424, MATH 520 MATH 523, and at least one of MATH 521 or MATH 524
- C. **Two additional courses** in areas relating to Actuarial Mathematics approved by an advisor.

### Residency

Minimum number of courses taken in residence for transfer students majoring in **Mathematics** (applies to all sub-plans): Students should take a minimum of 18 credits at the University of Michigan, Ann Arbor campus. Six of these credits must come from the basic courses and nine from the core courses and/or cognate courses. The 18 credits may include prerequisites taken in Math.

## Afroamerican and African Studies Major

Majoring in Afroamerican and African Studies will allow you to develop a comprehensive understanding of African and its diaspora: the varied cultures of African-descended people around the world. While exploring different geographical regions, cultures, historical periods, and political contexts, you will develop expertise about one of the geographical regions central to our curriculum: Africa, African America, or the African Diaspora broadly conceived, and you will develop specialized knowledge in your chosen field (e.g., Popular Culture and New media; Health; Gender and Sexuality Studies).

*Effective Fall 2020*

*Exclusions: A major in Afroamerican and African Studies is not open to students with a minor in the Department of Afroamerican and African Studies.*

### Advising

A team of DAAS faculty and staff is available to advise students. Students can make an appointment with an advisor through our department website, contact an advisor by email (daasadvising@umich.edu), or drop by the department during advising hours to meet with an advisor.

Students are also encouraged to relax or study in the Lemuel Johnson Center (room 5511) and to attend DAAS community events where our advisors are often present.

### Prerequisites

None.

### Requirements

#### **Minimum Credits: 28**

1. Complete two of the following three gateway courses:  
AAS 200 (Introduction to African Studies)  
AAS 201 (Introduction to African American Studies)  
AAS 202 (Introduction to African Diasporic Studies)
2. Complete two 300-level comparative or global courses that compare different geographical regions, historical periods, political contexts, or cultural contexts. Choose from: AAS 303, 304, 309, 322, 323, 324, 346, 354, 359, 362, 365, 366, 381, 384.
3. Complete four AAS electives chosen in consultation with a DAAS advisor or faculty. In selecting electives, students may find it helpful to organize their curriculum according to one of the following themes: Environmental Studies; Expressive Arts; Gender and Sexuality Studies; Global Political Economies; Health; Law, Politics, and Social Justice; Migrations and Humanitarianism; Popular Culture and New Media; or Religion and Spiritual Practice. See the DAAS website for a comprehensive list of AAS courses organized by theme.  
  
Two of these electives must be at the 300- or 400-level
4. Students who declare a major in Afroamerican and African studies must complete at least one AAS ULWR course. This course can be used to fulfill other requirements in the major, and can also be used to fulfill the college ULWR if the student receives a C- or better.. Additionally, DAAS Honors students may use their Honors Thesis to meet this requirement (see Honors section below for details)
5. Complete the DAAS-In-Action course, AAS 498.

### Distribution Policy

No course used to fulfill a major requirement may be used toward the [LSA Distribution Requirement](#). In addition, courses in the AAS subject area may not be used toward the Distribution Requirement.

### Honors

#### **Students**

AAS majors who want to declare the Honors subplan can do so through an independent study process that leads to an Honors thesis. Students wishing to pursue Honors must have a 3.4 overall GPA and a 3.5 GPA in AAS courses. Students interested in this opportunity should contact the department no later than the end of their junior year.



College Honors students can also use their honors thesis to meet the ULWR.

## Afroamerican and African Studies Minor

Minoring in Afroamerican and African Studies will allow you to develop a comprehensive understanding of Africa and its diaspora: the varied cultures of African-descended people around the world. While exploring different geographical regions, cultures, historical periods, and political contexts, you will develop expertise about one of the geographical regions central to our curriculum: Africa, African America, or the African Diaspora broadly conceived, and you will develop specialized knowledge in your chosen field (e.g., Popular Culture and New Media; Health; Gender and Sexuality Studies).

*Effective Fall 2020*

### Exclusions:

*A minor in Afroamerican and African Studies is not open to students with a major in the Department of Afroamerican and African Studies.*

### Advising

Students wishing to pursue a minor in Afroamerican and African Studies must develop a specific plan for its completion in consultation with the department's designated advisor. A team of DAAS faculty and staff is available to advise students.

Students can make an appointment with an advisor through our [department website](#), contact an advisor by email ([daasadvsing@umich.edu](mailto:daasadvsing@umich.edu)), or drop by the department during advising hours to meet with an advisor.

Students are also encouraged to relax or study in the Lemuel Johnson Center (room 5511) and to attend DAAS community events where our advisors are often present.

### Prerequisites

None.

### Requirements

#### Minimum Credits: 15

1. Complete two of the following three gateway courses:
  1. AAS 200: Introduction to African Studies
  2. AAS 201: Introduction to African American Studies
  3. AAS 202: Introduction to African Diasporic Studies
2. Complete one 300-level comparative or global course that compares different geographical regions, historical periods, political contexts, or cultural contexts. Choose from: AAS 303, 304, 309, 322, 323, 324, 346, 354, 359, 362, 365, 366, 381, 384.

3. Complete one 300- or 400-level AAS elective.
4. Complete the DAAS-In-Action course, AAS 498.

## American Culture Major

The U-M Program in American Culture is among the most dynamic units on the campus. Its intellectual development focuses on a rethinking of interdisciplinarity. In the spirit of the most creative and responsible scholarship of the new millennium, the Program is moving its intellectual center beyond a coalition of disciplinary specialists laboring in a collaborative relationship and toward the production of scholars whose accomplishments express a genuine synthesis of methods. Moreover, a critical constituent of this process is the reformulation of a vision of American cultures without borders, in an international framework, and with the study of Asian Americans, Latina/os, Native Americans, Arab Americans, and African Americans pivotal to teaching and research. Our goal is to enrich the investigation of American culture by engaging in a refashioning of the more traditional areas of the field of American Studies, together with attentiveness to budding subjects of new study within disciplines across the social sciences and humanities.

The Program in American Culture exposes students to the interdisciplinary study of U.S. society and culture. Our courses integrate a rich array of materials, themes, and approaches from many fields: not only historical and literary study, but also visual studies, musicology, film and media, anthropology, and others. The curriculum of the Program emphasizes the multicultural diversity of American society, paying particular attention to ethnic, gender, and other forms of social difference and inequality. At the same time, it stresses the importance of studying U.S. nationhood, including Americans' (sometimes conflicting) ideals and experiences of what it means to be American. Our courses are designed to explore these issues in both historical and contemporary settings.

Although the major in American Culture offers considerable flexibility and intellectual diversity, it also is designed to foster a community of learning among undergraduates. The Program aims to be an interdisciplinary "village" within the larger College, in which majors share the opportunity for intensive study, conversation, and research about American society and culture.

*Effective Winter 2014*

### Prerequisites

None.

### Requirements

**Minimum Credits: 28**

1. **Core course:** AMCULT 300 (275): Practices of American Culture.
2. **Capstone:** AMCULT 498: Capstone Seminar in American Culture.
3. **Breadth Requirements:** Students must also have classes focused on the following Breadth Requirements at the 200-level or higher. Depending on content, one course might satisfy two or more of these requirements.

- Pre-Twentieth-Century United States
  - Transnationalism, Diaspora, and/or Empire
  - Women, Gender, and/or Sexuality
  - Ethnic and/or Indigenous Studies
4. **Electives:** Students must elect additional courses at the 200 level or higher under American Culture (AMCULT) and/or any of American Culture's Ethnic Studies SUBJECT Codes (LATINOAM, ASIANPAM, NATIVEAM, ARABAM) to reach the 28 minimum credits required for the major. (Includes Breadth Requirement courses).

### Constraints

No more than 9 credits at the 200 level (not including AMCULT 275) can be counted toward the major.

### Distribution Policy

No course used to fulfill a major requirement may be used toward the [LSA Distribution Requirement](#). In addition, courses in the AMCULT, ARABAM, ASIANPAM, LATINOAM, and NATIVEAM subject areas may not be used toward the Distribution Requirement.

### Honors

American Culture Honors provides an opportunity for majors in American Culture and Latina/o Studies to complete a comprehensive, original independent project under the guidance of a faculty member as the culmination of their undergraduate studies. Honors requirements consist of regular American Culture or Latina/o Studies requirements plus the Honors requirements.

American Culture and Latina/o Studies majors with an overall grade-point average of 3.5 or higher may apply for the Honors major. Students usually apply in the fall term of their junior year.

Honors requirements spans three terms.

- In the second term of the junior year, the student must successfully complete AMCULT 398, which involves preparing a thesis prospectus and bibliography and identifying a supervising faculty advisor and a second reader.
- In both terms of the senior year, the student will enroll in AMCULT 493 (3 credits per term) to research and write the thesis.
- participation in three Friday colloquia. Colloquia will focus on peer response to work in progress, as well as on topics of particular usefulness to a given cohort of students. The series will be facilitated by the Director of Undergraduate Studies and is intended to provide seniors with ongoing mentoring.

The primary advisor and the second reader determine the designation of Honors (Honors, High Honors, Highest Honors).

## American Culture Minor

American Culture offers a general minor in addition to minors from our Latina/o Studies, Native American Studies, and Asian/Pacific Islander American Studies units. The American Culture minor gives skills, information, and techniques from a wide variety of perspectives and

disciplines. Students engage comparative ethnic studies, history, literature, film/media studies, religion, music, art, digital technologies, women's studies, folklore, sexuality studies, and ethnography. Our curriculum allows students a better understanding of the nation's diversity and the U.S.'s role in a global context. We explore what it has meant — and continues to mean — to claim to be an "American." The department also offers a minor in Digital Studies.

American Culture's general minor is flexible to allow students to chart their own trajectory. Students should consult with the department's designated advisor to discuss their interests and plan.

American Culture's general minor is an ideal companion degree for any student interested in law, medicine, business, marketing, museum studies, or graduate school in the humanities and social sciences. A minor in American Culture signals that a student can engage with the nation's ever increasing diversity intelligently and critically. Because of the plethora of disciplines, interdisciplinary faculty, and geographic reach designed into the American Culture curriculum (which stretches far beyond the bounds of the continental United States), this minor is a valuable intellectual resource for any career.

This minor is aimed at students with interests in understanding how they came to know their role in the United States. The general American Culture minor encourages students to take an ensemble of courses focusing on, for example, comparative ethnic studies, popular culture, gender and sexuality studies, digital technologies, media and society, or contemporary social issues.

*Effective Winter 2013*

**Exclusions:**

*Not open to students with a major in American Culture.*

Advising

Students can set up advising appointments for any of the program's major or minor plans by visiting <http://lsa.umich.edu/ac/undergraduates/advising.html>.

Prerequisites

None.

Requirements

**Minimum Credits: 15**

1. One AMCULT course (3 credit) at 200-level, or higher (AMCULT 222 and 223 are excluded).
2. AMCULT 300: Approaches to American Culture (3 credits).
3. Three additional courses (9 credits total) at 300-level or higher. In consultation with the American Culture department advisor, students will plot their own path toward the minor through these additional courses.

# Anthropology Major

The Undergraduate Anthropology Program emphasizes the commitment of this department to four-field anthropology, providing exposure to Anthropological Archaeology, Biological Anthropology, Linguistic Anthropology, and Sociocultural Anthropology. This holistic approach serves Anthropology's intellectual goal to achieve a comprehensive and comparative understanding of humanity. An undergraduate major in Anthropology contributes to a liberal arts education, offering a disciplined awareness of human behavior and social institutions in different times and places.

*Effective Fall 2016*

## Advising

The department offers undergraduate majors for a bachelor's degree in Anthropology and Evolutionary Anthropology; minors are offered in Medical Anthropology, Biological Anthropology, and Anthropology (with tracks in Sociocultural Anthropology, Linguistic Anthropology, and Archaeological Anthropology).

All anthropology faculty members are available for informal discussion with students during scheduled office hours (check the Department office for times).

[Department advisors](#) are available to explain program objectives and requirements and to help with the planning of your program.

Students wishing to pursue a minor in the Department of Anthropology should contact the undergraduate advisor with any questions.

Appointments are scheduled in the Department office or online at:  
<http://lsa.umich.edu/anthro/undergraduates/advising>

## Prerequisites

None, but ANTHRCUL 101 is recommended.

## Requirements

**Minimum Credits: 34**

At least 34 credits at the 200-level or above are required:

Choose at least one course in each of the following subfields

- 1. Anthropological Archaeology:**
  - ANTHRARC 282: Introduction to Prehistoric Archaeology (4)
  - ANTHRARC 386: Early Civilizations
- 2. Biological Anthropology:**
  - ANTHRBIO 201: Introduction to Biological Anthropology (4)
- 3. Linguistic Anthropology:**
  - ANTHRCUL 272: Language in Society (4)

- ANTHRCUL 374: Language and Culture (4)
- 4. Sociocultural Anthropology:**
  - ANTHRCUL 222: The Comparative Studies of Culture (4)
  - ANTHRCUL 226: Introduction to Historical Anthropology (4)
  - ANTHRCUL 230: Fundamentals of Social Theory (4)
  - ANTHRCUL 330: Culture, Thought, and Meaning (4)

Other credits are taken from ANTHRARC, ANTHRBIO, or ANTHRCUL courses with a minimum of four courses at the 300-level or above, at least one of which must be at the 400-level.

### Constraints

A maximum of 6 credits of independent research can be counted toward the major.

### Residency

At least 20 credits must be completed in residence at the University of Michigan.

### Distribution Policy

No course used to fulfill a major requirement may be used toward the [LSA Distribution Requirement](#). In addition, courses in the ANTHRARC, ANTHRBIO, and ANTHRCUL subject areas may not be used toward the Distribution Requirement.

### Honors

Students interested in scholarly research are encouraged to consider the Honors major. Previous participation in the College Honors program is not a prerequisite. Seniors admitted to the [Honors](#) major normally elect a seminar in their special field of interest: biological anthropology (ANTHRBIO 398), archaeology (ANTHRARC 398) or sociocultural or linguistic anthropology (ANTHRCUL 398). The seminars give students an opportunity for intensive training and research experience; the Honors major requires a senior thesis. Interested students should consult an Anthropology advisor for more information.

### Teaching Certificate

Students interested in obtaining a secondary teaching certificate with a teaching minor in Anthropology should consult the ["Teacher Certification Program"](#) on the LSA website and the School of Education Office of Academic Services.

## Anthropology Minor

Anthropology at the University of Michigan emphasizes four-field training. Our majors gain anthropological understanding of the human condition through exposure to Sociocultural Anthropology, Biological Anthropology, Anthropological Archaeology, and Linguistic Anthropology and their many interrelationships. Many students, however, take our courses to supplement other majors or out of general interest and have less need for four-field training. Academic minors in anthropology may benefit these students, providing structure to their course

elections, and allowing thoughtful integration of anthropology into their academic plans. The department offers three minors: Anthropology, Biological Anthropology, and Medical Anthropology.

The sub-disciplines of anthropology are natural complements to many majors. The minor in Anthropology allows students with particular regional or topical interests to add an anthropological perspective to their studies, whether sociocultural, linguistic or archeological. Students may choose a track that emphasizes Sociocultural Anthropology, Linguistic Anthropology, or Anthropological Archaeology.

*Effective Winter 2008*

**Exclusions:**

*The Anthropology minor is not open to students with any major or any other minor in the department of Anthropology.*

Advising

The department offers undergraduate majors for a bachelor's degree in Anthropology and Evolutionary Anthropology: minors are offered in Medical Anthropology, Biological Anthropology, and Anthropology (with tracks in Sociocultural Anthropology, Linguistic Anthropology, and Archaeological Anthropology).

All anthropology faculty members are available for informal discussion with students during scheduled office hours (check the Department office for times).

[Department advisors](#) are available to explain program objectives and requirements and to help with the planning of your program.

Students wishing to pursue a minor in the Department of Anthropology should contact the undergraduate advisor with any questions.

Appointments are scheduled in the Department office or online at:  
[www.lsa.umich.edu/anthro/undergraduates/advising](http://www.lsa.umich.edu/anthro/undergraduates/advising)

Prerequisites

None.

Requirements

**Minimum Credits: 16**

At least five courses (no fewer than 16 credits) in one "track" to be chosen from the following tracks, as described below.

**1. Sociocultural Anthropology**

- a. One general introduction to anthropology: ANTHRCUL 101 or 222.
- b. One upper-level course in anthropological theory from those designated Sociocultural

Anthropology- Theory/Method.

- c. Three anthropology courses, chosen in consultation with the advisor. At least one must be at the 400-level, one must be a regional course.

## **2. Linguistic Anthropology**

- a. One general introduction to anthropology; ANTHRCUL 101 is recommended.
- b. ANTHRCUL 272.
- c. At least three upper-level courses from those listed under Linguistic Anthropology.

## **3. Anthropological Archaeology**

- a. ANTHRARC 282.
- b. ANTHRARC 385 or 386.
- c. Three additional regularly offered courses in anthropological archaeology, two of which must be 300-level or above, chosen from ANTHRARC 258, 285, 283, 284, 381, 382, 383, 385, 386, 392, 394, 407, 442, 482, 484, 490, or 495.
- d. Other less regularly taught courses in anthropological archaeology may also be used. Consult the department advisor for more information. Field courses (ANTHRARC 400 or 487) and Independent Reading and Research (ANTHRARC 499) may not be used toward the minor.

# Applied Statistics Minor

The Applied Statistics minor program introduces students to applied statistical methodology. The minor provides students with an appreciation for the tools that enable them to be involved in the design and analysis of quantitative studies as part of their professional careers or for pursuing graduate studies in quantitative fields.

*Effective Winter 2018*

## **Exclusions:**

*The academic minor in Applied Statistics is not open to students with a Statistics or Data Science major or any other minor in Statistics.*

## Advising

Most statistics courses are elected after taking an introductory course (STATS 250, STATS 280 or STATS 412) and completing an introductory mathematics sequence. Students wishing to pursue a minor in Statistics must develop a specific plan for its completion in consultation with a Statistics Department undergraduate department advisor. See Department website for contact information: [lsa.umich.edu/stats/undergraduate-students/advising](https://lsa.umich.edu/stats/undergraduate-students/advising)

## Prerequisites

MATH 116 or 121.

## Requirements

**Minimum Credits: 15**

1. **Core Courses:** (STATS 250 or STATS 280) and STATS 306 and STATS 401.
2. **Elective Statistics Courses:** At least two advanced electives. These may be STATS 403, 408, 449,



470, 480 or other approved courses. One elective may be a quantitative methods course with advanced statistical content offered by another department, with approval from a Statistics Department undergraduate advisor.

### Constraints

- STATS 412 can be used to meet the core requirement (STATS 250 or STATS 280) but cannot be used as an elective.
- The following courses may not be used as electives for the Applied Statistics minor: STATS 404, 489 and 499.

### Residency

At least four of the five courses used to meet the minor requirements must be taken within the University of Michigan's Statistics Department.

## Arab and Muslim American Studies Minor

Today, an estimated 3.5 million Arab Americans and an overlapping 8 million Muslim Americans live in the United States. Michigan is a major center for these massive and growing populations. The Detroit metropolitan region has the largest concentration of Arab Americans in the nation (almost half a million). Moreover, the Arab region and its diasporas have become increasingly central to U.S. history, diplomacy, and politics. Immigration and displacement by war and the forces of global economy are among the factors that have sparked movements of Arab people to the United States. Since September 11, 2001, there has been increased national attention to Arab and Muslims Americans and a scholarly renaissance in the field.

Courses in Arab American Studies provide an interdisciplinary study of Arab American histories, literatures, and cultures. We address the historical and current experiences of Arab Americans in the United States and the relevance of those experiences for understanding race and ethnicity in the U.S. and globally. Courses explore themes such as immigration history; racism and discrimination; gender and sexuality; media representations; the local and global impacts of war and violence on Arabs and Arab Americans; intellectual, artistic, and cultural contributions; and relationships with other racial and ethnic groups. This curriculum provides knowledge vital for a critical understanding of the contemporary United States in a global context. The Program in American Cultures offers the following courses in Arab American Studies: "Why do they Hate Us?: Perspectives on 9/11", Arab American Literature", Introduction to Arab American Studies, Muslim Americans, Arab Women: Homelands and Diasporas, Immigrant and Racial Politics after September 11th, Representing the Middle East in Hollywood Cinema. Courses may also be offered in other departments or cross listed in American Culture. Faculty members teaching in this area include Nadine Naber and Evelyn Alsultany.

This minor is intended for students interested in Arab and/or Muslim diasporas and who wish to develop a coherent understanding of the cultural politics of being Arab and/or Muslim in the U.S. and the contributions of Arabs/Muslims in American culture. Students will draw on the Arab and Muslim American Studies minor to supplement and make more coherent their understanding of the knowledge formed in a traditional discipline. For instance, students with interests in Arab and/or Muslim American identities, experiences, culture, or politics, who are majoring in a traditional humanities or social science discipline can enhance and deepen their

thinking about Arabs and/Muslim communities by taking a systematic supplement of courses designed around those populations. Students majoring in Near Eastern Studies, International Studies, Public Policy, Anthropology, Sociology, History, English, Intergroup Relations, Political Science, and Women's and Gender Studies would take particular interest in this minor, as well as those majoring in American Culture.

The minor in Arab and Muslim American Studies offers students:

- An interdisciplinary approach to Arab and Muslim American studies that integrates research and teaching methods from various fields, such as history, media studies, religious studies, literature, anthropology, and sociology, among others
- A transnational approach that highlights the relationship between Arab and Muslim homelands and diasporas
- Comparative approaches that place the understanding of Arab and Muslim American history and experiences in relation to other racial, ethnic, religious, or immigrant groups
- Community-based approaches that link universities with Arab and Muslim American communities through internships and collaborative projects

*Effective Fall 2016*

#### Advising

The designated Director of Arab American Studies will be responsible for advising most students with the assistance of the American Culture Undergraduate Program Coordinator and Ethnic Studies Associate. Both the Associate Chair and the Chair will provide back-up advising.

Students interested in pursuing a course of study in the field should contact American Culture's designated advisor. Appointments are schedule online at <http://lsa.umich.edu/ac/undergraduates/advising.html>

#### Prerequisites

None.

#### Requirements

**Minimum Credits: 15**

At least one course must be at the 300- or 400-level, and at least three courses must be taken in American Culture (AMCULT) or Arab American Studies (ARABAM).

1. **Survey courses:** Any 200-level ARABAM course.
2. **Electives.** At least two additional courses (6 credits) offered by American Culture/Arab American Studies providing interdisciplinary study of Arab and/or Muslim American histories, literatures, and cultures, chosen from the list below or selected in consultation with and approved by the Arab and Muslim American Studies minor advisor:

- AMCULT 311: Topics in Ethnic Studies, *section titled "Camels, Kabobs and Kahlil: Arab American Cultural Studies"*
  - AMCULT 498: Capstone Seminar in American Culture, *section titled "Why Do They Hate Us: Perspectives on 9/11"*
  - ARABAM 236 / AMCULT 236: Muslims in America
  - ARABAM 290 / AMCULT 290: Arab American Literature
  - ARABAM 311: Arab American Studies and the Humanities, *section titled "Camels, Kabobs and Kahlil: Arab American Cultural Studies"*
  - ARABAM 390 / AMCULT 390: Internship in Arab and Muslim American Studies
  - ARABAM 498: Capstone Seminar in Arab American Studies, *section titled "Why Do They Hate Us: Perspectives on 9/11"*
3. **Electives.** Two additional courses (6 credits) in American Culture/Arab American Studies, or in another department. These electives may be chosen from the list below or selected in consultation with and approved by an American Culture advisor.

**Courses in other departments** providing comparative, transnational, or broader perspectives on Arab and Muslim Americans.

- ANTHRCUL 409: Peoples and Cultures of the Near East and North Africa
- ASIAN 324 / HISTORY 325 / MIDEAST 375 / MEMS 325 / RELIGION 325: The History of Islam in South Asia
- ENGLISH 280: Introduction to Digital Cultures, *section titled "Writing Islam"*
- ENGLISH 317: Literature and Culture, *section titled "Arab American Literature"*
- HISTART 285 / MIDEAST 285: Visual Culture Islam
- HISTORY 241: America and Middle Eastern Wars
- HISTORY 243 / MENAS 243: Islamic World History
- HISTORY 324: Muslims in Contemporary Europe
- HISTORY 325 / MIDEAST 375 / ASIAN 324 / MEMS 325 / RELIGION 325: The History of Islam in South Asia
- HISTORY 443 / MIDEAST 487: Modern Middle East History
- HISTORY 449: Topics in Middle Eastern History
- MEMS 325 / HISTORY 325 / MIDEAST 375 / ASIAN 324 / RELIGION 325: The History of Islam in South Asia
- MENAS 243 / HISTORY 243: Islamic World History
- MENAS 493 / MIDEAST 483: Comparative Perspectives of the Middle East and North Africa
- MIDEAST 200: Introduction to the Middle East
- MIDEAST 285 / HISTART 285: Visual Culture Islam
- MIDEAST 322 / RELIGION 363: The Qur'an and Its Interpretations
- MIDEAST 323: The Prophet Muhammad in Islam
- MIDEAST 325: Introduction to Arab Literature in Translation
- MIDEAST 326: The Arab-Israeli Conflict in Middle Eastern Literature
- MIDEAST 375 / HISTORY 325 / ASIAN 324 / MEMS 325 / RELIGION 325: The History of Islam in South Asia
- MIDEAST 429: Topics in Modern Arabic Literature in Translation
- MIDEAST 487 / HISTORY 443: Modern Middle East History
- MIDEAST 483 / MENAS 493: Comparative Perspectives of the Middle East and North Africa
- REEES 490 / SOC 490 / WGS 492: Women and Islam: A Sociological Perspective

- RELIGION 325 / HISTORY 325 / MIDEAST 375 / ASIAN 324 / MEMS 325: The History of Islam in South Asia
- RELIGION 363 / MIDEAST 322: The Qur'an and Its Interpretations
- SOC 218 / UC 218: Foundations of Intergroup Relations
- SOC 490 / REEES 490 / WGS 492: Women and Islam: A Sociological Perspective
- UC 218 / SOC 218: Foundations of Intergroup Relations
- WGS 492 (WGS 492) / SOC 490 / REEES 490: Women and Islam: A Sociological Perspective
- Another course with significant Arab or Muslim content from another department, contingent on approval from an Arab and Muslim American Studies minor advisor.

### Constraints

One 300- or 400-level Arabic language courses or other relevant language can be applied toward the minor with the consent of the AMAS advisor (no more than three credits can be applied toward the minor)

## Art & Design (Minor)

The Stamps School of Art & Design offers a minor in (studio) Art & Design to provide non-majors with a more nuanced and sophisticated understanding of the creative processes and skills important to visual inquiry and communication. This minor is unique in that it adds making, hands-on material investigation and manipulation, to the academic skills of research and scholarship. By engaging in a structured process of conveying ideas and information through visual images and tangible forms, students who are not visual art and design majors gain a richer understanding of themselves and the world. They come to understand that there are many ways of seeing, many ways of addressing problems and expressing concerns, and many concepts that can be best communicated through visual means. Students who wish to develop the skills emphasized in art and design classes – namely design principles and visual composition; envisioning what does not yet exist; constructing tangible solutions to complex, open-ended questions; tools and techniques relevant to a wide range of material processes, expressive agility; iterative idea development and prototyping; critical thinking and analysis of sensory experience; and collaborative effort – are one of the target audiences for the minor. Students who desire a cohesive program of study and greater expertise in a specific area of art or design, for example, graphic design, are also suited to the minor. Other students may wish to supplement their major with a minor that offers an approach different from those employed in the liberal arts. Some students may feel the want of sustained art and design practice in their education and seek to remedy that deficiency by pursuing a minor in some area of endeavor unrelated to the major, such as painting or illustration. Much as the major in Art & Design does, the minor allows students flexibility in crafting their course of study while providing a framework that ensures the final product will have its own integrity.

## Stamps Minor Policies

- The minor is open to all undergraduates who are not Stamps Majors and who have already declared a major
- A portfolio is not required
- All coursework must be selected from the list of approved courses
- Test or transfer credits may not be used to meet the requirements of the minor
- Students may not elect the pass/fail grading option for courses included in the minor
- A maximum of one course may be shared between the requirements of a minor and a major
- A student must earn an overall GPA of at least 2.0 in the minor , including any prerequisites necessary for completion of the minor
- Students may not add, complete, or declare a minor after graduation

## How to Earn a Minor in Art & Design

### Step One

[Attend a Stamps Minor in Art & Design information session](#): This one-hour information session, offered every Friday afternoon, is the first step in declaring a Minor in Art & Design. You'll talk with Stamps representatives, learn more about our program, and find out if the Minor in Art & Design is right for you. [Sign up now!](#)

### Step Two

Complete two 3-credit courses, one from each category below (*6 credits total*):

1. Choose either **Drawing: Observation** (ARTDES 100) or **Drawing: Visualization** (ARTDES 105)
2. Choose one of our foundation "dimensional" courses: **Studio 2D** (ARTDES 115), **Studio 3D** (ARTDES 120) or **Studio 4D** (ARTDES 125).

Once you have finished *one* of these courses, you're ready to declare your minor by completing the [Minor Declaration Form](#). This form indicates that you've taken the prerequisite course, discussed the Stamps Minor with a Stamps advisor, and established a plan of study.

### Step Three

With the help of your advisor, choose **four courses** (12 credits) as follows:

1. **Two 200-level studio courses (6 credits).**  
Options include [ARTDES 200 - 299](#), a wide variety of introductory courses focused on developing skills in specific studio areas. 200-level classes are often prerequisites for more advanced studios.  
200-level studio courses offered outside the Stamps School can also count toward this requirement. These options include:  
*ARCH 211, Digital Drawing*  
*ARCH 218, Visual Studies*

*MECHENG 250, Design & Manufacturing I*

*PAT 201, Intro to Computer Music*

*PAT 202, Computer Music*

*PAT 280, Sound Reinforcement*

*RCARTS 285, Photography*

*RCARTS 286, Sculpture*

*RCARTS 287, Printmaking*

*RCARTS 289, Ceramics*

*SAC 290, Intro to Media Production*

*THREMUS 240, Intro to Design*

*THREMUS 256, Lighting Design I*

*THREMUS 260, Scene Design I*

*THREMUS 263, Design Rendering*

*THREMUS 270, Costume Design I*

*UARTS 250, Creative Process*

2. **One 300-level studio course (3 credits).**

Options include [ARTDES 300 - 397](#), a variety of more advanced, project-based courses where you can apply and refine the skills acquired in introductory classes. 300-level studio courses offered outside the Stamps School can also count toward this requirement. These options include:

*ADABRD 300-399*

*ARCH 312, Architectural Design*

*PAT 331, Sound Recording I*

*PAT 380, Sound for Theatre*

*RCARTS 385, Interdisciplinary Photographic Applications*

*RCARTS 389, Ceramics Theory and Criticism*

*SAC 300, Dramatic Narrative I*

*SAC 304, The Experimental Screen I*

*SAC 306, New Media Practices I*

*THREMUS 356, Lighting Design II*

*THREMUS 360, Scene Design II*

*THREMUS 370, Costume Design II*

Higher-level (400) studio courses can also count toward this requirement, with approval.

3. **One academic course (3 credits), selected from the following:**

*ARTDES 150: Art and Design in Context*

*ARTDES 151: Art and Design History*

*ARTDES 130: Methods of Inquiry*

*ARTDES 160: Penny W. Stamps Lecture Series (1 credit/semester)*

*HISTART 271: Origins of Modernism: Art and Culture in Nineteenth Century France*

*HISTART 272: Modern Art: Avant-Garde to Contemporary*

Art/design-related courses offered by other University of Michigan units can also apply to the minor. Only courses offered by the University of Michigan can count toward the minor. No exceptions.

#### Step Four

Complete the [Minor Release Form](#). The purpose of this release form is to inform the student and the student's home unit which courses for the Stamps Minor in Art & Design have been completed, and which courses are still required to complete this minor successfully. You must return this completed form to your home unit to have your Stamps minor listed on your transcript.

#### Questions?

For more information, [contact Brian Banks](#)

## Arts & Ideas in the Humanities Major

The Arts and Ideas major allows students to immerse themselves in two or more Arts and Humanities disciplines with rigor, care, and attention, and then combine them in an interdisciplinary program of study. Our flexible major guides you to combine theoretical and historical study in the humanities (literature, history of art, music, film, dance) with your own artistic practice. In other words: you don't just think and write about the arts, you do the arts. Your thinking is enriched by the doing, and the doing is enriched by the thinking. The Arts and Ideas major will give you skills of critical analytic writing and attentive looking, reading, and listening that are essential in any profession. Further, its integrated approach to the arts prepares students for careers in arts development and administration. A&I majors have found jobs as doctors, teachers, arts and academic administrators, among others.

*Effective Fall 2020*

#### Advising

1813 East Quadrangle

(734) 647-2745

[www.lsa.umich.edu/rc](http://www.lsa.umich.edu/rc)

The Residential College (RC) is a four-year undergraduate liberal arts program with about 900 students and 60 faculty, situated within LSA. All RC advisors are RC faculty members and are available to meet with students to discuss RC and LSA requirements, possible majors, graduation requirements, etc. The RC [Board on Academic Standing](#) considers petitions submitted by RC students relating to requirements, deadlines, and academic circumstances. Appointments with academic advisors can be scheduled by calling the RC Academic Services Office at (734) 647-2745, or by stopping by the offices at 1813 East Quad.

Students wishing to pursue a major program in Arts and Ideas in the Humanities must develop a specific plan for its completion in consultation with the program's designated advisor. Appointments may be scheduled at the RC Advising Office, 1813 East Quad, or by calling (734) 647-2745 or online at: <https://lsa.umich.edu/rc/current-students/academic-services.html>

## Prerequisites

None.

## Requirements

### I. How to think in the Arts and Humanities: 6 credits

All majors are required to take 6 credits of How To Think courses, preferably in a balance of Arts and Humanities topics.

RCHUMS 201: How to Think (Creative Arts)

RCHUMS 202: How to Think (Humanities)

### II. How to Think ACROSS the Arts and Humanities. 12 credits

Must be fulfilled only from the courses listed below. The courses fulfilling this requirement have been specifically designed to treat at least two art forms.

Distribution: Of the 4 courses fulfilling this requirement,

at least one must have a significant focus on the world before 1900

and at least one must have a significant focus outside the English-Speaking or European worlds.

RCHUMS 290: The Experience of Arts and Ideas of the 20th Century

RCHUMS 291: The Experience of Arts and Ideas of the 19th Century

RCHUMS 304 Time, History, Arts, and Culture

RCHUMS 305: Cultural Confrontations in the Arts

RCHUMS 306 History of Writing

RCHUMS/ASIAN 308: Art and Culture: Arts and Ideas of Modern South and Southeast Asia

RCHUMS 318: Critical Approaches to Literature

RCHUMS/ENVIRON 337: Children Under Fire: Narratives of Sustainability

RCHUMS 338: Growing Up Near the Great Lakes: Reading and Writing Landscapes of Childhood

RCHUMS 342: Representing the Holocaust in Literature, Film and the Visual Arts

RCHUMS 344/HISTART 342: Reason and Passion in the 18th Century

RCHUMS 346/HISTART 352: Art and Philosophy in the Renaissance Tradition

RCHUMS /AAS/HONORS/WGS 354 (WGS 354): Race and Identity in Music

RCHUMS 371: Political Modernism: The Artist in the Nightmare of History: Picasso, Eliot, Orwell

RCHUMS 372: The Subject in the Aftermath of Revolution

RCHUMS/ASIAN 373: The Performing Arts in South and Southeast Asia

### III. Arts. 6 credits

Courses fulfilling this requirement may be chosen from offerings at the RC and across the University at the 200 level or above. Choose these courses in consultation with an advisor.



#### **IV. Concentration. 9 credits**

Courses fulfilling this requirement may be chosen from RCARTS and RCHUMS courses and across the University at the 300 level or above. RC Language Readings courses may also be used in this area. The concentration coursework may focus on the study of a single art form in deep historical and theoretical context, or two art forms in relation to each other. These courses should be selected according to a clear rationale approved by your Arts & Ideas advisor. Choose these courses in consultation with an advisor.

#### Distribution Policy

No course used to fulfill a major requirement may be used toward the [LSA Distribution Requirement](#).

#### Honors

To be eligible for an Honors subplan in Arts & Ideas, students should have a cumulative grade point average of at least a 3.4, and a 3.5 grade point average in courses counting toward the major. Students who elect an Honors degree will write an Honors Thesis during the final year of their course work.

## **Asian Languages and Cultures Minor**

The minor in Asian Languages and Cultures provides a means for majors in other departments to add to their undergraduate program a substantial and structured course of study in an Asian language, combined with a number of courses focused upon Asian culture. The minor offers guidance to students who want to acquire usable language skills and insures that the study of language is grounded in knowledge about the larger culture in which the language is historically produced and used. Undergraduates minoring in ALC will be equipped with specific linguistic capabilities and cultural knowledge they can apply to their inquiries within other disciplinary major. The minor can be elected in conjunction with any of the languages taught through the third year in ALC.

*Effective Fall 2020*

#### **Exclusions:**

*A minor in Asian Languages and Cultures is not open to students with another minor in the Department of Asian Languages and Cultures.*

#### Advising

Appointments are scheduled on the department's online advising calendar. Please go to [www.lsa.umich.edu/asian](http://www.lsa.umich.edu/asian) for more information.

Students who have a formal or informal interest in Asian Studies are encouraged to consult a department advisor.

#### Grade Policies

No course will count toward the minor unless the student receives a grade of C- or better.

#### Prerequisites

Two years (fourth-term proficiency) in an Asian Language.

#### Requirements

##### **Minimum Credits: 15**

At least 15 credits, chosen in consultation with and approved by a department advisor, in the following categories, as stated:

**Language Requirement:** At least two ASIANLAN courses at the 300-level or above of an Asian language taught within the department. Minors are encouraged to take language courses beyond third-year proficiency and also take courses to acquire a second Asian language.

**Culture Requirement:** At least one ASIAN course at the 300-level or above that is directly related to the language studied (e.g. a student studying Japanese should elect courses focused on Japan).

#### Residency

At least 6 of the credits must be elected at the University of Michigan or through an overseas program associated with the U-M.

## Asian Studies Major

The major in Asian Studies offers students an opportunity to pursue interests in the traditional and modern civilizations of Asia. The particular courses to be counted toward the major will depend on the individual student's submajor. Students choose a submajor and then have the option to additionally focus on a field of study. An intellectually coherent combination of fields is permitted.

*Effective Fall 2017*

## Advising

Appointments are scheduled on the department's online advising calendar. Please go to [www.lsa.umich.edu/asian](http://www.lsa.umich.edu/asian) for more information.

Students who have a formal or informal interest in Asian Studies are encouraged to consult a department advisor.

## Grade Policies

No course will count toward the major unless the student receives a grade of C- or better.

## Prerequisites

1. One year (or first-year proficiency) of an Asian language taught in the Department of Asian Languages and Cultures.
2. ASIAN 235: Introduction to Asian Studies.\*

\*ASIAN 235 must be completed before declaring the major.

## Requirements

**Minimum Credits: 30**

### *Asian Studies Language Requirement*

All majors must have fourth-term proficiency in an Asian language appropriate to their submajor. Majors are strongly encouraged to continue their language training beyond the second year requirement. This is particularly important, if not essential, for students contemplating a graduate program in an Asian field.

*These credits do not count toward the credits needed for the major.*

### *Required Courses*

## Course Requirements

30 credits at the 200-level and above, 15 of which must be at the 300-level or above. The plan for the major is designed in consultation with and approved by, a department advisor.

## Submajor requirement

At least 15 credits in courses in the student's submajor (*e.g.*, South Asian Studies). Students are encouraged to plan their submajor courses in relation to a field of study, if one has been chosen. Up to 10 credits from language courses at the 300 level or above may be counted toward the submajor requirement. 5 credits or more must be taken in Asian Studies in the student's

submajor; classical languages (Sanskrit, Classical Japanese, Classical Chinese, Javanese, Old Tibetan) may be used to satisfy this portion of the requirement.

### **Breadth requirement [9 credits]**

1. ASIAN 381: Research Seminar for Majors.
2. At least six credits from either or both of the following two categories:
  - Courses exclusively focused on one of the submajors outside the student's chosen submajor, (*e.g.*, a student in the Korean Studies submajor could elect ASIAN 210, The Philippines: Culture and History), or
  - Trans-regional courses focused on more than one of the submajors (which could include the student's submajor) (*e.g.*, ASIAN 220: Introduction to the Study of Asian Religions, or ASIAN 367: Languages of Asia).

**Cognate requirement** At least 6 credits elected outside the Department of Asian Languages and Cultures from either or both of the following categories:

1. theory or methodology courses that are focused on either the student's chosen field of study or on a discipline complementary to the study of Asia (*e.g.*, Statistics, Linguistics, Social Theory), or
2. courses in the student's chosen submajor, but taken in a department other than Asian Languages and Cultures.

### **Residency**

At least 15 credits of the 30 required credits must be taken in residence at the University of Michigan.

### **Distribution Policy**

No course used to fulfill a major requirement may be used toward the [LSA Distribution Requirement](#). In addition, courses in the ASIAN and ASIANLAN subject areas may not be used toward the Distribution Requirement.

### **Honors**

Candidates for Honors must complete all regular requirements for the major, and maintain a cumulative grade point average of at least 3.4 and at least 3.5 in courses elected as part of the major. They must also demonstrate the ability to do original work by writing an Honors thesis and must elect the appropriate Honors course(s). Recommendations for the designation of "Honors," "High Honors," and "Highest Honors" in Asian Studies are made on the basis of the student's performance in departmental Honors courses and the quality of the student's Honors thesis.

## **Asian Studies Minor**

The academic minor in Asian Studies allows majors in other departments to undertake a guided and coherent program in Asian Studies when extensive coursework in an Asian language is impractical for them. In contrast to the Asian Studies concentration, as well as the minor in Asian Languages and Cultures, this academic minor does not contain a language component, it is designed to give students the opportunity to plan a structured and articulated series of courses that will result in an intellectual engagement with the culture of at least one Asian region.

*Effective Fall 2017*

**Exclusions:**

*An academic minor in Asian Studies is not open to students with a concentration in Asian Studies or other academic minor in the Department of Asian Languages and Cultures.*

Advising

Appointments are scheduled on the department's online advising calendar. Please go to [www.lsa.umich.edu/asian](http://www.lsa.umich.edu/asian) for more information.

Students who have a formal or informal interest in Asian Studies are encouraged to consult a department advisor.

Grade Policies

No course will count toward the minor unless the student receives a grade of C- or better.

Prerequisites

None.

Requirements

**Minimum Credits: 15**

At least 15 non-language credits chosen in consultation with and approved by a department advisor:

At least 3 courses in Asian Studies offered through ALC within one of the regional tracks: Chinese Studies, Japanese Studies, Korean Studies, South Asian Studies, or Southeast Asian Studies. Two courses must be elected at the 300-level or above.

An academic minor plan may also be organized around disciplines or lines of inquiry not necessarily defined by a region in consultation with and approved by a department advisor.

## Residency

Twelve of the credits counted toward the academic minor must be elected at the University of Michigan or at an overseas program associated with U-M.

# Asian & Pacific Islander American Studies Minor

## Asian/Pacific Islander American Studies Minor

The Asian/Pacific Islander American Studies (A/PIA) program within American Culture offers interdisciplinary graduate and undergraduate courses focusing on Asian American and Pacific Islander communities and experiences.

A/PIA is a focal point for university research and teaching on issues concerning Asian American and Pacific Islanders, providing resources for their understanding. The unique historical and political circumstances surrounding the incorporation of Asian immigrants and Pacific Islanders into American society, and the broad range of stratification spanning such communities, underscores the richness and theoretical importance of studying A/PIA communities alongside – and often in contrast to – that of other groups in the United States.

Students may take a full range of courses examining the historical, political, economic, literary, artistic, cultural, and psychological forces, which have shaped and continue to shape the lives and communities of Asian Americans and Pacific Islanders.

The minor in Asian/Pacific Islander American Studies is intended for students who wish to develop a coherent understanding of the contributions of the Asian/Pacific Islander American presence in American life, history, and thought.

Students interested in pursuing a course of study in A/PIA should contact Scott Kurashige, Director of Asian/Pacific Islander American Studies.

*Effective Fall 2012*

### Exclusions:

*A minor in Asian/Pacific Islander American Studies is not open to students with any minor in the Department of American Culture.*

## Advising

Appointments with the respective advisor can be scheduled online at:

<http://lsa.umich.edu/ac/undergraduates/advising.html>

## Prerequisites

None.

## Requirements

**Minimum Credits: 15**

1. **Core Course: ASIANPAM 214 / AMCULT 214:** Introduction to Asian/Pacific American Studies
2. **Electives:** Four courses (minimum of 12 credits). These courses may be taken from within, or from across, any of the three areas of specialty listed below that are regularly offered in A/PIA, as well as other 200- and 300-level courses occasionally offered in A/PIA. One of these four courses may be a 100-level course (e.g., Freshman Seminar on an A/PIA topic), while 200 and 300 level courses with A/PIA content offered in other departments can count if approved by the A/PIA Director:
  - a. *Historical Experience:*
    - ASIANPAM 314 / AMCULT 314 / HISTORY 378: History of Asian Americans in the U.S.
    - ASIANPAM 317 / AMCULT 317: History of the Pacific Islands.
    - appropriate sections of AMCULT 310: Topics in Ethnic Studies or AMCULT 496: Social Science Approaches to American Culture, chosen in consultation with, and approved by, the advisor.
  - b. *Cultural Expression:*
    - ASIANPAM 324 / AMCULT 324 / ENGLISH 381: Asian American Literature.
    - ASIANPAM 325 / AMCULT 325 / ENGLISH 388: Pacific Literacy and Cultural Studies.
    - appropriate sections of AMCULT 311: Topics in Ethnic Studies or AMCULT 498: Capstone Seminar in American Culture, chosen in consultation with, and approved by, the advisor.
  - c. *Contemporary Communities:*
    - ASIANPAM 305 / AMCULT 305: Asian Pacific American Community Service and Learning
    - ASIANPAM 346 / AMCULT 346: Asian American Communities and Social Issues
    - ASIANPAM 347 / AMCULT 347: Pacific Islander American Communities
    - appropriate sections of AMCULT 301: Topics in American Culture or 310: Topics in Ethnic Studies, chosen in consultation with, and approved by, the advisor.

# Astronomy and Astrophysics Major

Will the universe expand forever? Is there life on other planets? How do stars form, live, and die? These are some of the exciting questions confronting astronomers in the twenty-first century. Because of the awe-inspiring immensity of the subject, the study of astronomy has a strong fascination—poetic, philosophical, speculative—for many individuals. In the modern observatory, however, the urge to understand and discover what is happening in the universe finds expression in the scientific pursuit of the subject. To explore the dynamics of colliding galaxies and of interstellar gas in galaxies, to find the compositions of chemically peculiar stars and supernovae remnants, to explain radio-galaxy variations and atomic emissions of quasars—some of the active areas in the Michigan Department of Astronomy—requires patience and dedication, together with the curiosity and talent characteristic of all scientists.

*Effective Winter 2017*

**Exclusions:**

*Not open to those with a major in Interdisciplinary Astronomy.*

Advising

Advising appointments are scheduled [online](#).

Prerequisites

1. Mathematics through MATH 216
2. PHYSICS 160/161 [or PHYSICS 140/141 and one of EECS 183, ENGR 101, or an equivalent computing course approved by the Astronomy department advisor]
3. PHYSICS 240/241 or 260/261
4. PHYSICS 340 or 360

Requirements

**Minimum Credits: 36**

- 1. Astronomy Core:**  
ASTRO 201, 361, 399, 402, 404, and 429
- 2. Physics Core:**  
PHYSICS 390, 391, 401, 405
- 3. Astronomy Electives:**  
Two of: ASTRO 401, 403, 405, 406, 461, or by permission of instructor, a 500-level ASTRO course.

Students are urged to complete the requirements in physics and mathematics as soon as possible. Students planning graduate work might benefit from knowledge of Spanish, but this is not essential.



### Distribution Policy

No course used to fulfill a major requirement may be used toward the [LSA Distribution Requirement](#). In addition, courses in the ASTRO subject area may not be used toward the Distribution Requirement.

### Honors

Students who are interested in scholarly research in astronomy and have a cumulative grade point average of 3.5 are encouraged to consider the Honors major. Students with a lower GPA may be admitted to Honors at the discretion of the department advisor. The Honors major requires writing a senior Honors thesis based on research done in collaboration with a faculty member. Interested students should consult with the department advisor by the beginning of their junior year.

## Astronomy and Astrophysics Minor

The minor in Astronomy and Astrophysics is offered to students with a strong background in physics and math, who wish to develop a deep expertise in astronomy.

Students with a science, math, or engineering major can often incorporate the added dimension of a minor in Astronomy and Astrophysics with only a few additional courses if their degrees already require a significant background in physics.

*Effective Fall 2016*

### Exclusions:

*The minors in Astronomy are not open to students with a major in Department of Astronomy.*

### Advising

Advising appointments are scheduled [online](#).

### Prerequisites

1. Mathematics through differential equations: MATH 216 or its equivalent
2. PHYSICS 140/141, 240/241, and 340.

### Requirements

**Minimum Credits:** 15

1. **Introductory Course:** ASTRO 201
2. **Astronomy Core Courses:** at least two courses chosen from among: ASTRO 361, 402, 404.
3. **Astronomy Electives:** Remaining credits can be selected from ASTRO 399 and 400-level courses not already taken as Astronomy core.

# Biochemistry Minor

The Biochemistry minor provides a broad and general exposure to biochemistry from a chemical sciences perspective.

The curricula in Chemistry serve those preparing for careers in chemistry, biochemistry, medicine, chemical engineering, pharmacy, and allied fields as well as those seeking a general knowledge of chemistry as part of a liberal arts education. Beyond the first-year courses, there is an emphasis on development of technical knowledge and laboratory experience needed in chemistry and related scientific fields. The undergraduate majors prepare students for work in research and testing laboratories, as well as for business positions in which a chemistry background is desirable. Graduate work is necessary for those planning to do college and university teaching or industrial research.

It is strongly recommended that students who are thinking of degrees in chemistry should arrange an appoint with a Chemistry advisory via the online advising system as soon as possible, preferably before the end of the freshman year but certainly before the end of the sophomore year. The online appointment scheduling system can be found here:

<http://www.umich.edu/~michchem/undergrad/index.html>.

*Effective Winter 2020*

## Exclusions:

*The Biochemistry Academic Minor is not open to students majoring in Biochemistry; Biomolecular Science; Chemical Science; Interdisciplinary Chemical Sciences; Chemistry; Molecular, Cellular, and Developmental Biology (formerly known as Cell and Molecular Biology, or CMB); Biology; General Biology; Biology, Health and Society (BHS); Neuroscience; Ecology, Evolution, and Biodiversity; Plant Biology; and Microbiology.*

*Students electing a minor within the Department of Chemistry may only elect ONE of the five minors offered by the Department.*

## Advising

Students wishing to pursue a minor offered by the Chemistry Department must develop a specific plan for its completion in consultation with the Department's designated advisor. [Chemistry](#), [Chemical Physics](#), [Polymer Chemistry](#), and [Chemical Measurement Science](#) minors are arranged in consultation with any Chemistry department advisor, while [Biochemistry](#) minors are arranged in consultation with any Biochemistry advisor. Information about scheduling advising appointments is available from the Department's [website](#).

## Grade Policies

The department strongly recommends that a student earn a grade of at least C– in all CHEM courses and mathematics, physics, and biology courses that are prerequisite for subsequent elections. A major program grade point average of at least 2.0 is required; this includes chemistry courses, mathematics, physics, and biology prerequisites, and advanced electives that are part of a major plan. Prerequisites must be taken for a grade. Students must request any

change in a chemistry course grade within the first fifteen University Business days of the first full term following the term in which the disputed grade was issued.

### Prerequisites

- MATH 115 (or 120) or equivalent
- PHYSICS 135 (or 125), 139, 140, 160, or equivalent
- BIOLOGY 172, 174, 192 or 195

### Requirements

#### **Minimum Credits: 18**

1. *Core:* CHEM 210/211, CHEM 215, CHEM 260 (or CHEM 261 and CHE 330) or CHEM 370, CHEM 351.
2. *Electives:* CHEM 451, 452, CHEM 241/242 or CHEM 245/246/247, BIOLOGY 305.

\*Students who have already taken any of the one-term biochemistry courses [MCDB (BIOLOGY) 310 or BIOLCHEM 415] cannot get credit for CHEM 351. The minor will accept these other one-term courses provided the student takes CHEM 451 or 452 as one of their electives.

### Teaching Certificate

Those seeking a B.S. or B.S. Chem. degree with a teaching certificate in Chemistry must fulfill departmental as well as School of Education requirements. Students who plan to earn a teaching certificate with a teaching major or minor in Chemistry should contact the School of Education Teacher Education Office.

## Biochemistry Major

The biochemistry major is intended for students interested in the chemical basis of biological phenomena. This degree program is ideal for students who are interested in learning about life from a chemical perspective. The major is intellectually demanding and is intended to prepare students for further education (graduate school or medicine). Students will gain a solid foundation in chemistry through traditional sub-discipline courses, but will also take a number of chemistry courses that are focused on the role of chemistry in biological systems. Students will also have the option to take elective courses in molecular biology, and also may pursue undergraduate research in lieu of one of the traditional laboratory courses. A B.S. degree in biochemistry is also a useful means of preparing for jobs in academic medical centers, the pharmaceutical industry, and in biotechnology companies. Students that pursue this degree will be well equipped for graduate studies in biochemistry, chemical biology, and many other fields of inquiry in the life sciences. The degree will also provide excellent preparation for students intending to pursue professional careers in the Biotechnology Industry as well as the Health Sciences. Because the major is highly structured, it is essential that prospective majors follow the guidelines set forth below.

The curricula in Chemistry serve those preparing for careers in chemistry, biochemistry, medicine, chemical engineering, pharmacy, and allied fields as well as those seeking a general knowledge of chemistry as part of a liberal arts education. Beyond the first-year courses, there is

an emphasis on development of technical knowledge and laboratory experience needed in chemistry and related scientific fields. The undergraduate majors prepare students for work in research and testing laboratories, as well as for business positions in which a chemistry background is desirable. Graduate work is necessary for those planning to do college and university teaching or industrial research.

**BS Major in Biochemistry:** This degree program is ideal for students who are interested in learning about life from a chemical perspective. Students will gain a solid foundation in chemistry through traditional sub-discipline courses, but will also take a number of chemistry courses that are focused on the role of chemistry in biological systems. Students will also have the option to take elective courses in molecular biology, and also may pursue undergraduate research in lieu of one of the traditional laboratory courses. Students that pursue this degree will be well equipped for graduate studies in biochemistry, chemical biology, and many other fields of inquiry in the life sciences. The degree will also provide excellent preparation for students intending to pursue professional careers in the Biotechnology Industry as well as the Health Sciences.

It is strongly recommended that students who are thinking of degrees in chemistry should arrange an appoint with a Chemistry advisor via the online advising system as soon as possible, preferably before the end of the freshman year but certainly before the end of the sophomore year. The online appointment scheduling system can be found here:  
<http://www.umich.edu/~michchem/undergrad/index.html>.

*Effective Winter 2020*

**Exclusions:**

*Students who elect a major in Biochemistry may not elect the following majors: Biology; General Biology; Molecular, Cellular, and Developmental Biology (formerly known as Cell and Molecular Biology, or CMB); Cellular and Molecular Biomedical Science Major (formerly known as Cellular and Molecular Biology and Biomedical Engineering, or CMB:BME); Ecology and Evolutionary Biology; Microbiology; or Neuroscience. They may also not elect a minor in Biology, or any of the Chemistry minors.*

[Advising](#)

Students develop a plan for the major in consultation with a program advisor. Those interested in a B.S. degree with a major in Chemical Science (120 credits) or the specialized program leading to the *Bachelor of Science in Chemistry* (124 credits) are urged to consult a program advisor during the freshman and/or sophomore years. Prospective majors are advised that further study in

chemistry requires adequate performance in early chemistry courses (preferably B- or better) as well as in the mathematics and physics prerequisites. Students interested in an Honors degree should see the Chemistry Honors advisor. Appointments are scheduled online at <http://lsa.umich.edu/chem/undergraduates/advising.html>. Students interested in the joint program with the College of Engineering should make an appointment with [John Stratman](#) [Academic Advising Center, 1255 Angell Hall, 734.764.0332] and then make an appointment to see a chemistry department advisor online.

## Grade Policies

The department strongly recommends that a student earn a grade of at least C– in all CHEM courses and mathematics, physics, and biology courses which are prerequisites for subsequent elections. A major program grade point average of at least 2.0 is required; this includes chemistry courses, mathematics and physics prerequisites and advanced electives which are part of a plan for the major. Prerequisites must be taken for a grade. Students must request any change in a grade before the end of the next regular academic term.

## Prerequisites

- BIOLOGY 171 and either 172 or 174; or BIOLOGY 192; or BIOLOGY 195
- CHEM 210/211 and CHEM 215
- MATH 115 (or 120) and MATH 116 (or 121)
- MATH 215 or CHEM 262
- PHYSICS [125/127 or 135/136 or 139 or 140/141 or 160/161] and PHYSICS [126/128 or 235/236 or 239 or 240/241 or 260/261].

## Requirements

**Minimum Credits: 37**

Must include:

1. **Core:** BIOLOGY 305; CHEM 260, [302 or 303 or 241 or 245], [216 or 242 (or 246 and 247)] 351\*, 352, 451, 452, 453.  
\*Students are strongly encouraged to take CHEM 351 but could substitute this course requirement with MCDB 310 or BIOLCHEM 415.
2. **Electives:** A total of at least six credits chosen from:
  - CHEM / BIOPHYS / PHYSICS 417: Dynamic Biophysics (3)
  - CHEM 420: Advanced Organic Chemistry (3)
  - CHEM / BIOPHYS 440: Biophysics of Disease (3)
  - CHEM 447: Physical Methods of Analysis (3)
  - CHEM 454: Biophysical Chem II: Macromolecular Structure, Dynamics (3)
  - CHEM 455: Special Topics in Biochemistry (3)
  - CHEM 461: Physical Chemistry I (3)
  - CHEM / AOSS 467 / EARTH 465 / ENSCEN / ENVIRON 467: Biogeochemical Cycles (3)
  - CHEM / BIOPHYS 521: Biophysical Chemistry II (3)
  - CHEM / BIOLCHEM / MEDCHEM 528: Enzyme Mechanisms, Ligand Binding (2)
  - CHEM / BIOLCHEM 673: Enzyme Kinetics (2)

- AOSS / CHEM 467 / EARTH 465 / ENSCEN / ENVIRON 467: Biogeochemical Cycles (3)
- BIOLCHEM / CHEM / MEDCHEM 528: Enzyme Mechanisms, Ligand Binding (2)
- BIOLCHEM / CHEMBIO 530: Structural Biology (3)
- BIOLCHEM 541: Molecular Genetics (3)
- BIOLCHEM 550: Macromolecular Structure and Function (3)
- BIOLCHEM / PHYSIOL / PHRMACOL 576: Signal transduction (1)
- BIOLCHEM 640: Post-transcriptional Gene Regulation (2)
- BIOLCHEM 650: Mechanisms of Eukaryotic Gene Expression (3)
- BIOLCHEM / CHEM 673: Enzyme Kinetics (2)
- BIOLCHEM / CDB / MICRBIOL 675: Advanced Topics in Protein Trafficking and Localization (2)
- BIOPHYS 417/CHEM 417/PHYSICS 417: Dynamical Processes in Biophysics (3)
- BIOPHYS 420: Structural Biology I (3) *(only if taken W17 or later)*
- BIOPHYS / PHYSICS 430: Medical Physics (3) *(only if taken WN20 or later)*
- BIOPHYS 435: Biophysical Modeling (3)
- BIOPHYS / CHEM 440: Biophysics of Disease (3)
- BIOPHYS / CHEM 521: Biophysical Chemistry II (3)
- CDB / BIOLCHEM / MICRBIOL 675: Advanced Topics in Protein Trafficking and Localization (2)
- CHEMBIO / BIOLCHEM 530: Structural Biology (3)
- EARTH 465 / CHEM / AOSS / ENSCEN / ENVIRON 467: Biogeochemical Cycles (3)
- ENSCEN / CHEM / AOSS 367 / EARTH / ENVIRON 467: Biogeochemical Cycles (3)
- ENVIRON / CHEM / AOSS 467 / EARTH 465 / ENSCEN 467: Biogeochemical Cycles (3)
- MCDB 405: Molecular Basis of Development (3)
- MCDB 411: Protein Biochemistry (3)
- MCDB 417: Chromosome Structure and Function (3)
- MCDB 418: Endocrinology (3)
- MCDB 422: Brain Development, Plasticity, and Circuits (3) *(only if taken W17 or later)*
- MCDB 427: Molecular Biology (3)
- MCDB 428: Cell Biology (3)
- MCDB 431: Plant Biochemistry (3)
- MCDB 435: Intracellular Trafficking (3)
- MCDB 436: Introductory Immunology (3)
- MCDB 437: Microbial Communities & Development (3)
- MCDB 441: Cell Biology of Disease (3)
- MCDB 471: Advanced Methods in Biochemistry (3)
- MEDCHEM / BIOLCHEM / CHEM 528: Enzyme Mechanisms, Ligand Binding (2)
- MICRBIOL / BIOLCHEM / CDB 675: Advanced Topics in Protein Trafficking and Localization (2)
- PHRMACOL 576/BIOLCHEM 576/PHYSIOL 576: Signal transduction (1)
- PHYSICS / CHEM / BIOPHYS 417: Dynamic Biophysics (3)
- PHYSICS / BIOPHYS 430: Medical Physics (3) *(only if taken WN20 or later)*
- PHYSIOL / BIOLCHEM / PHRMACOL 576: Signal transduction (1)

3. **An advanced laboratory or undergraduate research course.** Recommended options for the advanced laboratory course are MCDB 429, CHEM 482 or 483; or four credits of undergraduate research elected as any combination of either CHEM 398 or BIOLCHEM 398, by permission of the department advisor. Students electing the undergraduate research option must execute an extended research project under the supervision of a faculty member who agrees to oversee the project.

## Honors

Qualified students may elect an Honors major. The Honors major requires a thesis which describes and analyzes independent experimental work. The research topic and advisor must be approved by the Honors advisor in Biochemistry. Students in this program are expected to maintain an overall grade point average above 3.4 and at least a 3.4 in the field of the major, including prerequisite courses. CHEM 398 (4 credits) and the thesis course, CHEM 498, replaces the requirement for an upper-level laboratory course outlined above.

## Teaching Certificate

Those seeking a B.S. or B.S. Chem. Degree with a teaching certificate in Chemistry must fulfill departmental as well as School of Education requirements. Students who plan to earn a teaching certificate with a teaching major or minor in Chemistry should contact the School of Education Teacher Education Office.

# Biological Anthropology Minor

The minor in Biological Anthropology allows students with interests in evolutionary biology or medicine to add an anthropological perspective to their studies. Many students are interested in specific topics covered by Biological Anthropology, such as Human Evolution, the Evolution of Human Behavior, Primatology, Nutrition and Adaptation, Human Genetics, *etc.* Thus, a minor in biological anthropology offers several "tracks" to students depending on their interests.

*Effective Fall 2014*

### Exclusions:

*An academic minor in Biological Anthropology is not open to students with any major or any other minor in the department of Anthropology.*

## Advising

The department offers undergraduate majors for a bachelor's degree in Anthropology and Evolutionary Anthropology: minors are offered in Medical Anthropology, Biological Anthropology, and Anthropology (with tracks in Sociocultural Anthropology, Linguistic Anthropology, and Archaeological Anthropology).

All anthropology faculty members are available for informal discussion with students during scheduled office hours (check the Department office for times).

[Department advisors](#) are available to explain program objectives and requirements and to help with the planning of your program.

Students wishing to pursue a minor in the Department of Anthropology should contact the undergraduate advisor with any questions.

Appointments are scheduled in the Department office or online at:  
[www.lsa.umich.edu/anthro/undergraduates/advising](http://www.lsa.umich.edu/anthro/undergraduates/advising)

#### Prerequisites

None.

#### Requirements

**Minimum Credits:** 16

At least five courses (no fewer than 16 credits), to be chosen from the following categories as stated:

1. ANTHRBIO 201.
2. At least four upper-level courses in ANTHRBIO, chosen in consultation with an advisor, one of which must be at the 400-level or above.

## Biological Physics Sub-Major

The Biological Physics track is primarily focused on educating undergraduate students in the basics of Biophysics. In addition, participation in research is required, which allows students to explore cutting-edge biophysical research and gain valuable experience for a future career.

*Effective Winter 2020*

#### Advising

The Program in Biophysics currently offers a **B.S. degree in Biophysics** and a [minor in Biophysics](#). Students interested in either option are strongly encouraged to schedule an advising appointment by contacting Student Services at [biophysics@umich.edu](mailto:biophysics@umich.edu).

#### Grade Policies

The Biophysics department strongly recommends that a student earn a grade of at least C– in all BIOPHYS courses and mathematics, chemistry, physics, and biology courses that are prerequisite for subsequent elections. A major program grade point average of at least 2.0 is



required; this includes biophysics courses, chemistry, mathematics, physics, and biology prerequisites, and advanced electives that are part of a major plan.

### Prerequisites

See specific prerequisites listed under Biological Physics Track or Structural Biology Track.

### Requirements

**Minimum Credits: 26**

The Biophysics Major consists of two tracks:

- [Biological Physics Track](#)
- [Structural Biology Track](#)

### Honors

In addition to completing all the Biophysics requirements for the major, a GPA in the major of at least 3.4 and the completion of an Honors thesis (BIOPHYS 499) with a grade of B or better, and a second Biophysics elective are required.

Approved Honors electives are all biophysics and cognate electives above, and BIOPHYS 440 or CHEM 440, CHEM 453, MCDB 422, MCDB 428, PHYSICS 402, and PHYSICS 453. Students double majoring in Biophysics and any major in the Department of Physics cannot use PHYSICS 402, 406, or 453 to satisfy the Biophysics cognate or Honors elective requirement.

### Biological Physics Track (Sub-Major)

*Effective Winter 2020*

### Prerequisites

- Math 115 and 116
- Math 215 and 216; **or** Chem 262
- Chem 210/211 and 215
- Physics 135/136 and 235/236 **or** 140/141 and 240/241
- Bio 172, 174, 191, 192, **or** 195

NOTE: students with Math AP credit are advised to take the Math 215, 216 sequence

### Requirements

**Minimum Credits: 28**

**Core:**

1. BIOPHYS / PHYSICS 290: Physics of the Body & Mind
2. BIOPHYS / CHEM / PHYSICS 370: Physical and Chemical Principles behind Biology and Medicine
3. BIOPHYS / CHEM / PHYSICS 417: Dynamical Processes in Biophysics
4. BIOPHYS / PHYSICS 450: Biophysics Laboratory
5. BIOPHYS 495: Senior Seminar in Biophysics

**Outside Core:**

1. CHEM / BIOLCHEM 351: Fundamentals of Biochemistry

**Electives:**

Two of the following:

- BIOPHYS / MCDB 420: Structural Biology: The Architecture of Life
- BIOPHYS 421: Structural Biology: Biophysical Controversies
- BIOPHYS / CHEM 422: Exp Methods in Structural Biology
- BIOPHYS / PHYSICS 430: Medical Physics
- BIOPHYS / PHYSICS 433: Biocomplexity
- BIOPHYS 435: Biophysical Modeling
- BIOPHYS / CHEM 440: Biophysics of Diseases
- BIOPHYS / CMPLXSYS / PHYSICS 445: Introduction to Information Theory for the Natural Sciences (*only if taken FA20 or later*)
- BIOPHYS / CHEM 454: Macromolecular Structure & Dynamics
- BIOPHYS / MATH / BIOINF 463: Mathematical Modeling in Biology
- BIOPHYS / CHEM 520: Biophysical Chemistry: Methods & Techniques
- BIOPHYS / CHEM 521: Biophysical Chemistry: Theories

Note: Other 400-level Physics, Chemistry, or Biology courses may be accepted, per approval of the Undergraduate Chair

**Cognate:**

One of the following:

- MATH 404: Intermediate Differential Equations
- MATH 471: Intro to Numerical Methods
- PHYSICS 406: Statistical Mechanics and Thermodynamics
- PHYSICS 453: Quantum Mechanics
- CHEM / BIOLCHEM 451: Biochemistry I
- MCDB 427: Molecular Biology
- MCDB 428: Cell Biology

Note: Other 400-level Physics, Chemistry, or Biology courses may be accepted, per approval of the Undergraduate Chair.

Students double majoring in Biophysics and any major in the Department of Physics cannot use PHYSICS 402, 406, or 453 to satisfy the Biophysics cognate or Honors elective requirement.

### Research:

At least two credits of BIOPHYS 399. Students wishing to conduct research in a laboratory outside of the Program must identify a Biophysics co-sponsor.

### Honors

In addition to completing all the Biophysics requirements for the major, a GPA in the major of at least 3.4 and the completion of an Honors thesis (BIOPHYS 499) with a grade of B or better, and a third Biophysics elective are required. **Approved Honors electives are all Biophysics and cognate electives above, plus CHEM 453, MCDB 422, PHYSICS 402 and PHYSICS 453.** Other courses may be accepted, per approval of the Undergraduate Chair.

## Biology Major

This major program develops an appreciation of the levels of organization of life, its diversity, and the processes by which life has achieved its present forms. The program is recommended for those who wish to study biology as part of a liberal education, to prepare for a teaching career in secondary schools, or to prepare for graduate study in biology or the health professions.

*Effective Winter 2019*

### Exclusions:

*Students who elect a major in Biology may not elect the following majors: Biology, Health, and Society (formerly known as General Biology); Molecular, Cellular, and Developmental Biology (MCDB - formerly known as Cellular & Molecular Biology or CMB); Cellular and Molecular Biomedical Science (formerly known as CMB:BME); Ecology and Evolutionary Biology; Ecology, Evolution, and Biodiversity; Microbiology; Plant Biology; Biochemistry; Biomolecular Science; or Neuroscience. They also may not elect a minor in Biology; Ecology and Evolutionary Biology; Plant Biology; Chemistry; or Biochemistry.*

### Advising

Students are advised by a combination of Undergraduate Biology Office staff and faculty department advisors. [Advising](#) topics include investigating majors, declaring a major, course planning, research and honors, major releases, graduate school and career advice. Students who are interested in the Program in Biology majors or minors should consult a general advisor during the freshman year, and are strongly encouraged to meet with a department advisor early in

their academic career, but no later than the second term of their sophomore year. It is not necessary to complete every prerequisite before declaring a major.

To make an appointment, go to the Program in Biology website at [www.lsa.umich.edu/biology](http://www.lsa.umich.edu/biology).

### Grade Policies

#### **Total Credits and GPA Requirement for Biology:**

Minimum 30 cr. in the Major.

Minimum 2.0 GPA in the Major.

GPA is calculated from all mandatory prerequisites, all courses used for major requirements (including cognates) and all courses in BIOLOGY, EEB, and MCDB.

The introductory biology sequence must be taken for a grade. Prerequisites other than introductory biology may be taken pass/fail; however, it is not recommended, especially for chemistry. Remember that at least a C- must be earned to pass a course taken pass/fail.

Courses used for the major may not be taken pass/fail.

### Prerequisites

#### **Introductory Biology Sequence:**

Choose A, B, or C:

- A. BIOLOGY 171, BIOLOGY 172 or 174, & BIOLOGY 173; or
- B. BIOLOGY 195 (AP/IB) & BIOLOGY 173; or
- C. BIOLOGY 191 (transfer credit), BIOLOGY 192, & BIOLOGY 173

#### **Chemistry Sequence:**

- CHEM 210 & 211; and,
- CHEM 215 & 216

#### **Quantitative Analysis Sequence:**

- CALCULUS I: MATH 115, 120 (AP), 175, 185, or 295; and,
- One course from MATH 116, 121 (AP), 156, 176, 186, or 296; STATS 180 (AP), 250 or 280; STATS 400-level or above (min. 3 credits); BIOLOGY 202; BIOPHYS / PHYSICS 290; EECS 183, 203 or 280; EARTH 468; or other course with a MATH 115 prereq. chosen in consultation with a major advisor.

[Note: Any course used to fulfill this requirement cannot also be used as a major elective; i.e., a course cannot "double-count."]

### Physics Sequence:

- Physics I (lecture & lab): One of the following combinations: PHYSICS 125 & 127; 135 & 136; 140 & 141; or 160 & 161. PHYSICS 139 (AP) will also fulfill this requirement.
- Physics II (lecture & lab): One of the following combinations: PHYSICS 126 & 128; 235 & 236; 240 & 241; or 260 & 261. PHYSICS 239 (AP) will also fulfill this requirement.

### Requirements

**Minimum Credits:** 30

### Biology Group Options

(Courses with an asterisk (\*) may overlap with the lab requirement):

Choose from one Group I and one from Group II:

- **Group I** - MCDB Elective: Choose 1 from: BIOLOGY 205, BIOLOGY 207\*, BIOLOGY 222, BIOLOGY 225, or BIOLOGY 230\*; BIOLOGY 272; and,
- **Group II** - EEB Elective: Choose 1 from: BIOLOGY 207\*, BIOLOGY 230\*, BIOLOGY 252\*, BIOLOGY 255\*, BIOLOGY 256, BIOLOGY 281, BIOLOGY 288\*, or EEB 381\*

### Required Courses

(Courses with an asterisk (\*) may overlap with the lab requirement):

- Genetics: BIOLOGY 305
- Biochemistry: Choose from: MCDB 310, BIOLCHEM 415, or CHEM 351
- Evolution: EEB 390, 391, or 392\*

### Upper-Level Elective

(May overlap with the lab requirement):

Choose one course in EEB or MCDB at the 300- or 400- level

- EEB / MCDB 301, EEB/MCDB 302, EEB/MCDB 399, EEB/MCDB 499, MCDB 412, and a non-specific (departmental) transfer courses are EXCLUDED.
- EEB / MCDB 300 or 400 (Independent Research), *elected for a minimum of 3 credits in a single term, may be used to fulfill this requirement. (3 credit max. applies; see CONSTRAINTS below.)*

### Lab Courses for Biology

(This requirement may OVERLAP with other major reqs.):

3 courses with labs are required. Choose from BIOLOGY 207, 226, 230, 252, 255, 288; EEB 300\*, 313, 320, 321, 330, 341, 348, 372, 381, 392, 400\*, 405, 416, 431, 433, 436, 441, 443, 450, 451, 453, 455, 457, 468, 477, 482, 483, 486, 489, 493, 556; MCDB 300\*, 306, 308, 400\*, 416, 419, 423, 424, 429.

*\*EEB / MCDB 300 or 400 (Independent Research), elected for a minimum of 3 credits in a single term, may be used to fulfill a lab requirement. (3 credit max. applies; see CONSTRAINTS below.)*

### **Additional Course(s):**

Choose additional BIOLOGY, EEB, and MCDB courses at the 200-, 300-, or 400-level, to reach 30 major credit hours.

- BIOLOGY 241, BIOLOGY 299, EEB / MCDB 301, EEB / MCDB 302, MCDB 412, MCDB 600, and non-specific (departmental) transfer courses are EXCLUDED.
- A maximum of two approved cognate courses may be used as additional courses: ANTHR BIO 365, 368, ANTHR BIO / ENVIRON 461; BIOLCHEM 650; BIOMEDE 231; CHEM 230 and above; CLIMATE / EARTH / SPACE 320; CMPLXSYS 501, 530; EARTH 418, 436, 437; EARTH / ENVIRON 450, 453; ENVIRON 310, 317; EPID 543, 560; HUMGEN 541; MATH 200 and above; MICRBIOL / IMMUN 440; MICRBIOL 405, 415, 430, 460; PHRMACOL 310, 425; PHYSICS / BIOPHYS 290\* (only if not used as a prerequisite); PSYCH 337, 338; STATS 401, 412, 425.

### Constraints

- Prerequisites, introductory science courses, and non-specific (departmental) transfer courses are EXCLUDED from the 30 cr. required for the major.
- A maximum of three credits of independent research (BIOLOGY 200, EEB/MCDB 300 or 400) may be counted toward the major.

### Distribution Policy

No course used to fulfill a major requirement may be used toward the [LSA Distribution Requirement](#). In addition, courses in the BIOLOGY, EEB, MCDB, and MICRBIOL subject areas may not be used toward the Distribution Requirement.

### Honors

The Program in Biology administers an Honors major to train students to conduct independent research in the biological sciences. Participating in the Honors major allows students to develop their research skills, deepen their understanding of the field, and form productive relationships with faculty and other students. The achievement is noted on the diploma and official transcript.

In addition to completing all the requirements for the major, an honors degree requires:

1. an overall **and** major GPA of at least 3.4, and
2. the completion of a significant piece of independent research that is
  - a. reported in an honors thesis and

- b. presented in a public forum.

For more information, consult the [Program in Biology Honors Information page](#) or a Program in Biology advisor.

## Biology Minor

The minor in biology offers students a coherent program of study and training in the biological sciences. It provides exposure to the fundamental principles of biology, including studies of the structure, organization, and diversity of life. The minor is well suited for students who wish to pursue a career that requires an understanding and appreciation of the life sciences, though it is not intended for students interested in graduate work in biology.

*Effective Winter 2019*

### Exclusions:

*Students who elect a minor in Biology may not elect the following majors: Biology; Biology, Health, and Society (formerly known as General Biology); Plant Biology; Ecology and Evolutionary Biology; Ecology, Evolution, & Biodiversity; Cellular and Molecular Biomedical Science (formerly known as CMB:BME); Microbiology; Molecular, Cellular, and Developmental Biology (MCDB - formerly known as Cellular & Molecular Biology or CMB); Neuroscience; or Biochemistry. They may also not elect a minor in Environmental Studies, Plant Biology, or Ecology and Evolutionary Biology.*

The minor in Biology is not intended for students interested in graduate work in the biological sciences.

### Advising

To make an advising appointment, go to the Program in Biology website at <http://lsa.umich.edu/biology/undergraduates/advising.html>

### Grade Policies

### Total Credits and GPA Requirement for Biology Minor:

Minimum 15 cr. in Minor (minimum of five courses)

Minimum 2.0 GPA in Minor

GPA is calculated from all mandatory prerequisites, all courses used for minor requirements, and all courses in BIOLOGY, EEB, and MCDB.

## Prerequisites

### Introductory Biology Sequence:

Choose Sequence A, B, or C:

- A. BIOLOGY 171, BIOLOGY 172 or 174, & BIOLOGY 173; or
- B. BIOLOGY 195 (AP/IB) & BIOLOGY 173; or
- C. BIOLOGY 191 (transfer credit), BIOLOGY 192, & BIOLOGY 173

## Requirements

### Minimum Credits: 15

Five courses totaling at least 15 credits, distributed as follows:

### Core Courses

Select at least two of the four courses listed. (Courses with an asterisk (\*) may overlap with the lab requirement.)

- Ecology: BIOLOGY 281 or EEB 381\*
- Genetics: BIOLOGY 305
- Biochemistry: Choose from: MCDB 310, BIOLCHEM 415, or CHEM 351
- Evolution: EEB 390, 391, or 392\*

### Lab or Field Course

(This requirement may OVERLAP with other minor reqs.):

Choose one laboratory or field course in BIOLOGY, EEB, or MCDB from the following: BIOLOGY 207, 226, 230, 252, 255, 288; EEB 300\*, 313, 320, 321, 330, 341, 348, 372, 381, 392, 400\*, 405, 416, 431, 433, 436, 441, 443, 450, 451, 453, 455, 457, 468, 477, 482, 483, 486, 489, 493, 556; MCDB 300\*, 306, 308, 400\*, 416, 419, 423, 424, 429.

*\*EEB/MCDB 300 or 400 (Independent Research), elected for a minimum of 3 credits in a single term, may be used to fulfill a lab requirement.*

### Upper-Level Elective

(May overlap with the lab requirement.):

Choose one course in EEB or MCDB at the 300- or 400- level

- EEB/MCDB 301, EEB/MCDB 302, EEB/MCDB 399, EEB/MCDB 499, MCDB 412, MCDB 461, and non-specific (departmental) transfer courses are EXCLUDED.
- EEB/MCDB 300 or 400 (Independent Research), elected for a minimum of 3 credits in a single term, may be used to fulfill this requirement. (3 credit max. applies; see CONSTRAINTS below.)



### **Additional Course(s)**

Choose additional BIOLOGY, EEB, and MCDB courses at the 200-, 300-, or 400-level, to reach 15 minor credit hours.

- BIOLOGY 241, BIOLOGY 299, EEB/MCDB 301, EEB/MCDB 302, MCDB 412, and non-specific (departmental) transfer courses are EXCLUDED.

### **Constraints**

- Prerequisites, introductory science courses, and non-specific (departmental) transfer courses are EXCLUDED from the 15 cr. required for the minor.
- A maximum of three credits of independent research (BIOLOGY 200, EEB/MCDB 300 or 400) may be counted toward the minor.

## **Biology, Health, and Society Major**

Biology, Health, & Society (BHS) is recommended for students interested in a broad view of biology and the interactions between science and society, whether focused on health, education or the environment. The major is appropriate for pre-health students, as well as those who wish to pursue professional school (e.g., law school) or other non-biology-specific career options where knowledge of the natural sciences would be beneficial. BHS also works well when paired with another (non-)science field of study in a dual major. It differs from other Biology majors in that it requires fewer credits, less laboratory work, and has more breadth.

*Effective Winter 2019*

### **Exclusions:**

*Students who elect a major in Biology, Health, & Society may not elect the following majors: Biology; Molecular, Cellular, and Developmental Biology (MCDB - formerly known as Cellular & Molecular Biology or CMB); Cellular and Molecular Biomedical Science (formerly known as CMB:BME); Ecology, Evolution, and Biodiversity; Ecology and Evolutionary Biology; Microbiology; Plant Biology; Biochemistry; Biomolecular Science; Neuroscience; or Evolutionary Anthropology. They may also not elect a minor in Biology; Ecology and Evolutionary Biology; or Plant Biology.*

### **Advising**

Students are advised by a combination of Undergraduate Biology Office staff and faculty department advisors. [Advising](#) topics include investigating majors, declaring a major, course planning, research and honors, major releases, graduate school and career advice. Students who are interested in the Program in Biology majors or minors should consult a general advisor during the freshman year, and are strongly encouraged to meet with a department advisor early in their academic career, but no later than the second term of their sophomore year. It is not necessary to complete every prerequisite before declaring a major.

To make an appointment, go to the Program in Biology website at [www.lsa.umich.edu/biology](http://www.lsa.umich.edu/biology).

## Grade Policies

### **Total Credits and GPA Requirement for Biology, Health, & Society:**

Minimum 24 cr. in Major

Minimum 2.0 GPA in Major

GPA is calculated from all mandatory prerequisites, all courses used for major requirements (including cognates), and all courses in BIOLOGY, EEB, and MCDB.

The introductory biology sequence must be taken for a grade. Prerequisites other than introductory biology may be taken pass/fail; however, it is not recommended, especially for chemistry. Remember that at least a C- must be earned to pass a course taken pass/fail.

Courses used for the major may not be taken pass/fail.

## Prerequisites

### **Introductory Biology Sequence:**

Choose Sequence A, B, or C:

- A. BIOLOGY 171, BIOLOGY 172 or 174, & BIOLOGY 173; or
- B. BIOLOGY 195 (AP/IB) & BIOLOGY 173; or
- C. BIOLOGY 191 (transfer credit), BIOLOGY 192, & BIOLOGY 173

### **Chemistry:**

- CHEM 210 & 211

### **Quantitative Analysis Sequence:**

- CALCULUS I: MATH 115, 120 (AP), 175, 185, or 295; and,
- One course from: MATH 116, 121 (AP), 156, 176, 186, or 296; STATS 180 (AP), 250 or 280; STATS 400-level or above (min. 3 credits); BIOLOGY 202; BIOPHYS/PHYSICS 290; EECS 183, 203 or 280; EARTH 468; PHYSICS 125, 135, 139, 140, or 160; or other course with a MATH 115 prereq. chosen in consultation with a major advisor.

*[NOTE: Any course used to fulfill this requirement cannot also be used as a major elective; i.e., a course cannot "double-count."]*

## Requirements

**Minimum Credits: 24**

### **Biology, Health, & Society Group Options:**

(Courses with an asterisk (\*) may overlap with the lab requirement)

Choose two courses each from groups A & B:

- **Group A: Gateway Biology Options:** Choose two (2) courses (min. 6 credits) from: BIOLOGY 205, 207\*, 222, 225, 230\*, 252\*, 255\*, 256, 272, 288\*
- **Group B: Health & Society Options:** Choose two (2) courses (min. 6 credits total) from: ALA 306 / WGS 305 (WGS 305), BIOLOGY 212; BIOLOGY/AMCULT 241; MCDB 396; EEB/ENVIRON 318; EEB/ANTHRBIO/ENVIRON 362; EEB 498; AMCULT/WGS 233 (WGS 233); AMCULT/HISTORY 284; AMCULT 365; ANTHRIBIO 363, 364, 373, 467; ANTHRCUL / RCSSCI 327 / WGS 307 (WGS 307); ANTHRCUL 341, 344; ENVIRON 270, 308, 310; ENVIRON / ANTHRCUL 256, ENVIRON 312 / POLSCI 308 / PUBPOL 312; ENVIRON / PSYCH 360; HISTORY 233, 234, 285; HISTORY / AAS / ANTHRCUL 355; HISTORY / WGS 356 (WGS 356); HISTORY 376; IHS 340; PHIL 320, 356, 381, 425; PUBHLTH 200 / PUBPOL 210; PUBHLTH 305, 350, 381, 403; SOC 302, 475, 476; WGS / NURS 220 (WGS / NURS 220) , 300, 324, 400.

### **Core Courses:**

(Courses with an asterisk (\*) may overlap with the lab requirement)

- **Group C - Core Biology:** Choose two (2) courses (min. 6 credits) from: Genetics: BIOLOGY 305; Biochemistry: Choose from: MCDB 310, BIOLCHEM 415, or CHEM 351; Evolution: EEB 390, 391, or 392\*, or Ecology: BIOLOGY 281 or EEB 381\*
- **Group D - Biology Elective:** Choose one course (min. 3 credits) from Group D: BIOLOGY, EEB, or MCDB 200-, 300-, or 400-level (excluding BIOLOGY 200, 212, 241, 299; MCDB/EEB 300, 301, 302, 396, 397, 399, 400, 412, 494, 499)

### **Lab Requirement for Biology, Health, & Society:**

(This requirement may OVERLAP with other major reqs.)

- 1 course with a lab is required. Choose from: BIOLOGY 207, 226, 230, 252, 255, 288; EEB 300\*, 313, 320, 321, 330, 341, 348, 372, 381, 392, 400\*, 405, 416, 431, 433, 436, 441, 443, 450, 451, 453, 455, 457, 468, 477, 482, 483, 486, 489, 493, 556; MCDB 300\*, 306, 308, 400\*, 413 (*only through Winter 2019*), 416, 419, 423, 424, 429  
*\*EEB/MCDB 300 or 400 (Independent Research), elected for a minimum of 3 credits in a single term, may be used to fulfill a lab requirement. (3 credit max. applies: see CONSTRAINTS below.)*

### **Additional Courses:**

Choose additional courses, if needed, to reach 24 major credit hours from:

- Groups A, B, C, or D (above)

BIOLOGY 200\*\*, BIOLOGY 299; CHEM 230 and above; EEB/MCDB 300\*\*, 399, 400\*\*;  
 MATH 200-The major in Biomolecular Science serves pre-health students and others who are not intending to go into science as a career but would benefit from a scientific credential. In addition to medicine, we envisage that this major will be of interest to students planning careers in fields such as education, journalism, science policy, business, law, etc. The Biomolecular Science major provides students with the core knowledge necessary to understand the chemical principles underpinning biology and the option to explore aspects of the subject of interest to them through a set of electives drawn from current course offerings in chemistry, biophysics and MCDB. The major differs from the Biochemistry major in requiring fewer courses and does not have a research component. Biomolecular Sciences is a less extensive major than Biochemistry, and is primarily aimed at those planning a career outside of the chemical sciences. Instead, this should be an attractive degree option for students who plan to pursue post-graduate studies in Biomedical or Health Sciences. Students who are intending to pursue graduate studies or an industrial career in biochemistry or related areas are strongly encouraged to elect the Biochemistry major. The major is structured so that students can readily convert to the BS major in Biochemistry if they decide to do so during the course of their studies.

The curricula in Chemistry serve those preparing for careers in chemistry, biochemistry, medicine, chemical engineering, pharmacy, and allied fields as well as those seeking a general knowledge of chemistry as part of a liberal arts education. Beyond the first-year courses, there is an emphasis on development of technical knowledge and laboratory experience needed in chemistry and related scientific fields. The undergraduate majors prepare students for work in research and testing laboratories, as well as for business positions in which a chemistry background is desirable. Graduate work is necessary for those planning to do college and university teaching or industrial research.

- level or above\*; MCDB 397, 494, or 499; PHYSICS 200-level or above\*; or STATS 250\*, STATS 400-level or above\*  
 (\*Courses used here may not also be used as prerequisites)  
 (\*\*3 credit max. applies: see CONSTRAINTS below.)

### Constraints

- Prerequisites, introductory science courses, and non-specific (departmental) transfer courses are EXCLUDED from the 24 cr. required for the major.
- Test credits may not be used to meet the requirements of a major.
- A maximum of three credits of independent research (BIOLOGY 200 or 299, EEB/MCDB 300 or 400) may be counted toward the major.

## Distribution Policy

No course used to fulfill a major requirement may be used toward the [LSA Distribution Requirement](#). In addition, courses in the BIOLOGY, EEB, MCDB, and MICRBIOL subject areas may not be used toward the Distribution Requirement.

## Honors

The Program in Biology administers an Honors Program to train students to conduct independent research in the biological sciences. Participating in the honors program allows students to develop their research skills, deepen their understanding of the field, and form productive relationships with faculty and other students. The achievement is noted on the diploma and official transcript.

In addition to completing all the requirements for the major, an honors degree requires:

1. an overall **and** major GPA of at least 3.4, and
2. the completion of a significant piece of independent research that is
  - reported in an honors thesis and
  - presented in a public forum.

For more information, consult the Program in Biology Honors Program Information page or a Program in Biology advisor.

# Biomolecular Science Major

The major in Biomolecular Science serves pre-health students and others who are not intending to go into science as a career but would benefit from a scientific credential. In addition to medicine, we envisage that this major will be of interest to students planning careers in fields such as education, journalism, science policy, business, law, etc. The Biomolecular Science major provides students with the core knowledge necessary to understand the chemical principles underpinning biology and the option to explore aspects of the subject of interest to them through a set of electives drawn from current course offerings in chemistry, biophysics and MCDB. The major differs from the Biochemistry major in requiring fewer courses and does not have a research component. Biomolecular Sciences is a less extensive major than Biochemistry, and is primarily aimed at those planning a career outside of the chemical sciences. Instead, this should be an attractive degree option for students who plan to pursue post-graduate studies in Biomedical or Health Sciences. Students who are intending to pursue graduate studies or an industrial career in biochemistry or related areas are strongly encouraged to elect the Biochemistry major. The major is structured so that students can readily convert to the BS major in Biochemistry if they decide to do so during the course of their studies.

The curricula in Chemistry serve those preparing for careers in chemistry, biochemistry, medicine, chemical engineering, pharmacy, and allied fields as well as those seeking a general knowledge of chemistry as part of a liberal arts education. Beyond the first-year courses, there is an emphasis on development of technical knowledge and laboratory experience needed in chemistry and related scientific fields. The undergraduate majors prepare students for work in research and testing laboratories, as well as for business positions in which a chemistry

background is desirable. Graduate work is necessary for those planning to do college and university teaching or industrial research.

The Biomolecular Sciences major is designed to provide students with the core knowledge necessary to understand the chemical principles underpinning biology and the option to explore aspects of the subject of interest to them through a limited set of electives drawn from course offerings in chemistry, biophysics, and molecular, cellular and developmental biology. Biomolecular Sciences is a less extensive major than Biochemistry, and is primarily aimed at those planning a career outside of the chemical sciences. Instead, this should be an attractive degree option for students who plan to pursue post-graduate studies in Biomedical or Health Sciences. Students who are intending to pursue graduate studies or an industrial career in biochemistry or related areas are strongly encouraged to elect the Biochemistry major.

It is strongly recommended that students who are thinking of degrees in chemistry should arrange an appointment with a Chemistry advisor via the online advising system as soon as possible, preferably before the end of the freshman year but certainly before the end of the sophomore year. The online appointment scheduling system can be found here: <http://www.umich.edu/~michchem/undergrad/index.html>.

*Effective Fall 2015*

#### **Exclusions:**

*Students who elect a major in Biomolecular Science may not elect the following majors: Biology, General Biology; Molecular, Cellular, and Developmental Biology (formerly known as Cell and Molecular Biology, or CMB); Biomedical Engineering; Ecology and Evolutionary Biology; Microbiology; or Neuroscience. They may also not elect a minor in Biology, or any of the Chemistry minors.*

#### Advising

Students develop a plan for the major in consultation with a program advisor. Those interested in a B.S. degree with a major in Chemical Science (120 credits) or the specialized program leading to the *Bachelor of Science in Chemistry* (124 credits) are urged to consult a program advisor during the freshman and/or sophomore years. Prospective majors are advised that further study in chemistry requires adequate performance in early chemistry courses (preferably B- or better) as well as in the mathematics and physics prerequisites. Students interested in an Honors degree should see the Chemistry Honors advisor. Appointments are scheduled online at [www.lsa.umich.edu/chem/undergraduate/advising](http://www.lsa.umich.edu/chem/undergraduate/advising). Students interested in the joint program with the College of Engineering should make an appointment with [John Stratman](#) [Academic Advising Center, 1255 Angell Hall, 734.764.0332] and then make an appointment to see a chemistry department advisor online.

#### Grade Policies

The department strongly recommends that a student earn a grade of at least C- in all CHEM courses and mathematics, physics, and biology courses that are prerequisite for subsequent elections. A major program grade point average of at least 2.0 is required; this includes

chemistry courses, mathematics, physics, and biology prerequisites, and advanced electives that are part of a major plan. Prerequisites must be taken for a grade. Students must request any change in a chemistry course grade within the first fifteen University Business days of the first full term following the term in which the disputed grade was issued.

### Prerequisites

- BIOLOGY 171, 172 and 173
- CHEM 130, 125/126; or CHEM 245/246/247 for students with AP credit for CHEM 130, 125/126
- MATH 115 (or 120); (or the equivalent)
- MATH 116 (or 121), STATS 250, STATS 280; or the equivalent
- PHYSICS [135/136 or 140/141] and [235/236 or 240/241] (or the equivalent).

### Requirements

#### Minimum Credits: 25

1. **Core:** CHEM 210/211; CHEM 215; CHEM 260 or 230; CHEM 351\* and 352  
\*Students are strongly encouraged to take CHEM 351 but could substitute this course requirement with MCDB 310 or BIOLCHEM 415.
2. **Electives:** A total of at least 9 credits (three courses) with at least one course at the 400-level:
  - A. At least one course chosen from:
    - CHEM 303, 419 (*only if elected F16 or later*), 420, 425 (*only if elected W17 or later*), 436 (*only if elected W17 or later*), 451, 452, 453, 455, 465 (*only if elected W17 or later*)
    - BIOLCHEM 451, 452
  - B. At least one course chosen from:
    - BIOLOGY 305
    - BIOPHYS 420 (*only if elected W17 or later*), 421 (*only if elected W18 or later*), 430 (*only if elected W20 or later*), 440
    - CHEM 440
    - MCDB 405, 411, 422, 427, 428, 431, 433 (*only if elected W18 or later*), 436 (*only if elected W18 or later*), 437
    - MICRBIOL 405 (*only if elected W18 or later*)
    - PHARMACOL 425
    - PHYSIOL 502 (*only if elected W18 or later*)

### Distribution Policy

No course used to fulfill a major requirement may be used toward the [LSA Distribution Requirement](#). In addition, courses in the CHEM subject area may not be used toward the Distribution Requirement.

## Honors

*Effective Winter 2013*

Students may obtain Honors in Biomolecular Science by successfully completing all courses required for the Biomolecular Science major with an overall GPA of 3.4. In addition, students obtaining Honors must complete one additional upper-level Chemistry elective (chosen in consultation with the department advisor), complete four credits elected over at least two terms of CHEM 398 and write a thesis based on their undergraduate research. Students must register for one credit of CHEM 498 in the term in which they plan to submit their thesis.

## Biophysics Minor

The minor in biophysics is designed to give students in the natural sciences exposure and skills in quantitative, interdisciplinary work in the biophysical sciences.

*Effective Winter 2016*

### Exclusions:

*Not open to those electing a major in the Program in Biophysics.*

## Advising

The Program in Biophysics currently offers a [B.S. degree in Biophysics](#) and a minor in Biophysics. Students interested in either option are strongly encouraged to schedule an advising appointment by contacting Student Services at [biophysics@umich.edu](mailto:biophysics@umich.edu).

## Prerequisites

None for the minor *per se*, although individual courses elected to meet the requirements of the minor may have course prerequisites.

## Requirements

**Minimum Credits:** 15

The minor requires at least 15 credits from the following courses:

- PHYSICS 340 or CHEM 210
- BIOLOGY 305 or MCDB 310 or CHEM 351
- BIOPHYS 370 or 417, or PHYSICS 370 or 417, or CHEM 370 or 417
- BIOPHYS 290 or 430 or 440, or PHYSICS 290 or 430, or CHEM 440
- BIOPHYS 450 or PHYSICS 450

Students wishing to pursue this option are strongly encouraged to talk to an advisor because the LSA rules for double-counting courses towards a major and minor apply.



# Biophysics Major

The biophysics major is designed for students with a strong interest in the natural sciences who intend to embark on a career as a biophysical or medical scientist. It is intended to satisfy the admission requirements of most combined MD/Ph.D. programs and provide a strong foundation for quantitative interdisciplinary work in the biophysical or biomedical sciences or related fields, such as biomedical engineering.

The major requires introductory courses in Mathematics, Physics, Chemistry and Biology, followed by specialized biophysics courses. In addition, participation in research is required, which allows students to explore cutting-edge biophysical research and gain valuable experience for a future career.

*Effective Winter 2020*

## Advising

The Program in Biophysics currently offers a **B.S. degree in Biophysics** and a [minor in Biophysics](#). Students interested in either option are strongly encouraged to schedule an advising appointment by contacting Student Services at [biophysics@umich.edu](mailto:biophysics@umich.edu).

## Grade Policies

The Biophysics department strongly recommends that a student earn a grade of at least C– in all BIOPHYS courses and mathematics, chemistry, physics, and biology courses that are prerequisite for subsequent elections. A major program grade point average of at least 2.0 is required; this includes biophysics courses, chemistry, mathematics, physics, and biology prerequisites, and advanced electives that are part of a major plan.

## Prerequisites

See specific prerequisites listed under Biological Physics Track or Structural Biology Track.

## Requirements

**Minimum Credits: 26**

The Biophysics Major consists of two tracks:

- [Biological Physics Track](#)
- [Structural Biology Track](#)

## Distribution Policy

No course used to fulfill a major requirement may be used toward the [LSA Distribution Requirement](#). In addition, courses in the BIOPHYSICS subject areas may not be used toward the Distribution Requirement.

## Honors

In addition to completing all the Biophysics requirements for the major, a GPA in the major of at least 3.4 and the completion of an Honors thesis (BIOPHYS 499) with a grade of B or better, and a second Biophysics elective are required.

Approved Honors electives are all biophysics and cognate electives above, and BIOPHYS 440 or CHEM 440, CHEM 453, MCDB 422, MCDB 428, PHYSICS 402, and PHYSICS 453. Students double majoring in Biophysics and any major in the Department of Physics cannot use PHYSICS 402, 406, or 453 to satisfy the Biophysics cognate or Honors elective requirement.

# Biopsychology, Cognition, and Neuroscience (BCN) Major

## Curriculum

The curriculum in psychology is intended to enhance one's understanding of behavioral science and of oneself and others in terms of concepts developed by study. The undergraduate major program is not intended to prepare students for any specific vocational objective; to become a professional psychologist requires from two to four years (or more) of graduate study.

**Curriculum Guides.** Curriculum Guides are available for both Psychology and Biopsychology, Cognition, and Neuroscience majors. Clusters are groupings of courses (both within the Department of Psychology and throughout other programs at the University of Michigan) that focus on a more specific area related to psychology. Students are encouraged to refer to these clusters when making academic and career goals.

The following clusters are currently available:

- Behavioral and Cognitive Neuroscience
- Business, Systems, and Organizations
- Culture, Context, and Communities
- Development, Psychopathology, and Mental Health
- Evolution, Biology, and Behavior
- Gender, Psychology, and Society
- Health, Development, and Aging
- Intergroup Relations
- Language, Thought, and Culture
- Law, Criminal Justice, and Forensics

## Goals of the Major in BCN

The overall goal of Biopsychology, Cognition, and Neuroscience major is to provide a course of study that integrates the natural science components of the study of behavior and prepares students for graduate study in a number of related fields. The program integrates neuroscience, cognitive science, and evolutionary approaches to the study of behavior. This major is particularly appropriate for students interested in graduate study of human cognition,

biopsychology, behavioral neuroscience, comparative animal behavior, and evolutionary psychology. A variety of research course options are available to provide the research training needed for post-graduate study. A variety of other career opportunities are also available when additional appropriate courses are chosen from other departments.

*Effective Winter 2018*

#### **Exclusions:**

*Students who elect a major in Biopsychology, Cognition, and Neuroscience may not elect the Neuroscience or Psychology majors.*

#### Advising

Students choosing psychology as a field of the major develop an approved plan for the major with a department advisor. Students then assume responsibility for completing their program of study or for making revisions which will not jeopardize their graduation. Students are, however, encouraged to consult a department advisor at any time. A department advisor must approve the original plan for the major and any exceptions to the stated requirements for the major. Students should also consult a department advisor when planning the final term's elections to ensure that all requirements for the major have been met and to secure an advisor's approval on a Major Release form. Appointments for students are scheduled at 1343 East Hall or online through the [Department website](#).

#### Peer Advising

Advising by Undergraduate Psychology Academic Peer Advising Program students is available at 1343 East Hall during the fall and winter terms.

#### Prerequisites

An introductory course (PSYCH 111, 112, or 114) with a minimum letter grade of "C"; and STATS 250 or STATS 280 with a minimum letter grade of "C-".

#### Requirements

##### **Minimum Credits: 32**

1. **Core course requirement.** Both courses are required:
  - *Biopsychology*: PSYCH 230
  - *Cognitive Psychology*: PSYCH 240
2. **Breadth course requirement.** Choose one course from the following:
  - PSYCH 250, 270, 280, 290, or 291
3. **Lab requirement.** Two courses for a minimum of 5 credits total. At least one lab must be methods-based and only one non-Psych course may be elected. Students must see an advisor to use thesis courses to meet lab requirements.
  - *Methods-Based Lab Courses*: PSYCH 302, 303, 331, 341, 422, 423, 426, 429, 451, 457 (section titled "*Developmental Methods*"), PSYCH/LING 547; BIOLOGY 226; EEB 381 or 493; MCDB 306, 308, or 423

- *Research Lab Courses:* PSYCH 226, 322, 326, 422, 423, 424, 428
  - *Thesis Research Sequence:* Honors - PSYCH 424 & 426; non-Honors - PSYCH 428 & 429
4. **Cognate course requirement.** One course selected from the following list or a Psychology 300-400 level course (lec/sem) not on the advanced course list.  
One course selected from the following list:
- ANAT 403
  - ANTHRBIO 467, 478, (568)
  - BIOLCHEM 415
  - BIOLOGY 205, 208, 222, 225, 305
  - CHEM 351
  - COGSCI 200
  - EEB 390, 442, 450, 481, 492
  - EEB/ENVIRON 381, EEB 440/EAS/ENVIRON 422, EEB/EAS/ENVIRON 451
  - EECS 281, 492
  - LING 315, 516 (514)
  - MCDB 307, 310, 311, 418, 422, 425, 534
  - PHIL 340, 345, 450, 482
  - STATS 401, 406
5. **Advanced course requirement.** Four additional upper-level courses for at least 12 credits. Two courses must be at the 300-level and one course at the 400-level
- *300-level courses:* PSYCH 330, 332, 333, 334, 335, 336, 337, 338, 339, 340, 343, 344, 345, 346, 347, 348, 349, 352, 355, 356, 358, 359
  - *400-level courses:* PSYCH 402, 413, 414, 420, 430, 431, 432, 433, 434, 435, 436 (*only if elected W20 or later*), 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 454, 456 (*only if elected W20 or later*), 457 section titled "*Biology, Brain & Behavior: The Developing Child*", 463, 531

## Constraints

- 100-level courses may not be used to meet the requirements for the major or the credit requirement.
- Credit/No-credit courses may be used toward the Lab requirement, but will not count toward the total number of psychology credits required for major.
- Although some courses that are graded credit/no credit may be used to meet the lab requirement, 32 credits must be letter graded.

## Residency

Of the 40 overall credits (pre-requisites and courses for the major), 24 must be completed in-residence (AA Campus Department of Psychology and U-M Study Abroad). Of these 24 credits, 12 credits must be upper-division (300 or above).

## Distribution Policy

No course used to fulfill a major requirement may be used toward the [LSA Distribution Requirement](#). In addition, courses in the PSYCH subject area may not be used toward the Distribution Requirement.

## The Honors Major in Psychology and in Biopsychology, Cognition, and Neuroscience

Psychology and Biopsychology, Cognition, and Neuroscience majors with strong academic records and an interest in research are encouraged to consider participating in the Honors Major. The Honors Major is designed to enable advanced students to gain experience in design, conduct, and analysis of research studies. Students experience an intensive collaboration with a faculty member, and complete a significant effort to create new scientific knowledge. The Honors Major can serve as a capstone for their undergraduate studies, and as important preparation for graduate training or employment in a variety of fields.

1. **Requirements.** In addition to completing all the requirements for the major, an Honors degree designation requires having and maintaining a cumulative GPA of at least 3.4, participation in two terms of independent study Honors courses, presenting in the Annual Research Forum, and the completion and acceptance of a written thesis describing an original research project conducted in collaboration with a faculty mentor.
2. **Faculty Partnership.** Students wishing to pursue Honors should explore their interests in research and statistics early in their academic career. The student must then identify a faculty research mentor to work in partnership on an Honors project. The research mentor can be any faculty member or research scientist holding a faculty appointment in the University. Students must have one mentor from the Psychology Department. With the mentor as a collaborator, the student will prepare a project plan and timeline for completion. Application deadlines are posted on the Psychology Honors website.
3. **Admission to the Honors Major.** A student and their faculty research mentor must apply together for admission to Honors; this includes an application and research proposal. Students are encouraged to apply the semester before their final year at the university (i.e., the end of their Junior year) to begin the Fall term of their Senior year.
4. **Courses.** Once accepted into the Honors Major, Psychology and in Biopsychology, Cognition, and Neuroscience students will be issued overrides for PSYCH 424 for the first semester of their thesis, and PSYCH 426 in their final semester. The Honors courses are graded and may be used towards the lab requirements (PSYCH 424 = experiential/research lab; PSYCH 426 = methods lab) when taken for the appropriate number of credits (see Honors major advisor for guidance). PSYCH 426 may satisfy the college upper-level writing requirement. Students may be required to take a Methods-based lab in addition to these courses, and are encouraged to meet with the Honors major advisor to plan how each course will count toward their plan.
5. **The Honors Thesis.** The required senior Honors thesis is a written report describing the design and execution of the research project conducted in collaboration with the faculty mentor. The thesis will be due one calendar month before the anticipated graduation date. All Honors theses must be prepared in American Psychological Association (APA) format, and typically run 30-40 double-spaced pages in length. One electronic and hard copy of the thesis and a submission form must be submitted.
6. **Evaluation of Thesis.** The thesis will be evaluated by two-three readers: the mentor, an outside reader (a faculty member not involved in the research project), and a possibly representative of the Honors Major. Students and mentors are responsible for suggesting a second reader prior to submitting their application. The reports of all readers will address the quality of the science reported in the thesis, as well as the quality of the written presentation. The report of the

mentor will also address the role the student played in the design, execution, and interpretation of the experiments reported in the thesis, and should point out the role played by others on the project. The Honors Director will then meet to review the recommendations of the readers and decide on the appropriate level of Honors. The Honors Director will attempt to maintain uniform standards, and is not constrained by the recommendations of the readers. Based on LSA guidelines, a determination of "No Honors," "Honors," "High Honors," or "Highest Honors" is made. This determination of an Honors designation must be completed prior to the actual awarding of the degree.

Students interested in the Psychology Department Honors Major should attend an informational session and review program details on the website prior to applying.

## **Bosnian, Croatian, Serbian Literature and Culture Minor**

This academic minor provides students with a fundamental competence in BCS, as well as the knowledge of literary and cinema masterpieces from the region.

The BCS academic minor is a vibrant program that integrates political, architectural, and cultural knowledge with the already rich program of Eastern European studies. Its curriculum broadens the perspective needed for academics, diplomats, journalists, businesspersons, and future specialists on the history, language, literature, and politics of the Western Balkans. This program will be of particular interest to undergraduate students in concentrations like History, Political Science, Sociology, or Judaic Studies. It will also provide a necessary venue for a considerable body of students who are heritage speakers of BCS, and for those interested in the culture of the former Yugoslavia and its successor states.

This academic minor may represent an opportunity for a growing number of economics, politics, and diplomacy professionals employed in the Western Balkans, both in the government-sponsored and NGO sectors. The BCS academic minor will offer them a chance to gain linguistic competence, as well as prepare them for easier access to the BCS-speaking countries' cultural and social contexts [Serbia, Croatia, Bosnia, Montenegro, as well as Kosovo]. The courses included in the academic minor provide an excellent introduction into the political context of the unification of the Kingdom of Yugoslavia, the refusal of the Socialist Yugoslavia to become part of the Stalinist Eastern Europe, the subsequent 50 years of specific Yugoslav socialism, as well as causes and consequences of the dissolution wars that occupied the entire decade of the 1990s. Students will learn about the masterpieces produced by writers from the region, both by those who were openly critical of the political developments in specific periods, as well as those who kept their criticism limited to their work. An amazing discovery for students awaits in the film production from the region, where the level of artistic freedom and criticism of contemporary society is second to none. Ultimately, some courses address specific contemporary issues of ideology, racism, immigration, or gender and sexual discrimination, and they can be of interest

even to those students who may have neither heritage links nor specific career plans connected to BCS.

*Effective Winter 2013*

#### **Exclusions:**

*Not open to those who are electing a concentration in Russian, East European, and Eurasian Studies. Students could concurrently pursue this academic minor with one in REES with the following restrictions: (1). REES academic minors may not count any course for which Slavic is the home unit. (2). Slavic academic minors may not count REES 397 or any course for which REES is the home unit, which includes SLAVIC 395 and 396.*

#### Advising

Students wishing to pursue an academic minor in the Department of Slavic Languages and Literatures must develop a specific plan for its completion in consultation with the department's designated advisor, Tatjana Aleksic. Appointments are scheduled online at <http://lsa.umich.edu/slavic/undergraduate-students/advising.html>

#### Prerequisites

BCS 131, 132, and 231, or equivalent, as determined by the departmental placement examination.

#### Requirements

##### **Minimum Credits: 16**

16 credits of courses, including BCS 232 (4 credits) and 12 credits in courses selected from the following two categories, with at least 6 credits from Category A and no more than 6 credits from Category B:

**Category A: BCS Courses Language, Literature, and Culture.** Courses in Category A encourage students to continue their language study through literary classes and individualized work with an instructor, concentrating on BCS culture, literature and history.

- BCS 350 / JUDAIC 350 / REES 350: Legacy of the Holocaust in Yugoslav Culture: How and Why We Need to Narrate the Holocaust
- BCS 436: Modern Bosnian/Croatian/Serbian Literature
- BCS 437: Yugoslav Literature of Exile: Nowhere People-Exiles from the State of Ideology
- BCS 439: Directed Reading of Bosnian/Croatian/Serbian Literature
- BCS 450: In No Man's Land: Walls, Migrations and Human Trafficking in the Balkans and Mediterranean (W16)
- HISTORY 431: History of the Balkans Since 1878

- SLAVIC 471: Seminar in Cultural Studies of Central, Eastern and Southern Europe, *section titled "Technologies of Memory"*

**Category B: Courses on Central/Eastern European Slavic Culture.** Category B courses place the cultural space of the Western Balkans (the area where BCS is spoken) into a larger Central European political, cultural and historical context.

- POLISH 215: Heart of Europe: Poland Today
- SLAVIC 225: Arts and Cultures of Central Europe
- SLAVIC 245: Vampires and How to Spot Them: Blood, Lust and Power (W19)
- SLAVIC 312 / RCHUMS 312: Central European Cinema
- SLAVIC 423: Central European Literature in the Twentieth Century
- SLAVIC 490: Issues in the Cultures of Eastern Europe (appropriate topics)
- REEES 405: Topics in Russian, East European, and Eurasian Studies (appropriate topics)

## Business (Minor)

The Minor in Business is designed for students who would like to complement their undergraduate major with business knowledge. The curriculum will enable students to integrate business concepts, skills, and perspectives into their declared majors and will add value to many technical and non-technical majors across campus. Facilities, clubs, corporate visits, career fairs, and career-prep seminars will all be open to minors.

The Ross Business Minor curriculum provides a strong understanding of business fundamentals, including those in accounting, finance, marketing, and strategy. Like all Ross courses, Business Minor courses are action-oriented. That means you won't just hear about business concepts — you'll get to experience them, through interactive projects and group work.

### How to Earn the Minor

To successfully complete the minor, take 15 credit hours from a flexible set of core and elective courses. Each course must be completed for a grade (not pass/fail), and a minimum cumulative GPA of 2.000 is required within the minor coursework.

### Core Courses

12 credits (to be completed in any order)

[ACC 300 Financial Accounting](#) or [ACC 471 Accounting Principles](#)

[FIN 302 Making Financial Decisions](#) or [TO 302 Managing Business Operations](#)



[MKT 302 Marketing Management](#) or [MO 302 Positively Leading People and Organizations](#)

[STRATEGY 302 Business Strategy](#), or an action-based learning course from the following list (subject to change; consult with an advisor in the Ross Office of Undergraduate Programs):

Approved Action-Based Learning Courses:

- [BA 453 Action Learning Project](#) (Seniors only)
- [ES 395 Entrepreneurial Management](#)
- [ES 445/STRATEGY 445 Base of the Pyramid: Business Innovation for Solving Society's Problems](#)
- [MKT 401 Marketing Management II](#) (Seniors only)
- [MKT 411 Advertising Management](#)
- [MO 456 Magnify Immersion Program](#)
- [MO 463 Leading Creativity and Innovation](#) (Seniors only)
- [STRATEGY 492 Dynamic Capabilities Through Corporate Development \(Seniors only\)](#)
- [TO 465 Business Systems Consulting](#) (Seniors only)
- [TO 482 Projects in Operations, Purchasing, and Supply Chain Management](#)

Electives

3 credits (minimum)

The Business Minor requires that you complete at least three elective credits. You can choose from a wide range of topics that align with your specific career interests. It may be helpful to consult with an advisor to make the best choices for you; note that this list is subject to change.

[Electives](#)

Corequisites

To be completed before graduation

You must complete ECON 101 Principles of Economics before graduation.

- AP credit will NOT fulfill this requirement.
- IB, A-level, or transfer credit for the exact U-M course equivalent (not departmental credit, e.g., ECON 101X) will count for this requirement.
- ECON 101 can be completed for a letter grade or as pass/fail.
- ECON 401 will also fulfill the ECON 101 corequisite requirement if completed with a letter grade of C or higher.

Only students who apply and are accepted to the minor are eligible to have the Business Minor listed on their university record.

# Cellular and Molecular Biomedical Science Major

The CMBS program is designed for students enrolled in the College of Literature, Science and the Arts. The program is jointly administered by the Molecular, Cellular, and Developmental Biology (MCDB) Department (College of LS&A) and the Biomedical Engineering (BME) Department (College of Engineering). A matriculating student will receive the B.S. in Cellular and Molecular Biomedical Science (CMBS) from the College of LS&A upon completion of all undergraduate program requirements, and is eligible to apply to the M.S. in Biomedical Engineering (BME) program in the College of Engineering.

Students will be admitted to the CMBS program only after completing the major prerequisites. Admission to the program must be approved by advisors from the Departments of MCDB and BME.

Declaration requirements and application can be found here:  
[https://umich.qualtrics.com/jfe/form/SV\\_1GnYv0KSNRgPaG9](https://umich.qualtrics.com/jfe/form/SV_1GnYv0KSNRgPaG9)

*Effective Fall 2019*

## **Exclusions:**

*Students who elect a major in CMBS may not elect the following majors: Biology; Biology, Health, and Society (formerly known as General Biology); Cellular and Molecular Biomedical Science (formerly known as CMB:BME); Molecular, Cellular, and Developmental Biology (MCDB - formerly known as Cellular & Molecular Biology or CMB); Microbiology; Plant Biology; Biochemistry; Biomolecular Science; or Neuroscience. They may also not elect a minor in Biology; Plant Biology; Chemistry; or Biochemistry.*

## **Advising**

Upon acceptance into the program, each student will be assigned two advisors, one in MCDB and one in Biomedical Engineering.

Student course selections must be approved by both advisors each term. Students are advised by a combination of Undergraduate Biology Office staff and faculty department advisors. Advising topics include investigating majors, declaring a major, course planning, research and honors, major releases, graduate school and career advice. Students who are interested in the CMBS major should consult a general advisor during the freshman year, and are strongly encouraged to meet with a department advisor early in their academic career, but no later than the second term of their sophomore year. To make an appointment, go to the Program in Biology website at <http://www.lsa.umich.edu/biology/>.

## **MS phase**

A student may apply to the M.S. phase during the fourth year, when the student has achieved senior standing. At this time, the student must formally apply to the Rackham Graduate School

for admission to the M.S. program in Biomedical Engineering. Students with a 3.2 or higher cumulative GPA in the B.S. program in CMBS and who are judged by both academic advisors as making timely progress towards the B.S. degree will be admitted to the M.S. phase. Students will be charged graduate tuition for only one academic year. Students are never jointly enrolled in LSA and Rackham; however, students can begin to take graduate BME courses as undergraduates with the permission of the instructor.

Please see the Rackham website for specific policies:

<https://rackham.umich.edu/navigating-your-degree/sugs-information/>

### Grade Policies

#### **Total Credits and GPA Requirement for CMBS:**

Minimum 46 cr. in Major

Minimum 3.2 Cumulative GPA is required for admission to the M.S. program.

Minimum 2.0 GPA in Major

Major GPA is calculated from all mandatory prerequisites, all courses used for major requirements (including cognates), and all courses in BIOLOGY, EEB, and MCDB.

The introductory biology sequence must be taken for a grade. Prerequisites other than introductory biology may be taken pass/fail; however, it is not recommended, especially for chemistry. Remember that at least a C- must be earned to pass a course taken pass/fail.

Courses used for the major may not be taken pass/fail.

### Prerequisites

#### **Introductory Biology Sequence:**

Choose Sequence A, B, or C:

- A. BIOLOGY 171, BIOLOGY 172 or 174, & BIOLOGY 173; or
- B. BIOLOGY 195 (AP/IB) & BIOLOGY 173; or
- C. BIOLOGY 191 (transfer credit), BIOLOGY 192, & BIOLOGY 173

#### **Chemistry Sequence:**

- CHEM 210 & 211; and,
- CHEM 215 & 216

### **Quantitative Analysis Sequence:**

- CALCULUS I: MATH 115, 120 (AP), or 185; and
- CALCULUS II: MATH 116, 121 (AP), 156, or 186

### **Physics Sequence:**

- Physics I (lecture & lab): One of the following combinations: PHYSICS 125 & 127; 135 & 136; 140 & 141; or 160 & 161. PHYSICS 139 (AP) will also fulfill this requirement.
- Physics II (lecture & lab): One of the following combinations: PHYSICS 126 & 128; 235 & 236; 240 & 241; or 260 & 261. PHYSICS 239 (AP) will also fulfill this requirement.

### **Undergraduate Engineering:**

- ENGR 101 or EECS 183

### **Requirements**

**Minimum Credits: 46**

### **Biology Core Courses:**

- Biology Elective: Choose one course from the following: Any specific BIOLOGY, EEB, or MCDB course at the 200-, 300-, or 400-level (EXCEPT BIOLOGY 200, 201, 241, or 299; EEB 300, 301, 302, 399, or 499; MCDB 300, 301, 302, 399, 412, or 499)
- Genetics: BIOLOGY 305
- Biochemistry: Choose from: MCDB 310, BIOLCHEM 415, or CHEM 351
- Genetics Laboratory: BIOLOGY 306 **or** Cell and Molecular Biology Laboratory: MCDB 429\*
- Molecular Biology: MCDB 427\*
- Cell Biology: MCDB 428\* or BIOMEDE 418\*
- Advanced MCDB Course: Choose one course from: MCDB 400 (3 cr. min./max.), 401, 402, 403, 404, 405, 406, 408, 409, 410, 411, 415, 416, 417, 418, 419, 420, 421, 422, 423, 425, 426, 430, 433, 435, 436, 440, 441, 444, 448, 450, 452, 453, 454, 455, 456, 457, 458, 459, 462, 463, 469, 471, 489, 589

*\*See Rackham policies on transfer and double-counting, and consult with the BME Master's Program regarding graduate requirements*

### **Engineering Core Courses:**

- Calculus III: Math 215
- Differential Equations: Math 216
- Biophysical Chemistry & Thermodynamics: BIOMEDE 221
- Biomechanics: BIOMEDE 231
- Bioreaction Engineering & Design: BIOMEDE 321
- Biofluid Mechanics: BIOMEDE 331
- Biomedical Engineering Design: BIOMEDE 350

## Constraints

- Prerequisites, introductory science courses, and non-specific (departmental) transfer courses are excluded from the 46 cr. required for the major
- A maximum of three credits of independent research (MCDB 400) may be counted toward the major. Three credits must be completed in one term to meet the Advanced MCDB Course requirement.

## Distribution Policy

No course used to fulfill a major requirement may be used toward the [LSA Distribution Requirement](#). In addition, courses in the BIOLOGY, EEB, MCDB, and MICRBIOL subject areas may not be used toward the Distribution Requirement.

## Honors

The Program in Biology administers an Honors Program to train students to conduct independent research in the biological sciences. Participating in the honors program allows students to develop their research skills, deepen their understanding of the field, and form productive relationships with faculty and other students. The achievement is noted on the diploma and official transcript.

In addition to completing all the requirements for the major, an honors degree requires:

1. an overall **and** major GPA of at least 3.4, and
2. the completion of a significant piece of independent research that is
  - reported in an honors thesis and
  - presented in a public forum.

For more information, consult the Program in Biology Honors Program Information page or a Program in Biology advisor.

# Central Eurasian Studies Minor

The minors provide interdisciplinary surveys of three separate geographic sub-domains covered by the major in Russian, East European, and Eurasian Studies. Slavic Languages and Literatures offers interdisciplinary minors to students who wish to:

- better understand the history and culture of either Russia and the former Soviet Union or Eastern Europe or Central Eurasia (especially the countries of Transcaucasia, Central and Inner Asia)
- gain insight into the political, economic, and social transitions taking place in the region.

*Effective Fall 2019*

### Advising

Undergraduate advisors in Slavic Languages and Literatures are available to meet with undeclared students who would like to learn more about the program, and also with current majors and minors who would like to discuss course selection, degree requirements, major/minor releases, and other matters of concern. Appointments can be made through our online appointment calendar. Students may also contact [slavic@umich.edu](mailto:slavic@umich.edu) for any inquiries. The Slavic Department is currently located at 3040 Modern Languages Building, 812 E. Washington St. Ann Arbor, MI.

Students pursuing a REES minor must discuss their plans and course elections with the CREES undergraduate academic advisor. Appointments are scheduled online at [www.ii.umich.edu/crees](http://www.ii.umich.edu/crees).

### Prerequisites

None.

### Requirements

**Minimum Credits: 15**

At least 15 credits of courses on Central Eurasia, selected in consultation with and approved by the Slavic undergraduate academic advisor.

1. REES 340/HISTORY 340/AAPTIS 340/ASIAN 340/MENAS 340: From Genghis Khan to the Taliban: Modern Central Asia.
2. Disciplinary distribution: at least one 3-credit course in each sub area (arts/culture, history, and social science).

A minimum of three courses that will be counted toward the academic minor must be upper-level (300- or 400-level).

## Chemical Measurement Science Minor

The Chemical Measurement Science minor provides a concentrated exposure to analytical chemistry that is appropriate across a wide variety of scientific areas.

The curricula in Chemistry serve those preparing for careers in chemistry, biochemistry, medicine, chemical engineering, pharmacy, and allied fields as well as those seeking a general knowledge of chemistry as part of a liberal arts education. Beyond the first-year courses, there is an emphasis on development of technical knowledge and laboratory experience needed in chemistry and related scientific fields. The undergraduate majors prepare students for work in research and testing laboratories, as well as for business positions in which a chemistry

background is desirable. Graduate work is necessary for those planning to do college and university teaching or industrial research.

*Effective Fall 2015*

#### **Exclusions:**

*The Chemical Measurement Science Academic Minor is not open to students concentrating in Biochemistry, Biomolecular Science, Interdisciplinary Chemical Sciences, or Chemistry.*

#### Advising

Students wishing to pursue a minor offered by the Chemistry Department must develop a specific plan for its completion in consultation with the Department's designated advisor. [Chemistry](#), [Chemical Physics](#), [Polymer Chemistry](#), and Chemical Measurement Science minors are arranged in consultation with any Chemistry department advisor, while [Biochemistry](#) minors are arranged in consultation with any Biochemistry advisor. Information about scheduling advising appointments is available from the Department's [website](#).

#### Grade Policies

The department strongly recommends that a student earn a grade of at least C– in all CHEM courses and mathematics, physics, and biology courses that are prerequisite for subsequent elections. A major program grade point average of at least 2.0 is required; this includes chemistry courses, mathematics, physics, and biology prerequisites, and advanced electives that are part of a major plan. Prerequisites must be taken for a grade. Students must request any change in a chemistry course grade within the first fifteen University Business days of the first full term following the term in which the disputed grade was issued.

#### Prerequisites

- MATH 115 (or 120), or equivalent;
- PHYSICS 135, 140, or equivalent.

#### Requirements

##### **Minimum Credits: 18**

1. *Core:* CHEM 210/211, CHEM 260 or 370, CHEM 241/242, CHEM 447.
2. *Electives:* CHEM 480\*, CHEM 545\*.

\*Although prerequisites are not enforced, students who elect CHEM 480 or 545 should consider taking, or having taken, advanced physical chemistry beyond the CHEM 260/370 level.

# Chemical Physics Minor

The Chemical Physics academic minor provides a concentrated exposure to physical chemical principles.

The curricula in Chemistry serve those preparing for careers in chemistry, biochemistry, medicine, chemical engineering, pharmacy, and allied fields as well as those seeking a general knowledge of chemistry as part of a liberal arts education. Beyond the first-year courses, there is an emphasis on development of technical knowledge and laboratory experience needed in chemistry and related scientific fields. The undergraduate majors prepare students for work in research and testing laboratories, as well as for business positions in which a chemistry background is desirable. Graduate work is necessary for those planning to do college and university teaching or industrial research.

*Effective Fall 2012*

## **Exclusions:**

*The Chemical Physics Academic Minor is not open to students concentrating in Biochemistry, Biomolecular Science, Biophysics, Interdisciplinary Chemical Sciences or Chemistry.*

*Students electing a minor within the Department of Chemistry may only elect ONE of the five minors offered by the Department.*

## Advising

Students develop a plan for the major in consultation with a program advisor. Those interested in a B.S. degree with a major in Chemical Science (120 credits) or the specialized program leading to the Bachelor of Science in Chemistry (124 credits) are urged to consult a program advisor during the freshman and/or sophomore years. Prospective majors are advised that further study in chemistry requires adequate performance in early chemistry courses (preferably B- or better) as well as in the mathematics and physics prerequisites. Students interested in an Honors degree should see the Chemistry Honors advisor. Appointments are scheduled online at <http://lsa.umich.edu/chem/undergraduates/advising.html>. Students interested in the joint program with the College of Engineering should make an appointment with [John Stratman](#) [Academic Advising Center, 1255 Angell Hall, 734.764.0332] and then make an appointment to see a chemistry department advisor online.

## Grade Policies

The department strongly recommends that a student earn a grade of at least C– in all CHEM courses and mathematics, physics, and biology courses that are prerequisite for subsequent elections. A major program grade point average of at least 2.0 is required; this includes chemistry courses, mathematics, physics, and biology prerequisites, and advanced electives that are part of a major plan. Prerequisites must be taken for a grade. Students must request any change in a chemistry course grade within the first fifteen University Business days of the first full term following the term in which the disputed grade was issued.



## Prerequisites

MATH 215, or equivalent; PHYSICS 235, 240, or equivalent.

## Requirements

**Minimum Credits: 18**

At least 18 credits of courses as follows: CHEM 130,\* CHEM 210/211, CHEM 260 or CHEM 370, CHEM 461, CHEM 462, CHEM 463 or 453.

\*Students who do not place into CHEM 210 are strongly recommended to take CHEM 130. Neither CHEM 130, nor AP credits earned for CHEM 130, count toward the academic minor.

# Chemical Science Major

This major exposes students to all sub-disciplines in Chemistry, but provides more flexibility in course selection than the **BS Chemistry** degree. Undergraduate research is an option, but not a requirement for this degree. The major in Chemical Sciences is directed toward students who have interdisciplinary interests and are not planning to either attend a traditional graduate program in chemistry or to find immediate employment as a Chemist. Instead, this degree is geared towards students who plan to attend graduate school in an interdisciplinary field where chemical knowledge will be beneficial, and this should also be an attractive option to students that plan to pursue post-graduate degrees in the Health Sciences.

The curricula in Chemistry serve those preparing for careers in chemistry, biochemistry, medicine, chemical engineering, pharmacy, and allied fields as well as those seeking a general knowledge of chemistry as part of a liberal arts education. Beyond the first-year courses, there is an emphasis on development of technical knowledge and laboratory experience needed in chemistry and related scientific fields. The undergraduate majors prepare students for work in research and testing laboratories, as well as for business positions in which a chemistry background is desirable. Graduate work is necessary for those planning to do college and university teaching or industrial research.

**BS Major in Chemical Science:** This degree also exposes students to all sub-disciplines in Chemistry, but provides more flexibility in course selection than the BS Chemistry degree. Undergraduate research is an option, but not a requirement for this degree. The BS Major in Chemical Sciences is directed towards students who have interdisciplinary interests and are not planning to either attend a traditional graduate program in chemistry or to find immediate employment as a Chemist. Instead, this degree is geared towards students who plan to attend graduate school in an interdisciplinary field where chemical knowledge will be beneficial, and this should also be an attractive option to students that plan to pursue post-graduate degrees in the Health Sciences.

It is strongly recommended that students who are thinking of degrees in chemistry should arrange an appointment with a Chemistry advisory via the online advising system as soon as possible, preferably before the end of the freshman year but certainly before the end of the sophomore year. The online appointment scheduling system can be found here:  
<http://www.umich.edu/~michchem/undergrad/index.html>.

*Effective Winter 2020*

### **Exclusions:**

*Students who elect a major in Chemical Science may not elect the following major: Interdisciplinary Chemical Sciences. They may also not elect any of the Chemistry minors.*

### Advising

Students develop a plan for the major in consultation with a program advisor. Those interested in a B.S. degree with a major in Chemical Science (120 credits) or the specialized program leading to the *Bachelor of Science* in Chemistry (124 credits) are urged to consult a program advisor during the freshman and/or sophomore years. Prospective majors are advised that further study in chemistry requires adequate performance in early chemistry courses (preferably B- or better) as well as in the mathematics and physics prerequisites. Students interested in an Honors degree should see the Chemistry Honors advisor. Appointments are scheduled online at <http://lsa.umich.edu/chem/undergraduates/advising.html>. Students interested in the joint program with the College of Engineering should make an appointment with [John Stratman](#) [Academic Advising Center, 1255 Angell Hall, 734.764.0332] and then make an appointment to see a chemistry department advisor online.

### Grade Policies

The department strongly recommends that a student earn a grade of at least C– in all CHEM courses and mathematics, physics, and biology courses that are prerequisite for subsequent elections. A major program grade point average of at least 2.0 is required; this includes chemistry courses, mathematics, physics, and biology prerequisites, and advanced electives that are part of a major plan. Prerequisites must be taken for a grade. Students must request any change in a chemistry course grade within the first fifteen University Business days of the first full term following the term in which the disputed grade was issued.

### Prerequisites

- CHEM 210/211, 215, 216, 241/242, and 260
- PHYSICS [135/136 or 140/141] and [235/236 or 240/241]
- MATH 115 (or 120), 116 (or 121), or equivalent sequence.
- CHEM 262; OR MATH 215 and one of MATH 214, 216 or 217, or equivalent

### Requirements

#### **Minimum Credits: 24**

- CHEM 302 or 303
- Two of CHEM 351, 402, 419, 420
- Two of CHEM 447, 461, [463 or 453]
- CHEM 462 (Note: CHEM 462 is to be taken concurrent with CHEM 461, 463 or 452).
- Two different courses from the following CHEM 352, 399 (taken over 2 semesters), 436, 482, 483 to total a minimum of 5 credits.
- Additional 3-credit upper-level elective lecture

## Distribution Policy

No course used to fulfill a major requirement may be used toward [the LSA Distribution Requirement](#). In addition, courses in the CHEM subject area may not be used toward the Distribution Requirement.

## Honors

Students may obtain Honors in Chemical Science by successfully completing all courses required for the Chemical Science major with an overall GPA of 3.4 and a major GPA of 3.4. In addition, students obtaining Honors must complete one additional upper-level Chemistry elective lecture (chosen in consultation with the department advisor), complete four credits elected over at least two terms of CHEM 399 and write a thesis based on their undergraduate research. Students must register for one credit of CHEM 499 in the term in which they plan to submit their thesis.

## Teaching Certificate

Those seeking a B.S. with a **teaching certificate in Chemistry** must fulfill departmental as well as **School of Education** requirements. Students who plan to earn a teaching certificate with a teaching major or minor in Chemistry should contact the School of Education Office of Academic Services.

# Chemistry Minor

The Chemistry minor provides a broad and general exposure to the traditional areas of the chemical sciences.

*Effective Fall 2019*

### Exclusions:

*The Chemistry Academic Minor is not open to students concentrating in Biochemistry, Biomolecular Science, Interdisciplinary Chemical Sciences, Chemistry, Cell and Molecular Biology, Biology, General Biology, Neuroscience, Ecology and Evolutionary Biology, Plant Biology, and Microbiology*

*Students electing a minor within the Department of Chemistry may only elect ONE of the five minors offered by the Department.*

## Advising

Students develop a plan for the major in consultation with a program advisor. Those interested in a B.S. degree with a major in Chemical Science (120 credits) or the specialized program leading to the *Bachelor of Science in Chemistry* (124 credits) are urged to consult a program advisor during the freshman and/or sophomore years. Prospective majors are advised that further study in chemistry requires adequate performance in early chemistry courses (preferably B- or better) as well as in the mathematics and physics prerequisites. Students interested in an Honors degree should see the Chemistry Honors advisor. Appointments are scheduled online at

[www.lsa.umich.edu/chem/undergraduate/advising](http://www.lsa.umich.edu/chem/undergraduate/advising). Students interested in the joint program with the College of Engineering should make an appointment with [John Stratman](#) [Academic Advising Center, 1255 Angell Hall, 734.764.0332] and then make an appointment to see a chemistry department advisor online.

### Grade Policies

The department strongly recommends that a student earn a grade of at least C– in all CHEM courses and mathematics, physics, and biology courses that are prerequisite for subsequent elections. A major program grade point average of at least 2.0 is required; this includes chemistry courses, mathematics, physics, and biology prerequisites, and advanced electives that are part of a major plan. Prerequisites must be taken for a grade. Students must request any change in a chemistry course grade within the first fifteen University Business days of the first full term following the term in which the disputed grade was issued.

### Prerequisites

- MATH 115 (or 120), or equivalent;
- PHYSICS 135, 140, or equivalent.

### Requirements

#### Minimum Credits: 18

1. *Core:* CHEM 130\* & CHEM 210/211.
2. *Electives:* CHEM 215/216, CHEM 241/242, CHEM 260 (or CHEM 261 and CHE 330), CHEM 302 or 303, CHEM 419 or 420, CHEM 402, CHEM 461, CHEM 482.

\*Students who do not place into CHEM 210 are strongly recommended to take CHEM 130.

### Constraints

Neither CHEM 130, nor AP credits earned for CHEM 130, count toward the minor.

## Bachelor of Science in Chemistry (B.S.Chem.)

The curriculum leading to the degree of Bachelor of Science in Chemistry has been planned for students preparing for professional work in chemistry, biochemistry, or related fields. The [major in chemical sciences](#) entails a lesser degree of specialization than that leading to the B.S.Chem.

The B.S.Chem. is the most rigorous degree in pure chemistry offered by the [department](#), and it should be the degree of choice for students who plan to pursue Ph.D. studies in one of the traditional sub-areas of the field (organic chemistry, inorganic chemistry, physical chemistry, and analytical chemistry) or students who plan to seek careers in the chemical industry. Students are required to take several lecture and lab courses in all of these core areas and are also required to complete four credits (two semesters) of undergraduate research.

The program leading to Honors in chemistry is available to qualified students.

In addition, there is a [five-year joint degree program](#) with the College of Engineering that leads to a B.S.Chem. and a [Bachelor of Science in Engineering \(Chemical Engineering\)](#).

It is strongly recommended that students who are thinking of degrees in chemistry should arrange an appointment with a chemistry advisor via the [online appointment scheduling system](#) as soon as possible, preferably before the end of their freshman year but certainly before the end of their sophomore year.

## Degree Program

A minimum program leading to this degree is given in the following list of courses and requirements.

***Exclusions:*** *Students who elect the B.S.Chem. may not elect the following majors: Interdisciplinary Chemical Sciences or Chemical Science. They may also not elect any of the Chemistry minors.*

A Bachelor of Science in Chemistry degree requires competency in each major area of knowledge and a deep understanding of chemistry. Each student is required also to [achieve competency in the use of the English language](#), to acquire second-year college-level [proficiency in a language other than English](#), to receive credit for an approved course addressing questions on [race and ethnicity](#), and to fulfill the [quantitative reasoning requirement](#). The B.S.Chem. degree requires 60 credits of approved courses in the physical and natural sciences and/or mathematics.

## Chemistry Degree Credit and GPA Requirements

A student must complete a minimum of 124 credits with a cumulative GPA of 2.0 (C) or better. This includes chemistry courses, mathematics and physics prerequisites, and advanced electives that are part of the degree program.

## Special Departmental Policies (effective Fall 2015)

The department strongly recommends that a student earn a grade of at least C– in all CHEM courses and mathematics, physics, and biology courses that are prerequisite for subsequent elections. A major program grade point average of at least 2.0 is required; this includes chemistry courses, mathematics, physics, and biology prerequisites, and advanced electives that are part of a major plan. Prerequisites must be taken for a grade. Students must request any change in a chemistry course grade within the first 15 University business days of the first full term following the term in which the disputed grade was issued.

## Prerequisites to the Program (*Must be taken for a grade*)

- CHEM courses through 215, 216, CHEM 241/242, and CHEM 260 or 370
- PHYSICS [135/136 or 140/141] and [235/236 or 240/241]
- MATH 115 (or 120), and MATH 116 (or 121)
- CHEM 262 (or MATH 215, and MATH 216 or 217)

PHYSICS 240 or 235 and MATH 215 are prerequisites for CHEM 461, and students should, whenever possible, complete both of these before their junior year.

### Chemistry Degree Course Requirements

CHEM 302 or 303, 402, 447, 461, 462, 463, 482, and 483, plus four credits of CHEM 399 taken over at least two terms, as well as one advanced lecture course in chemistry.

### Honors Plan in Chemistry

The B.S.Chem. degree is the basis of the Honors degree in chemistry. Maintenance of a satisfactory GPA (3.4) in the courses required for the degree program, including prerequisites, and satisfactory completion of an Honors thesis (CHEM 499) based on the research done in CHEM 399 are required for Honors. All students, whatever their program, who are interested in an Honors degree should see the chemistry Honors advisor (Room 1500 Chemistry) for approval for participation in the Honors Program in chemistry.

## Classical Archaeology Major

A major in Classical Studies equips its students with the knowledge, skills, intellectual agility, and different points of view to pursue a variety of careers, whether the student's next step is entry into the workforce or further education in professional or graduate school. Faculty advisers work with students to develop a program of study within their major and to articulate the connections between their education and career goals and aspirations.

### Learning Goals for All Majors

Every major in Classical Studies asks students to:

- explore the many facets of the ancient world—its history, societal and cultural practices, and intellectual endeavors (e.g., law, religion, political theory and practice, art and material objects, language and literature, philosophy, science)
- recognize and interpret the complexities of the ancient world, including such problematic aspects as slavery, gender inequality, and various types of bias
- understand different critical perspectives
- ask questions and engage in critical thinking, especially analysis and synthesis of information, ideas, and situations to solve complex problems
- work with a variety of primary sources, both textual (in the original language or translation) and material (aided by the resources of the Kelsey Museum and the papyrology collection)
- make inferences from the fragmentary and incomplete record of the past
- communicate complex ideas and persuasive arguments in writing and oral presentations
- conduct research using primary and secondary sources, including both traditional and digital media

The Classical Studies Department encourages its students to participate in the wide array of events and activities in which faculty and graduate students are involved, including UROP projects, student clubs, lectures, brown bag presentations, and reading groups. Students are also encouraged to study abroad.

Because many Classical Studies courses are small, majors have opportunities to work closely with their professors, and professors get to know their students well.

## **Classical Archaeology**

In addition to the learning goals stated above, the Classical Archaeology major asks students to:

- examine the diverse material and visual record of the ancient Mediterranean world
- learn practical, theoretical, and scientific methods in archaeology
- acquire hands-on experience through class projects, collaboration with the Kelsey Museum of Archaeology, and/or participation in archaeological fieldwork

Courses in Classical Archaeology generally do not require knowledge of Greek or Latin.

*Effective Fall 2018*

### Advising

Students interested in the Department's majors in Greek (Ancient), Latin, Classical Languages and Literatures, Classical Archaeology, Classical Civilization or Greek (Modern) major should check with the [Department office](#) for the name of the current advisor. Students interested in obtaining Teacher Certification in Latin should see Professor Deborah Ross.

The Department recommends that interested students see the department advisors as early as possible in order to plan their programs and avoid unnecessary scheduling conflicts.

Students wishing to pursue a minor in Classical Studies must develop a specific plan for its completion in consultation with the Department's designated advisor.

### Grade Policies

The department requires that a student earn a grade of at least C– in all *language* courses which are prerequisite for subsequent elections. A student should repeat any *language* course in which a D+ or lower grade is earned and which serves as a prerequisite to other courses which are to be elected. A grade of D+ signifies some achievement but denotes too weak a foundation for subsequent courses.

### Prerequisites

None.

### Requirements

**Minimum Credits: 27**

Requires a minimum of 9 courses (at least 3 credits each) including:

1. two of the following introductory courses: CLARCH 221, 222, 323



2. three upper-level courses (numbered 325 and above) in the field of Classical Archaeology.
3. one course in either Greek or Roman history or civilization.
4. In consultation with an advisor, one upper-level course in a cognate field (e.g., Anthropology, History, History of Art, Near Eastern Studies, Religion, Women's Studies).
5. third-term proficiency in Greek or Latin (usually met by successful completion of GREEK 301 or the equivalent, or LATIN 231 or the equivalent). Students who plan to fulfill this requirement in other ways should speak to the undergraduate advisor.
6. At least one additional relevant course at the 400 level.

Students interested in possibly continuing in the field of Classical Archaeology should discuss their plans with the undergraduate advisor as early and as frequently as possible. Graduate school in Classical Archaeology requires knowledge of both Ancient Greek and Latin and the department advisor can assist in planning a curriculum to include both languages.

### Other Department Policies

#### Field Experience

Recommended but not required for a major in Classical Archaeology. There are several opportunities for students to join excavations in the Mediterranean area under the supervision of University of Michigan faculty. Contact the Department to speak with an advisor.

#### Distribution Policy

No course used to fulfill a major requirement may be used toward the [LSA Distribution Requirement](#). In addition, courses in the CLARCH, CLCIV, CLLING, GREEK, GREEKMOD, and LATIN subject areas may not be used toward the Distribution Requirement.

#### Honors

##### *Effective Date of Honors requirements for the major Fall 2006*

The department offers Honors in each of the six majors. Interested students who have a cumulative grade point average of at least 3.5 should contact their department advisor to discuss an Honors thesis no later than the winter term of their junior year at the latest.

It is the student's responsibility to find a suitable faculty advisor to oversee the thesis project. This project and its components are to be decided collectively by the student and the advisor at the end of the junior year. We encourage students to think creatively about the approach to their research and thesis project. Thesis advisors must sign off on a student's thesis project proposal.

Honors students may receive six credits during their senior year for research culminating in a thesis project by registering for one of the following courses: CLARCH 495, CLCIV 495, GREEK 495 or LATIN 495 depending on the major. At the end of the thesis project, the candidate must offer an oral defense of this work to a committee comprised of the thesis advisor and another faculty member, and present their research findings at the Classical Studies Honors Symposium.



Additional requirements for Honors candidates are specified with each major.

### **Honors Plan in Classical Archaeology**

In addition to the Honors plan requirements stated above, Honors candidates must satisfy the following:

- 3.4 minimum overall GPA; 3.5 minimum major GPA
- Completion of an Honors thesis and oral defense in coordination with a Classics faculty member
- Completion of eight credits in the second classical language (Greek if the major language is Latin; Latin if the major language is Greek).
- CLCIV 480 *section titled "Research Seminar"* (Fall term)

Students may also elect CLARCH 495 for 1-2 credits in the Fall and 1-3 credits in the Winter, but are not required to do so.

## **Classical Archaeology Minor**

The minor in Classical Archaeology is intended to provide students with the opportunity to explore the archaeology and art of the ancient Mediterranean world. Students will acquire a broad archaeological, historical and cultural overview, before turning to more specific courses dealing with the artistic production and material conditions of Greek and Roman society.

*Effective Winter 2021*

### **Exclusions:**

*The Academic minor in Classical Archaeology is not open to students with a major in Classical Archaeology or Classical Civilization or any other minor in the Department of Classical Studies.*

### **Advising**

Students interested in the Department's majors in Greek, Latin, Classical Languages and Literatures, Classical Archaeology, Classical Civilization or Modern Greek major should check with the [Department office](#) for the name of the current advisor. Students interested in obtaining Teacher Certification in Latin should see Professor Deborah Ross.

Major advising for Modern Greek is provided by Professor Vassilios Lambropoulos and Artemis Leontis. Information about scheduling appointments is available from the [department office](#).

The Department recommends that interested students see the department advisors as early as possible in order to plan their programs and avoid unnecessary scheduling conflicts.

Students wishing to pursue a minor in Classical Studies must develop a specific plan for its completion in consultation with the Department's designated advisor . Appointments may be scheduled at 2160 Angell Hall.

### Grade Policies

The department requires that a student earn a grade of at least C– in all language courses which are prerequisite for subsequent elections. A student should repeat any language course in which a D+ or lower grade is earned and which serves as a prerequisite to other courses which are to be elected. A grade of D+ signifies some achievement but denotes too weak a foundation for subsequent courses.

### Prerequisites

CLARCH 221, 222, or 323.

### Requirements

#### Minimum Credits: 16

At least 16 credits of courses, to be chosen from the following three categories as stated:

1. **Introductory courses:** At least one broad introductory course in classical archaeology, other than the course elected to meet the prerequisite (CLARCH 221, 222, or 323).
2. **Civilization or History courses (Greek or Roman):** At least one broad introductory course (CLCIV 101, 202, 302; HISTORY 200, 201).
3. **Upper-Level Classical Archaeology courses:** At least three courses at the 300- or 400-level in CLARCH.

## Classical Civilization Major

A major in Classical Studies equips its students with the knowledge, skills, intellectual agility, and different points of view to pursue a variety of careers, whether the student's next step is entry into the workforce or further education in professional or graduate school. Faculty advisers work with students to develop a program of study within their major and to articulate the connections between their education and career goals and aspirations.

### Learning Goals for All Majors

Every major in Classical Studies asks students to:

- explore the many facets of the ancient world—its history, societal and cultural practices, and intellectual endeavors (e.g., law, religion, political theory and practice, art and material objects, language and literature, philosophy, science)
- recognize and interpret the complexities of the ancient world, including such problematic aspects as slavery, gender inequality, and various types of bias
- understand different critical perspectives
- ask questions and engage in critical thinking, especially analysis and synthesis of information, ideas, and situations to solve complex problems

- work with a variety of primary sources, both textual (in the original language or translation) and material (aided by the resources of the Kelsey Museum and the papyrology collection)
- make inferences from the fragmentary and incomplete record of the past
- communicate complex ideas and persuasive arguments in writing and oral presentations
- conduct research using primary and secondary sources, including both traditional and digital media

The Classical Studies Department encourages its students to participate in the wide array of events and activities in which faculty and graduate students are involved, including UROP projects, student clubs, lectures, brown bag presentations, and reading groups. Students are also encouraged to study abroad.

Because many Classical Studies courses are small, majors have opportunities to work closely with their professors and professors get to know their students well.

### **Classical Civilization**

In addition to the learning goals stated above, the Classical Civilization major asks students to:

- understand the interrelationship of history, society, and culture of the ancient Greco-Roman world
- learn practical and theoretical methods for understanding this interrelationship
- familiarize oneself with at least one ancient civilization outside of Greek and Roman civilizations

*Effective Winter 2021*

### **Advising**

Students interested in the Department's majors in Greek, Latin, Classical Languages and Literatures, Classical Archaeology, Classical Civilization or Modern Greek major should check with the [Department office](#) for the name of the current advisor. Students interested in obtaining Teacher Certification in Latin should see Professor Deborah Ross.

The Department recommends that interested students see the department advisors as early as possible in order to plan their programs and avoid unnecessary scheduling conflicts.

Students wishing to pursue a minor in Classical Studies must develop a specific plan for its completion in consultation with the Department's designated advisor.

### **Grade Policies**

The department requires that a student earn a grade of at least C– in all language courses which are prerequisite for subsequent elections. A student should repeat any language course in which a D+ or lower grade is earned and which serves as a prerequisite to other courses which are to be elected. A grade of D+ signifies some achievement but denotes too weak a foundation for subsequent courses.

## Prerequisites

A minimum of two courses from the following choices, for a total of 8 credits. One course must emphasize Greek culture and the other course must emphasize Roman culture:

- CLCIV 101, 202
- HISTORY 200, 201
- GTBOOKS 191
- CLARCH 221, 222

## Requirements

### **Minimum Credits: 27**

A minimum of nine courses of at least 3 credits each. Knowledge of Greek or Latin is not required for this program but is highly recommended.

1. One CLCIV course at the 200-level (minimum 3 credits).
2. Six courses (minimum 18 credits) in Classical Civilization, with at least three at the 300-level and at least two at the 400-level. Three of the six must belong to one of the following clusters: A) Language, Literature and Reception, B) History and Archaeology, or C) Religion and Philosophy. Greek and Latin language courses at the 3rd term or higher may be counted towards any of the cluster courses or as one of the three additional courses (with prior approval from the major advisor).
3. One upper-level elective cognate course (minimum 3 credits), chosen in consultation with the major advisor.
4. The "Capstone Seminar" - CLCIV 480 (advanced discussion and writing of a 12-15 page research paper on a topic in Classical Civilization) (3 credits) (Must register for section 001 (2 credits) and section 002 (1 credit)).

## **CLCIV Courses by Cluster**

List of courses that may be counted towards each cluster. Note that this list is not meant to be exhaustive, and students should consult with the major advisor about selecting courses for their chosen cluster.

### ***A) Language, Literature and Reception***

Ancient Greek at the 300- and 400-level

Latin at the 200-, 300- and 400-level

CLCIV 328: Ancient Languages and Scripts

CLCIV 385: Greek Mythology

CLCIV 464: Ancient Epic

CLCIV 473: Roman Decadence

GREEKMOD 325: Athens, Past and Present

GREEKMOD 340: Travels to Greece

### ***B) History and Archaeology***

CLCIV 302: The Roman Republic

CLCIV 375: War in Greek and Roman Civilization  
CLCIV 376: Emperors of Rome  
CLCIV 382: Food in the Ancient World  
CLCIV 392/HIST 292: Ancient Medicine  
CLCIV 468: Greeks, Romans and Egyptians  
300- and 400-level CLARCH courses also count towards this cluster  
Greek and Latin language courses with a history focus (i.e. Herodotus, Thucydides)

### ***C) Religion and Philosophy***

CLCIV 293 Ancient World Ethics  
CLCIV 347 Roman Religion  
CLCIV 381: Magic & Witchcraft  
CLCIV 475: Socrates Man & Myth  
CLCIV 466: Greek Religion  
CLCIV 476: Pagans and Christians  
CLCIV 388/PHIL 388: Survey of Ancient Greek Philosophy  
Greek and Latin language courses with a religion/philosophy focus (i.e. Lucretius)

### **Distribution Policy**

No course used to fulfill a major requirement may be used toward the [LSA Distribution Requirement](#). In addition, courses in the CLARCH, CLCIV, CLLING, GREEK, GREEKMOD, and LATIN subject areas may not be used toward the Distribution Requirement.

### **Honors**

The department offers Honors in each of the six majors. Interested students who have a cumulative grade point average of at least 3.5 should contact their department advisor to discuss an Honors thesis no later than the winter term of their junior year at the latest.

It is the student's responsibility to find a suitable faculty advisor to oversee the thesis project. This project and its components are to be decided collectively by the student and the advisor at the end of the junior year. We encourage students to think creatively about the approach to their research and thesis project. Thesis advisors must sign off on a student's thesis project proposal.

Honors students may receive six credits during their senior year for research culminating in a thesis project by registering for one of the following courses: CLARCH 495, CLCIV 495, GREEK 495 or LATIN 495 depending on the major. At the end of the thesis project, the candidate must offer an oral defense of this work to a committee comprised of the thesis advisor and another faculty member, and present their research findings at the Classical Studies Honors Symposium.

Additional requirements for Honors candidates are specified with each major.

### **Honors Concentration in Classical Civilisations**

In addition to the above requirements, students pursuing an Honors major must satisfy the following:

- 3.4 minimum overall GPA; 3.5 minimum major GPA
- Completion of an Honors thesis and oral defense in coordination with a Classics faculty member

- Completion of two additional cognate courses deemed relevant to the thesis
- Fourth term language proficiency in either ancient Greek or Latin.
- CLCIV 480 *section titled "Research Seminar"* (in addition to a CLCIV 480 Capstone Seminar already required for majors)

Students may also elect CLCIV 495 for 1-2 credits in the Fall and 1-3 credits in the Winter but are not required to do so.

## Classical Civilization Minor

This academic minor is designed to provide a grounding in ancient Greek and Roman civilization for those unable to elect Classical Civilization as a major. It requires students to learn about the history, literature, religion, philosophy, and material culture of ancient Greece and Rome, primarily through the close reading and analysis of original Greek and Latin texts in translation. Confrontation with how people lived and thought in ancient Greece and Rome allows students to gain an understanding of the relation between the ancient and modern world in all its complexity, and gives them valuable intellectual tools to deal with issues in many aspects of modern life. Courses in Classical Civilization also enhance students' ability to think critically and improve their competence in written and oral communication.

*Effective Winter 2021*

### Exclusions:

*The Academic minor in Classical Civilization is not open to students with a major in Classical Civilization or any other academic minor in the Department of Classical Studies.*

### Advising

Students interested in the Department's majors in Greek, Latin, Classical Languages and Literatures, Classical Archaeology, Classical Civilization or Modern Greek major should check with the [Department office](#) for the name of the current advisor. Students interested in obtaining Teacher Certification in Latin should see Professor Deborah Ross.

The Department recommends that interested students see the department advisors as early as possible in order to plan their programs and avoid unnecessary scheduling conflicts.

Students wishing to pursue a minor in Classical Studies must develop a specific plan for its completion in consultation with the Department's designated advisor .

### Grade Policies

The department requires that a student earn a grade of at least C– in all language courses which are prerequisite for subsequent elections. A student should repeat any language course in which a D+ or lower grade is earned and which serves as a prerequisite to other courses which are to be elected. A grade of D+ signifies some achievement but denotes too weak a foundation for subsequent courses.

## Prerequisites

Choose one broad introductory course (4 credits) on Greek or Roman culture from the following:

- CLCIV 101: The Ancient Greek World
- CLCIV 202: The Ancient Roman World
- HISTORY 200: Greece to 201 B.C.
- HISTORY 201: Rome
- GTBOOKS 191: Great Books
- CLARCH 221: Intro to Greek Archaeology
- CLARCH 222: Intro to Roman Archaeology

## Requirements

**Minimum Credits: 16**

At least five additional courses (minimum 16 credits) in Classical Civilization. One of these must be another course from the prerequisite list above (at the 200-level) in the culture not chosen to fulfill the prerequisite. The remaining four must be (a) at the 300-level or above and (b) one must be at the 400-level.

One of the 300-level courses in Classical Civilization may be substituted for with any of the following

1. One 300-level course (minimum 3 credits) in Classical Archaeology
2. One course (minimum 3 credits) in Greek or Roman History (other than one taken as a prerequisite)
3. One course in ancient Greek or Latin at the third-semester level or above
4. GREEKMOD 325: Athens Present and Past

# Classical Languages and Literatures Major

A major in Classical Studies equips its students with the knowledge, skills, intellectual agility, and different points of view to pursue a variety of careers, whether the student's next step is entry into the workforce or further education in professional or graduate school. Faculty advisers work with students to develop a program of study within their major and to articulate the connections between their education and career goals and aspirations.

## Learning Goals for All Majors

Every major in Classical Studies asks students to:

- explore the many facets of the ancient world—its history, societal and cultural practices, and intellectual endeavors (e.g., law, religion, political theory and practice, art and material objects, language and literature, philosophy, science)
- recognize and interpret the complexities of the ancient world, including such problematic aspects as slavery, gender inequality, and various types of bias
- understand different critical perspectives
- ask questions and engage in critical thinking, especially analysis and synthesis of

information, ideas, and situations to solve complex problems

- work with a variety of primary sources, both textual (in the original language or translation) and material (aided by the resources of the Kelsey Museum and the papyrology collection)
- make inferences from the fragmentary and incomplete record of the past
- communicate complex ideas and persuasive arguments in writing and oral presentations
- conduct research using primary and secondary sources, including both traditional and digital media

The Classical Studies Department encourages its students to participate in the wide array of events and activities in which faculty and graduate students are involved, including UROP projects, student clubs, lectures, brown bag presentations, and reading groups. Students are also encouraged to study abroad.

Because many Classical Studies courses are small, majors have opportunities to work closely with their professors and professors get to know their students well.

### **Greek, Latin, or Classical Languages and Literatures (Greek and Latin)**

In addition to the learning goals mentioned above, each of the three language tracks asks students to:

- attain a sophisticated understanding of the ancient language(s) and a deepened understanding of how language constructs meaning
- attain a deep familiarity with foundational literary works and genres through close reading and critical analysis of the content and structure of texts in the original language(s)
- understand the ancient language(s) as the source for the terminology of medicine, law, and the sciences
- understand the wide-ranging influence of classical literature from antiquity to the modern era on cultural and creative enterprise
- draw on the rhetorical and narrative strategies of classical literature to strengthen and refine skills in writing clearly and persuasively

Our department provides free "drop-in" tutoring available to all students in the Elementary Latin and Greek courses.

*Effective Winter 2021*

#### [Advising](#)

Students interested in the Department's majors in Greek, Latin, Classical Languages and Literatures, Classical Archaeology, Classical Civilization or Modern Greek major should check with the [Department office](#) for the name of the current advisor. Students interested in obtaining Teacher Certification in Latin should see Professor Deborah Ross.



The Department recommends that interested students see the department advisors as early as possible in order to plan their programs and avoid unnecessary scheduling conflicts.

Students wishing to pursue a minor in Classical Studies must develop a specific plan for its completion in consultation with the Department's designated advisor.

### Grade Policies

The department requires that a student earn a grade of at least C– in all *language* courses which are prerequisite for subsequent elections. A student should repeat any *language* course in which a D+ or lower grade is earned and which serves as a prerequisite to other courses which are to be elected. A grade of D+ signifies some achievement but denotes too weak a foundation for subsequent courses.

### Prerequisites

None.

### Requirements

#### **Minimum Credits: 27**

The major requires study of both Greek and Latin; the student chooses one language as the primary language for the purpose of determining requirements. The student takes a minimum of 9 courses (of at least 3 credits each) including:

1. In the primary language at least 3 courses at the 400-level or above.
2. In the secondary language, at least one course at the 400-level or above (300-level courses can't be used in the secondary language).
3. At least 3 additional upper-level language courses (300-level count in the primary language only; courses in the secondary language must be at the 400-level or above).
4. One course selected from CLARCH (221 or 222), CLCIV (202, or 302), or HISTORY (200 or 201).
5. At least one upper-level (300- or 400-level) course in Greek or Roman civilization, archaeology, or history. Minimum of 3 credits.

### Constraints

Three credits of Independent Study (GREEK 499 and LATIN 499) may be used with written approval of the undergraduate advisor.

### Distribution Policy

No course used to fulfill a major requirement may be used toward the [LSA Distribution Requirement](#). In addition, courses in the CLARCH, CLCIV, CLLING, GREEK, GREEKMOD, and LATIN subject areas may not be used toward the Distribution Requirement.

## Honors

### *Effective Date of Honors requirements for the major Fall 2016*

The department offers Honors in each of the six majors. Interested students who have a cumulative grade point average of at least 3.5 should contact their department advisor to discuss an Honors thesis no later than the winter term of their junior year at the latest.

It is the student's responsibility to find a suitable faculty advisor to oversee the thesis project. This project and its components are to be decided collectively by the student and the advisor at the end of the junior year. We encourage students to think creatively about the approach to their research and thesis project. Thesis advisors must sign off on a student's thesis project proposal.

Honors students may receive six credits during their senior year for research culminating in a thesis project by registering for one of the following courses: CLARCH 495, CLCIV 495, GREEK 495 or LATIN 495 depending on the major. At the end of the thesis project, the candidate must offer an oral defense of this work to a committee comprised of the thesis advisor and another faculty member, and present their research findings at the Classical Studies Honors Symposium.

Additional requirements for Honors candidates are specified with each major.

### **Honors Concentration in Classical Civilizations**

In addition to the above requirements, students pursuing an Honors major must satisfy the following:

- 3.4 minimum overall GPA; 3.5 minimum major GPA;
- Completion of an Honors thesis and oral defense in coordination with a Classics faculty member
- Completion of one additional Greek or Latin course at the 420-level or above (CLCIV 480 & GREEK/LATIN 495 do not satisfy this requirement)
- CLCIV 480 *section titled "Research Seminar"* (Fall term)

Students may also elect GREEK or LATIN 495 (taken in the primary language) for 1-2 credits in the Fall and 1-3 credits in the Winter but are not required to do so.

## **Climate and Space Sciences and Engineering Minor**

Climate and Space Sciences and Engineering spans a broad range of geoscience and space science and engineering disciplines and attempts to understand the complex, coupled Earth and Space system. It is inherently multidisciplinary, involving departments from the College of Engineering and from other colleges.

The minor will attract and enable undergraduate students throughout the college and university to better prepare them for their chosen profession where knowledge of the climate and space science and engineering is essential for solving global problems.

The primary goal of the Climate and Space Sciences and Engineering (Climate & Space) Minor is to provide exposure to research opportunities in atmospheric, climate and space science and engineering for those students who wish to work in the geoscience or space industry but are not majoring in Climate and Space Sciences and Engineering. The secondary goal is to increase awareness of the Climate and Space Sciences and Engineering and the educational and research opportunities within Climate & Space within the College of Engineering as a whole.

Climate and Space Sciences and Engineering (Climate & Space) is offering a new minor for undergraduate students in the College of Engineering and undergraduates in other UM Schools and Colleges that have students pursuing degrees in the broader Earth and Space Sciences (LS&A, SNRE, Public Policy, Public Health, Ross).

The primary goal of the Climate & Space Minor is to provide exposure to research opportunities in atmospheric, climate and space science and engineering for students who wish to work in the geoscience or space industry but are not majoring in Climate and Space Sciences and Engineering. The secondary goal is to increase awareness of the Climate and Space Sciences and Engineering and the educational and research opportunities within Climate & Space within the College of Engineering as a whole.

The fields of climate, space sciences and engineering require scientists and engineers from a wide range of disciplines, including physics, geosciences, aerospace, mechanical, electrical, computer, civil and environmental engineering etc., in addition to meteorologists, climate scientists, space scientists and space engineers. The breadth required of understanding the coupled Earth and Space system and the tools (computer simulations, instruments and spacecraft) used requires graduates with knowledge of the Earth and Space system in order to be better prepared to succeed.

Contact our **Student Services Office** for more information about the program: [clasp\\_um@umich.edu](mailto:clasp_um@umich.edu)

### Eligibility

To be eligible to declare the minor, students must have:

- Registered no later than the last day to add courses for the semester in which they complete the last courses for the minor
- Submitted his or her program of study for the minor to the Climate & Space undergraduate advisor
- Attained a minimum GPA of 2.0 in the designated courses
- Complete the Climate & Space Minor as part of a degree program

## Requirements

### *Prerequisite coursework (18 credits):*

- MATH 115 (4)
- MATH 116 (4)
- PHYSICS 140/141 (5)
- PHYSICS 240/241 (5)

### *Required Coursework (6 credits)*

- One of the following four courses:  
SPACE 101 (Introduction to Rocket Science – 3 credits)  
CLIMATE 102 (Extreme Weather – 3 credits)  
SPACE 103 (Introduction to Space Weather – 3 credits)  
CLIMATE 105 (Our Changing Climate – 3 credits)
- CLIMATE 320/SPACE 320 (Earth and Space System Evolution, 3 credits)

### *Core Focus Courses (minimum 9 credits)*

At least three courses from one of the following tracks:

- Meteorology
- Climate Science and Impacts Engineering
- Space Science
- Space Engineering

### *Meteorology Core*

CLIMATE 321 Earth and Space System Dynamics 3  
CLIMATE 350 Atmospheric Thermodynamics 3  
CLIMATE 380 Introduction to Radiative Transfer 3  
CLIMATE 414 Weather Systems\* 3  
CLIMATE 422 Boundary Layer Meteorology\* 4  
CLIMATE 440 Meteorology Analysis Lab\* 4  
CLIMATE 462 Instrumentation 4  
CLIMATE 411 Cloud and Precipitation 3  
CLIMATE 463 Air Pollution Meteorology 3

### *Climate Science and Impacts Engineering Core*

CLIMATE 321 Earth and Space System Dynamics 3  
CLIMATE 350 Atmospheric Thermodynamics 3  
CLIMATE 380 Introduction to Radiative Transfer 3  
CLIMATE 401 Geophysical Fluid Dynamics 3  
CLIMATE 451 Atmospheric Dynamics\* 4  
CLIMATE 467 Biogeochemical Cycles 3

CLIMATE 466 Carbon Climate Interactions 3  
 CLIMATE 473 Climate Physics 3  
 CLIMATE 474 Ice Sheets, Glaciers and Climate Change 3  
 CLIMATE 480 Climate Change: The Move to Action 3

[Space Science Core](#)

SPACE 370 Solar-Terrestrial Relations 4  
 SPACE 478 Space Environment 4  
 SPACE 477 Space Weather Modeling 4  
 SPACE 495 Upper Atmosphere and Ionosphere 4  
 SPACE 462 Instrumentation 4

[Space Engineering Core](#)

SPACE 478 Space Environment 4  
 SPACE 405 Engineering Astrophysics 4  
 SPACE 462 Instrumentation 4  
 SPACE 581 Space Policy 3

\* These courses require a prerequisite within Climate & Space.

Climate & Space Minor Sample Program Paths			
Path Option	Required Core (6 Credits)	Path Preparation Core (3 Credits)	Electives (min 6 Credits)
Meteorology	CLIMATE 320 CLIMATE 321	CLIMATE 102	CLIMATE 350, CLIMATE 414
Climate Science and Engineering	CLIMATE 320 CLIMATE 321	CLIMATE 105	CLIMATE 401, CLIMATE 405
Space Science	SPACE 320 SPACE 321	SPACE 101 or 103	SPACE 370, SPACE 405
Space Engineering	SPACE 320 SPACE 321	SPACE 101 or 103	SPACE 370, SPACE 462

# Cognitive Science Major

*May be elected as an interdepartmental major, jointly administered by the Departments of Linguistics, Philosophy, and Psychology, and supervised by the Cognitive Science Executive Committee*

Cognitive science is the cross-disciplinary study of mind, brain, and behavior. This study is conducted at multiple levels of analysis, ranging from theories of neuronal processing, to computational models of how information is processed, to evolutionary models intending to explain various features of mental architecture. Recent advances in cognitive science — made possible in large part by crossing conventional disciplinary and departmental boundaries — are distinguished by efforts to build comprehensive theories that integrate these multiple levels of analysis. Through rigorous, multi-disciplinary investigations, the field continues to reformulate fundamental and enduring questions, while posing new ones, concerning the nature of, for example, thought, reason, decision, language, and knowledge.

The Weinberg Institute for Cognitive Science reflects these developments by coordinating interdisciplinary course offerings and research training for students seeking a degree in Cognitive Science. Tracks of study within the major provide primary (but concomitantly interdisciplinary) emphases on (a) **computation and cognition**, (b) **decision and cognition**, (c) **language and cognition**, and (d) **philosophy and cognition**. The major is therefore intended for students interested in a natural or social science degree in the behavioral and brain sciences with a combined focus and breadth not accommodated by a major within any single department.

*Effective Fall 2019*

## Advising

A three-tier advising system exists.

- Peer advisors (**Tier 1**) will help majors select a major track, identify courses that suit their interests, and plan course schedules.
- Students will meet with advisors in the major (student services staff; **Tier 2**) when declaring, making course substitutions, discussing transfer/study abroad credit evaluations, preparing major release forms, and more.
- Students will meet with faculty advisors (**Tier 3**) for more detailed discussions about their undergraduate preparation, graduate school, and research opportunities (including possible post-graduate training opportunities). Faculty advisors are faculty in Linguistics, Philosophy, and Psychology.

Although all tracks are interdisciplinary, each has a particularly heavy concentration of courses in one of the sponsoring units, and advisors for a given track will be primarily selected from that unit:

- **Computation and Cognition**
- **Decision and Cognition**
- **Language and Cognition**

- **Philosophy and Cognition**

Advising appointments can be made [here](#); or by contacting weinberg-institute@umich.edu

### Grade Policies

Cognitive Science majors must earn a grade of at least C- in all courses taken to satisfy the requirements of the major (including the major gateway/prerequisite course, COGSCI 200).

### Prerequisites

1. Have completed or are enrolled in COGSCI 200: Introduction to Cognitive Science
2. Prerequisites vary dependent on student's declared track. Courses used to satisfy track requirements may have additional prerequisites.

### Requirements

#### **Minimum Credits: 27**

The major is structured into four tracks, each representing a major area of research within contemporary cognitive science.

Each track consists of:

1. Three required courses
2. Six electives
  - a. Four elective courses chosen from a track-specific list
  - b. Two elective courses from any of the Cognitive Science tracks

**The combined set of students' required and elective courses must be selected from a minimum of three departments.**

### *Computation and Cognition Track*

A foundational idea of cognitive science is that mental processes are computational, and computation remains central to (but not the exclusive domain of) the field. This track requires students to take coursework in psychology and computer programming. Subsequent depth courses emphasize — although not exclusively so — computational and formal methods including machine learning, computational linguistics, rational choice theory, and mathematical psychology.

#### **Required Track Courses**

1. PSYCH 240: Introduction to Cognitive Psychology  
OR  
PSYCH 345: Introduction to Human Neuropsychology
2. EECS 281: Data Structures and Algorithms

3. EECS 492: Introduction to Artificial Intelligence  
OR  
EECS 445: Introduction to Machine Learning  
OR  
COGSCI 445: Introduction to Machine Learning for Natural Language Processing

**Electives.** Choose Six electives selected from:

Four elective courses chosen from a track-specific list

Two elective courses from any of the Cognitive Science tracks

- CMPLXSYS 270: Agent-Based Modeling
- CMPLXSYS 501: Introduction to Complex Systems
- CMPLXSYS 511: Theory of CMPLXSYS
- COGSCI / LING 209 / PSYCH 242: Language and Human Mind
- COGSCI 497: Directed Research for Cognitive Science
- COGSCI 498: Independent Study for Cognitive Science
- COGSCI 499: Senior Honors Research for Cognitive Science
- ECON 398: Strategy
- EECS 368: Special Topics, section titled "Conversational Artificial Intelligence: Principles and Practice of Virtual Assistant AI" (only if elected WN20 or later)
- EECS 376: Foundations of Computer Science
- EECS 442: Computer Vision
- EECS 445: Introduction to Machine Learning
- EECS 498: Special Topics , *section titled "Reinforcement Learning"*
- EECS 498: Special Topics, *sections entitled "Reinforcement Learning" or "Deep Learning" or "Conversational Artificial Intelligence" (only if taken Winter 2020 or later)*
- EECS 595 / LING 541 / SI 561: Natural Language Processing
- EECS / PSYCH 644: Computational Modeling of Cognition (only if elected WN 20 or later)
- IOE 536: Cognitive Ergonomics
- LING209 / PSYCH 242 / COGSCI 209: Language and Human Mind
- LING 347 / PSYCH 349: Talking Minds
- LING 441: Introduction to Computational Linguistics
- LING 442: The Anatomy of Natural Language Processing Systems
- LING 447 / PSYCH 445: Psychology of Language
- LING 492: Topics in Linguistics; section titled, "Computation and Data Science for Linguists" (only if elected FA19 or later)
- LING 541 / EECS 595 / SI 561: Natural Language Processing
- PHIL 303: Symbolic Logic
- PHIL 340: Minds and Machines
- PHIL 383: Knowledge and Reality
- PHIL 414: Mathematical Logic
- PHIL 443: Foundations of Rational Choice Theory
- PHIL 450: Philosophy of Cognition
- PHIL 482: Philosophy of Mind
- PSYCH 240: Introduction to Cognitive Psychology
- PSYCH 242 / COGSCI / LING 209: Language and Human Mind
- PSYCH 303: Res Methods in Psych
- PSYCH 330: Topics in Biopsychology, *section titled "Human Cognition Evolution" or "Introduction to Neural Circuits"*
- PSYCH 345: Introduction to Human Neuropsychology



- PSYCH 346: Learning and Memory
- PSYCH 347: Perception
- PSYCH 348: Psychology of Thinking
- PSYCH 349 / LING 347: Talking Minds
- PSYCH 355: Cognitive Development
- PSYCH 445 / LING 447: Psychology of Language
- PSYCH 448: Mathematical Psychology
- PSYCH / EECS 644: Computational Modeling of Cognition (*only if elected WN 20 or later*)
- SI 388: Putting the H in HCI: Human Perception, Cognition and Mental Processes (*only if elected WN 19 or later*)
- SI 422: Needs Assessment and Usability Evaluation
- SI 561 / EECS 595 / LING 541: Natural Language Processing

### ***Decision and Cognition Track***

The study of decision and choice is a lively area of contemporary cognitive science inquiry. The Decision and Cognition track provides students with sustained, cohesive instruction in a single, important content area: contemporary approaches to decision-making and choice. Students are presented with theoretical approaches to judgment and decision-making from psychology, emerging neurocircuit models of reward and reinforcement from neurobiology, algorithmic models of planning and action selection from computer science, formal approaches to rational choice (e.g., rational choice theory and game theory) from philosophy and political science, and cutting-edge approaches to understanding irrationality from behavioral economics. Critical thinking skills are honed as students learn about a well-defined content area from diverse perspectives and across multiple levels of analysis. The required courses in the Decision and Cognition track give students an introduction to historically influential approaches to decision-making drawn from three major fields. Students then have the opportunity to take coursework in a number of disciplines that approach decision-making from diverse but complementary theoretical perspectives.

### **Required Track Courses**

1. PHIL 361: Ethics
2. PHIL 443: Foundations of Rational Choice Theory  
or  
PHIL 444: Groups and Choices
3. PSYCH 449: Decision Processes

### **Electives.** Choose Six electives selected from:

Four elective courses chosen from a track-specific list

Two elective courses from any of the Cognitive Science tracks

- CMPLXSYS 270: Agent-Based Modeling

- CMPLXSYS 501: Introduction to Complex Systems
- CMPLXSYS 511: Theory of CMPLXSYS
- CMPLXSYS / POLSCI 391: Modeling Political Processes
- COGSCI 301: Special Topics for Cognitive Science, *section titled "Topics in Moral Psychology" (only if elected WN 20 or later)*
- COGSCI 302: Topics in Moral Psychology *(only if elected FA 20 or later)*
- COGSCI 497: Directed Research for Cognitive Science
- COGSCI 498: Independent Study for Cognitive Science
- COGSCI 499: Senior Honors Research for Cognitive Science
- ECON 395: Topics in Microeconomics and Microeconomic Policy, *section titled "Risk and Uncertainty"*
- ECON 398: Strategy
- ECON 409: Game Theory
- ECON 490: Topics in Microeconomics, *section titled "Behavioral Economics"*
- ECON 490: Topics in Microeconomics, *section titled "Ethics in Economic Behavior"*
- ENVIRON / PSYCH 360: Behavior and Environment *(only if elected WN 19 or later)*
- IOE 536: Cognitive Ergonomics
- LING 492: Topics in Linguistics, *section titled "Computation and Data Science for Linguists"*
- MKT 313: Consumer Behavior
- PHIL 340: Minds and Machines
- PHIL 384: Applied Epistemology
- PHIL 414: Mathematical Logic
- PHIL 429: Ethical Analysis
- PHIL 443: Foundations of Rational Choice Theory
- PHIL 444: Groups and Choices
- PHIL 485: Philosophy of Action
- POLSCI / CMPLXSYS 391: Modeling Political Processes
- POLSCI 489: Advanced Topics in Contemporary Political Science, *section titled "Collective Intelligence"*
- POLSCI 490: Game Theory and Formal Models
- PPE 300: Introduction to Political Economy
- PSYCH 240: Introduction to Cognitive Psychology
- PSYCH 303: Res Methods in Psych
- PSYCH 314: Positive Psychology
- PSYCH 330: Topics in Biopsychology; *section titled, "Human Cognitive Evolution" (only if elected FA19 or later)*
- PSYCH 335: Introduction to Animal Behavior
- PSYCH 343: Cognitive Neuroscience of Learning and Memory *(only if elected WN 19 or later)*
- PSYCH 345: Introduction to Human Neuropsychology
- PSYCH 346: Learning and Memory
- PSYCH 348: Psychology of Thinking
- PSYCH 356: Educational Psychology *(only if elected WN21 or later)*
- PSYCH / ENVIRON 360: Behavior and Environment *(only if elected WN 19 or later)*
- PSYCH 389: Psychology and Law
- PSYCH 401: Special Problems in Psychology as a Social Science, *section titled, "The Science of Happiness" (only if elected WN 19 or later)*
- PSYCH 402: Special Problems in Psychology, *section titled "The Compassionate Brain"*
- PSYCH 402: Special Problems in Psychology, *section titled "Decision Making in Real Life"*
- PSYCH 440: Advanced Topics in Cognitive Neuroscience; *section titled, "Learning & Memory" (only if taken Winter 2020 or later)*
- PSYCH 443: Creativity
- PSYCH 446: Altruism

- PSYCH 448: Mathematical Psychology
- PSYCH 449: Decision Processes
- PSYCH 487: Current Topics in Social Psychology, *section titled "Intelligence, Foolishness, and Strategic-Control"*
- SI 388: Putting the H in HCI: Human Perception, Cognition and Mental Processes (*only if elected WN 19 or later*)

### ***Language and Cognition Track***

Because human language is universal in the species and grounded in human cognition and biology, linguistic inquiry was an integral component of the cognitive science revolution. Contemporary approaches to language synthesize models and findings from multiple disciplines, and the proposed curriculum is correspondingly interdisciplinary. The Language and Cognition track gives students a solid theoretical introduction to language through required coursework in linguistics, and in the philosophy and psychology of language. Further coursework broadens the investigation of language to include topics in computational linguistics and computer science, formal methods, and language development and learning.

### **Required Track Courses**

1. LING 313: Sound Patterns  
OR  
LING 315: Introduction to Syntax  
OR  
LING 316: Aspects of Meaning
2. PHIL 345: Language and Mind  
OR  
PHIL 409: Philosophy of Language  
OR  
PHIL 426/LING 426: Philosophy & Linguistic Theory
3. LING 347/PSYCH 349: Talking Minds  
OR  
LING 209 / PSYCH 242 / COGSCI 209: Language and Human Mind

**Electives.** Choose Six electives selected from:

Four elective courses chosen from a track-specific list

Two elective courses from any of the Cognitive Science tracks

- COGSCI / LING 209 / PSYCH 242: Language and Human Mind
- COGSCI / LING 445: Introduction to Machine Learning for Natural Language Processing (only if taken FA20 or later).
- COGSCI 497: Directed Research for Cognitive Science
- COGSCI 498: Independent Study for Cognitive Science
- COGSCI 499: Senior Honors Research for Cognitive Science
- EECS 595 / LING 541 / SI 561: Natural Language Processing
- LING 209 / PSYCH 242 / COGSCI 209: Language and Human Mind

- LING 313: Sound Patterns
- LING 315: Introduction to Syntax
- LING 316: Aspects of Meaning
- LING 342: Perspectives on Bilingualism
- LING 347 / PSYCH 349: Talking Minds
- LING 394: Topics in Linguistics, *section titled "Speech Errors"*
- LING 351 / PSYCH 344: Second Language Acquisition
- LING / PSYCH 352: Development of Language and Thought
- LING 412: Speech Perception
- LING 413: Speech Science
- LING / PHIL 426: Philosophy and Linguistic Theory
- LING 440: Language Learnability
- LING 441: Introduction to Computational Linguistics
- LING 442: The Anatomy of Natural Language Processing Systems
- LING 446: Comparative Linguistics
- LING 447 / PSYCH 445: Psychology of Language
- LING 492: Topics in Linguistics, *sections titled "Language Variation and Social Cognition" or "Perspectives on Bilingualism" or "Introduction to Neurolinguistics" or "Topics in Neurolinguistics" or "Sign language Linguistics" or "Computation and Data Science for Linguistics" (only if elected FA19 or later).*
- LING 497: Capstone Seminar, *section titled "Speech Perception"*
- LING 541 / EECS 595 / SI 561: Natural Language Processing
- PHIL 345: Language and Mind
- PHIL 409: Philosophy of Language
- PHIL / LING 426: Philosophy and Linguistics Theory
- PHIL 446: Social and Political Philosophy of Language
- PHIL 482: Philosophy of Mind
- PSYCH 240: Introduction to Cognition Psychology
- PSYCH 242 / COGSCI / LING 209: Language and Human Mind
- PSYCH 303: Research Methods in Psychology (*only if elected FA19 or later*)
- PSYCH 330: Topics in Biopsychology; *section titled, "Human Cognitive Evolution" (only if elected FA19 or later)*
- PSYCH 344 / LING 351: Second Language Acquisition
- PSYCH 349 / LING 347: Talking Minds
- PSYCH / LING 352: Development of Language and Thought
- PSYCH 445 / LING 447: Psychology of Language
- PSYCH 447: Current Topics in Cognition and Cognitive Neuroscience, *section titled "Analyzing Language Usage, Acquisition, and Processing"*
- SI 561 / EECS 595 / LING 541: Natural Language Processing

### ***Philosophy and Cognition Track***

There is extensive interaction between contemporary philosophy, especially philosophy of mind and ethics, and cognitive science. Philosophers have long posed fundamental questions about the nature of mind, the relationship between the mental and physical, and the nature of human agency. Cognitive science provides a rich and ever-expanding body of theory, models, and findings that are relevant to these timeless philosophical questions. The Philosophy and

Cognition track requires coursework in core philosophical, formal and cognitive approaches to mind. More in-depth coursework allows students to deepen their understanding of the philosophical problems and analytical enigmas raised by language and other symbolic systems, artificial intelligence, inference and reasoning, and decision-making.

### Required Track Courses

1. PSYCH 240: Introduction to Cognitive Psychology  
OR  
PSYCH 345: Introduction to Human Neuropsychology
2. PHIL 340: Minds and Machines  
OR  
PHIL 482: Philosophy of Mind
3. PHIL 303: Introduction to Symbolic Logic  
OR  
PHIL 305: Introduction to Formal Philosophical Methods  
OR  
PHIL 413: Formal Philosophical Methods

### Electives. Choose Six electives selected from:

Four elective courses chosen from a track-specific list

Two elective courses from any of the Cognitive Science tracks

- COGSCI / LING 209 / PSYCH 242: Language and Human Mind
- COGSCI 301: Special Topics for Cognitive Science, *section titled "Topics in Moral Psychology" (only if elected WN 20 or later)*
- COGSCI 302: Topics in Moral Psychology *(only if elected FA 20 or later)*
- COGSCI 497: Directed Research for Cognitive Science
- COGSCI 498: Independent Study for Cognitive Science
- COGSCI 499: Senior Honors Research for Cognitive Science
- HISTORY 265: Minds & Brains in the U.S. *(only if elected FA19 or later)*
- LING 209 / PSYCH 242 / COGSCI 209: Language and Human Mind
- LING 316: Aspects of Meaning
- LING 447 / PSYCH 445: Psychology of Language
- PHIL 303: Symbolic Logic
- PHIL 305: Introduction to Formal Philosophical Methods
- PHIL 340: Minds and Machines
- PHIL 345: Language and Mind
- PHIL 356: Bioethics
- PHIL 361: Ethics
- PHIL 381: Science and Objectivity
- PHIL 383: Knowledge and Reality
- PHIL 384: Applied Epistemology
- PHIL 413: Formal Philosophical Methods
- PHIL 414: Mathematical Logic
- PHIL 443: Foundations of Rational Choice Theory
- PHIL 444: Groups and Choices *(only if elected WN20 or later)*
- PHIL 446: Social and Political Philosophy of Language

- PHIL 450: Philosophy of Cognition
- PHIL 482: Philosophy of Mind
- PHIL 485: Philosophy of Action
- PSYCH 242 / COGSCI / LING 209: Language and Human Mind
- PSYCH 303: Research Methods in Psychology (*only if elected FA19 or later*)
- PSYCH 314: Positive Psychology (*only if elected WN20 or later*)
- PSYCH 330: Topics in Biopsychology, section titled, "Human Cognitive Evolution" (*only if elected FA19 or later*)
- PSYCH 345: Introduction to Human Neuropsychology
- PSYCH 346: Learning and Memory
- PSYCH 347: Perception
- PSYCH 348: Psychology of Thinking
- PSYCH 401: Special Problems in Psychology as a Social Science, *section titled, "The Science of Happiness"* (*only if elected WN20 or later*)
- PSYCH 440: Advanced Topics in Cognitive Neuroscience section titled, "Learning & Memory" (only if taken WN20 or later)
- PSYCH 445 / LING 447: Psychology of Language
- PSYCH 446: Altruism
- PSYCH 447: Current Topics in Cognition and Cognitive Neuroscience, *section titled "Consciousness and Cognition"*
- PSYCH 448: Mathematical Psychology

### Constraints

**Independent Study.** Students may take a minimum of three credits of Independent Study (COGSCI 497 or 498) to fulfill one elective requirement or six credits (COGSCI 497 and either 498 or 499) to fulfill two elective requirements.

### Other Department Policies

**Double Majoring.** Cognitive Science majors may double major in BCN, Linguistics, Neuroscience, Philosophy, Psychology, or other fields. However, to ensure that these students have devoted significant, independent effort to each major, **only three courses** can be counted toward both majors.

### Distribution Policy

No course used to fulfill a major requirement may be used toward the [LSA Distribution Requirement](#). In addition, courses in the COGSCI subject area may not be used toward the Distribution Requirement.

## Honors

Honors in Cognitive Science gives students with strong academic performance the opportunity for an in-depth research experience under the close supervision of a faculty mentor. Cognitive Science students interested in pursuing Honors will submit an interest form by December of their junior year, followed by an official application in September of the following year (senior year). The Honors plan will be added to the student's major after the submission of the interest form, provided they are within range to graduate with a 3.4 GPA. The application will include a research proposal with timeline and must be signed by the faculty mentor. Applications will be reviewed by the Cognitive Science Director & Assistant Director to ensure that the project falls within cognitive science. Cognitive Science Honors students will have the option to earn independent study credit for their thesis in the Fall (COGSCI 497) and/or Winter (COGSCI 499) semesters. If a student chooses to enroll in these courses, the courses will count toward the minimum of three credits of Independent Study to fulfill one elective requirement or six credits to fulfill two elective requirements (see Independent Study constraints above). To graduate with Honors, students must have a minimum cumulative GPA of 3.4 and complete an approved Cognitive Science Honors Thesis.

# Communication and Media Major

The mission of the Communication and Media major is to study and teach about the mass media and emerging media: their evolution, their effects, their uses by everyday people, and their regulation and industry practices. We are dedicated to cultivating thorough-going media literacy among our students, and to producing cutting-edge scholarship about the media's impact on individuals and society.

Communication and Media focuses on history, content and impact of mass media and new, emerging media. Four crucial reasons for studying mass media:

- Enormous influence on our culture and those around the world
- Role in shaping our individual and collective identities (including our attitudes toward others)
- Centrality to every day life, politics, the economy, and public policy
- Impact on democratic institutions

Key elements of the major are:

- Introductory classes taught by world-renowned faculty
- Small, upper-level seminars examining a range of issues like impact of mobile communications, gender and media, media and public opinion, health and media, media and globalization, media effects on individuals and society
- Emphasis on critical thinking and writing
- Opportunity to include [study abroad](#), research and transfer credit towards major elective requirement
- A Senior Thesis Program that is providing unique support to students interested in pursuing and presenting their own research
- Combining classroom training with internship opportunities in a variety of media-related fields
- Opportunity to learn about careers and network with outstanding U-M alumni through our Career Exploration events.

*Effective Fall 2020*

## Advising

Advising appointments are only scheduled online at: [www.lsa.umich.edu/comm/](http://www.lsa.umich.edu/comm/). Students should schedule an advising appointment on the online appointment system with an advisor to learn about major requirements, discuss progress in the major, discuss the process for approval for study abroad or transfer credit, or to complete *Major Release Forms*.

Prospective majors can schedule a pre-major appointment with an advisor anytime, but no later than the second term of the sophomore year is strongly recommended. Most majors continue to see an advisor at least once a year. In any case, students must consult with the undergraduate program coordinator during the first term of their senior year to ensure that required courses will be completed for graduation.

## Prerequisites

Two prerequisite courses (COMM 101 and COMM 102) must be **completed prior to declaration**. COMM 101 and 102 must be completed with a grade of C or higher in each course. Additional information can be found on the department website at [www.lsa.umich.edu/comm/undergraduates](http://www.lsa.umich.edu/comm/undergraduates).

## Requirements

### **Minimum Credits: 28**

At least 29 (or 28 for students using the Senior Thesis Program seminar COMM 452/492 toward Communication and Media Upper Level Writing) credits in Communication and Media. These must include the following:

1. *Communication and Media Upper-Level Writing*: One course from courses numbered COMM 350-399 or COMM 452/492.
2. *Communication and Media Capstone Seminar*: One course from courses numbered COMM 450-499 (3 credits). Students may choose to take a capstone seminar or senior thesis course\* to fulfill this requirement. Only ONE capstone seminar may count toward the major.
3. *Additional Advanced Communication and Media Credits*: 22 additional credits from courses numbered COMM 200-449 (not included in 1. and 2. above). No more than one of COMM 290, 291, 292 may count toward the 28 credits in the major. No more than three credits of independent reading/research (COMM 322/441/442) can be used to meet this requirement.

In order to ensure that majors can enroll in required courses, up to 75% of spaces in many 300- and 400-level Communication and Media courses are reserved for declared majors. All spaces in the Capstone seminars are reserved for declared senior Communication and Media students.

## **Senior Thesis Program**

Students accepted for the Senior Thesis Program take a year-long seminar during their senior year (COMM 451/491 and 452/492) while conducting research and writing a thesis. The program has two tracks: Seniors with a GPA which qualifies them to graduate with honors enroll in COMM 491 and 492, all other participating students enroll in 451 and 452. Enforced prerequisite for the Senior Thesis Program is completion of the LSA quantitative reasoning requirement (in any department)



with a C grade or better. COMM 451/491 may be counted towards the COMM Senior Capstone requirement and COMM 452/492 may fulfill the Communication and Media Upper Level Writing requirement.

### Constraints

No more than 8 credits may come from COMM 200-289.

### Other Department Policies

Students are strongly encouraged to attend a monthly information session prior to declaring a major.

Students cannot declare by email, phone, or fax. Additionally, the official grades of all prerequisite courses must be recorded on the students transcript before the student can declare the major.

### Residency

A minimum of 12 out of the 22 Additional Advanced Communication and Media Credits must be taken on the Ann Arbor campus. All other required courses must be taken on the Ann Arbor campus.

### Honors

A student accepted to the Senior Thesis Program may be eligible to graduate with Highest Honors, High Honors, or Honors. The Honors track requires a 3.5 major GPA by their final term of junior year and a 3.4 overall GPA. Application and formal admission by the Department are required.

- **Enforced prerequisite for admission to the Honors SubPlan:** Completion of the LSA quantitative reasoning requirement (in any department) with a C grade or better.
- **Advisory prerequisites:** COMM 221, COMM 222, STATS 250 or STATS 280 (honors) strongly recommended.
- Students should contact the department's Honors advisor as early as possible for curricular planning, but applications for the Honors Major are required by **March 15 of the student's junior year.**
- In addition to satisfying all regular requirements for the major, an Honors Plan must also include the Senior Thesis Seminars. COMM 492 is required for the Honors Degree.
- Students may fulfill their Upper Level Writing Requirement by completing COMM 492.

# Community Action and Social Change (Minor)

This multidisciplinary minor is a collaboration between the School of Social Work, the College of Literature, Science and the Arts, the Program in American Culture, Psychology, Sociology, and the Program in Intergroup Relations, the Residential College and the Michigan Community Scholars Program.

The CASC minor uses critical structural thinking to engage students in analyzing types, levels and sources of power to better understand how inequities are manifested, maintained and reinforced in society and how these inequities can be addressed through community action and social change efforts. It will extend opportunities for undergraduate students to:

1. examine community action and social change concepts using a multidisciplinary framework;
2. address community action and social change efforts in multilingual and multicultural communities;
3. integrate, using a multidisciplinary framework, social justice values into the community action and social change processes; and
4. engage in service learning opportunities to promote community action or social change.

The courses that comprise this multidisciplinary minor are linked together through a common set of principles. These principles include:

1. Civic engagement is a critical component of undergraduate education.
2. Community engagement, action and social change need to incorporate social justice perspectives.
3. Undergraduate students need the theories and skills to:
  - o recognize the importance of contexts on individual, group and interpersonal dynamics;
  - o engage in critical sociopolitical/historical/structural analyses;
  - o use a multi-level and multidisciplinary structural analysis and perspective;
  - o acknowledge and address the role of power and privilege in community action and social change efforts; and
  - o identify goals for community change and the strategies and tactics to work with others towards these goals.

## Declarations and Course Requirements

Thanks for your interest in the CASC minor. In order to declare the minor, please complete the following steps:

1. Attend an info session to find out more about the minor.
2. Complete this [online declaration form](#).

3. Meet with an academic advisor. Make an [appointment online](#) or email [cascminor@umich.edu](mailto:cascminor@umich.edu).
4. Drop in hours will be held every Wednesday from 1 - 4pm in CASC office room 3640 for inquiries about declarations.

Please note, SW 305 is not a pre-requisite to the CASC minor. You may begin taking any of the cluster area courses before taking SW 305 and before declaring the minor.

### CASC Minor Info Sessions

Prospective students are welcome to join CASC info sessions for general information about the minor, to learn more about academic requirements, the process to declare, and the MSW preferred admissions program. Sessions will be hosted once a month in the School of Social Work. Visit the CASC events calendar for more information about the date, time, and location. Email [cascminor@umich.edu](mailto:cascminor@umich.edu) for additional inquiries.

The 16 credit Community Action and Social Change minor requirements include:

#### *Foundation Course:*

**SW 305:** Theories and Practices for Community Action and Social Change (3 credits, SS distribution credit)

This foundation course is designed to prepare students to be informed and active participants in the process of community building and social change. The course uses a multidisciplinary framework to develop competencies that will help students envision what community action and social change look like, identify and implement steps towards social change, build on positive sources of power, indigenous knowledge and experiences of individuals, groups, and communities who are engaged in social change efforts.

#### *CASC Elective Clusters:*

(12 credits, minimum of 3 credits in each cluster)

- **Context Cluster:** These electives provide students with a range of context, theories and multidisciplinary perspectives to support understanding of various community action and social change efforts
- **Diversity Learning Cluster:** These electives provide students with skills and learning opportunities to facilitate diversity learning to support community action and social change efforts
- **Action Service Learning Cluster:** These electives provide students with opportunities to engage in service learning opportunities to promote community action and social change initiatives
- **Additional 3 credits:** An additional 3 credits chosen from any cluster is also required to complete the minor

*Note: Class substitutions may be made upon advisor approval.*

Upon completion of core course and electives, students will enroll in a [one-credit capstone course](#) to develop an integrative learning project, in consultation with social work faculty advisors or other faculty steering committee members.

## **Comparative Culture & Identify (CCI) (Sub-major)**

In this sub-plan, students take courses that help them understand the richness of behavioral, literary, and artistic expressions reflecting the diversity of the human experience. Among topics covered are theories of culture, theories of identity, comparative belief systems and societal organizations, nationalism, comparative literary and film traditions, comparative ideologies, colonialism and post-colonialism, global arts, comparative gender studies, and cultural transmission. Students gain an ability to analyze historical and global trends in these topics, and to compare experiences of diverse communities and diverse individuals across time and space.

*Effective Winter 2021*

### [Exclusions](#)

International Studies majors must declare a sub-plan. The sub-plan will be notated on the student's official transcript.

### [Advising](#)

The International Studies Advisor will assist students in developing a program of study. Advising for the Honors plan is provided by the PICS Director and the PICS Honors Thesis advisor. For more information, see: [www.ii.umich.edu/pics/undergraduates/advising](http://www.ii.umich.edu/pics/undergraduates/advising).

### [Grade Policies](#)

Students must earn a C- or better in all required PICS courses. Language requirement courses are not included in the minimum 34 credits required for the major nor in the major GPA.

### [Prerequisites](#)

The following requirements must be met before declaration:

- INTLSTD 101: Introduction to International Studies (Grade of C- or better).
- Students declaring Political Economy & Development sub-plan must complete ECON 101 with a grade of **C** or better.
- Students must have started or completed 4th-term language proficiency.

## Requirements

### Minimum Credits: 34

#### **PICS Language Requirement for the Major.**

Sixth-term proficiency in a language other than English must be obtained prior to graduation; therefore, *students should begin the language sequence early.*

We believe that language study is a vital part of any liberal arts education and that students who major in international studies should be well prepared to work in environments overseas, or in companies or organizations that interact regularly with people from other countries. The PICS language requirement will not only be of benefit to the students in broadening their skills and their vision of the world but will also be an important signal to employers or graduate admissions committees about how our students are well-rounded and focused on the world and not just the United States.

Please see [PICS website](#) for details of and further information about the sixth-term language requirement.

See Sub-Plans for course requirements:

- [International Security, Norms & Cooperation \(ISNC\)](#)
- [Political Economy & Development \(PED\)](#)
- [Comparative Culture & Identity \(CCI\)](#)
- [Global Environment & Health \(GEH\)](#)

#### Distribution Policy

No course used to fulfill a major requirement may be used toward the [LSA Distribution Requirement](#). In addition, courses in the INTLSTD subject area may not be used toward the Distribution Requirement.

#### Honors

Students interested in the Honors subplan typically elect the Honors section of INTLSTD 101: *Introduction to International Studies*, and must complete INTLSTD 101 with a grade of B+ or better. Students who have declared a major in International Studies must have an overall GPA of 3.4, must complete all International Studies requirements for the major with a 3.4 or higher average in those courses, and complete a senior Honors thesis.

*Students must earn C- or better in all required PICS courses.*

During their **senior year**, students writing a thesis will enroll in INTLSTD 489 during Fall term and INTLSTD 499 during Winter term. The thesis will have a minimum length of 50 pages. Students are responsible for locating their own PICS faculty thesis advisor. Advisor and topic must be approved by PICS director.

An instructor will oversee the Honors subplan. This will include a class meeting with all Honors thesis students as a collective, at least twice per semester of their senior year, and once at the end of their junior year, to review requirements, answer questions, and discuss research practices and principles.

Each student will have an oral defense of the thesis in a meeting with the Honors thesis advisor, the Coordinator of Experiential, Independent, and Honors Education, plus one outside reader from the faculty.

Student grades on the thesis and Honors level will be determined by the PICS instructor in consultation with the Honors thesis advisor.

Advising for the Honors Plan is provided by the Honors advisor and the PICS Honors Plan advisor.

## Comparative Literature Major

The major in Comparative Literature provides excellent preparation for professional studies in fields such as law, journalism, and business, as well as preparation for graduate work in the humanities.

Undergraduate majors will establish individualized programs of study in close consultation with a faculty advisor. These programs will offer students the opportunity to increase skills in analytical reading and argumentative writing and to develop an understanding of the interrelationships among several literary traditions. Students who concentrate in comparative literature will acquire training in one or more second languages, study at least two literatures (one of which may be English) in the original languages, and acquaint themselves with some of the essential writings in the theory of literature. Students who choose to write a senior thesis will find it an opportunity for synthesis of earlier course work and further intellectual exploration.

*Effective Fall 2010*

### Advising

Prospective majors should consult the Comparative Literature department advisor as early as possible about developing a challenging and unified interdepartmental program of study.

### Prerequisites

Foreign languages necessary for the study of foreign literature courses at the 300-level.

### Requirements

#### **Minimum Credits: 33**

- 24 credits: A complementary grouping of literature courses at the 300-level or above in a minimum of two languages, one of which may be English. At least 12 credits are required in each literature.
- If a student chooses to work in English as one of the chosen languages, then a maximum of 18 credits of undergraduate courses in COMPLIT may be applied to the major, of which the maximum number of credits at the 200-level is six. Students may also combine with courses in COMPLIT other courses in the national literature departments and related fields, in consultation with the department advisor. 100-level courses do not count toward the major.

- 3 credits: The senior seminar, COMPLIT 495, is required for all students in the major.
- 6 credits: Comparative Literature electives at the 200 level or above. COMPLIT 496 (3 credits), for those writing an Honors thesis during the last term may be used. (Maximum of 6 credits of 200-level COMPLIT courses may be used in the major.)

Courses will be chosen in consultation with the department advisor in Comparative Literature based on a robust theoretical or organizational principle.

### Distribution Policy

No course used to fulfill a major requirement may be used toward the [LSA Distribution Requirement](#). In addition, courses in the COMPLIT subject area may not be used toward the Distribution Requirement.

### Honors

To be eligible for an Honors major in Comparative Literature, students should have a cumulative grade point average of at least a 3.4, and a 3.5 grade point average in courses counting toward the major. Students who elect an Honors degree will write an Honors thesis during the final year of their course work.

## Complex Systems Minor

Over the past twenty years, the ideas and methodologies that underpin the science of complex systems have gained a foothold in the research agendas of many of the world's leading universities. This trend can be explained by the resonance of the complexity paradigm and its focus on core concepts of networks, nonlinear interdependence, adaptation, and diversity to current scientific and social challenges and opportunities. These include climate change, epidemics, ecosystem and financial system robustness, genetic engineering, sustainability science, health sciences and ethnic conflict.

Academic research on nonlinear systems, networks, evolutionary and adaptive systems, emergence, and diversity using mathematics, agent based models, and numerical computation increases with each passing day at think tanks, universities, and laboratories. Most leading graduate programs in physical, biological, and social sciences now include courses that fall under the rubric of complexity science. Many of these courses involve agent based modeling and numerical analysis. At the same time, government and private sector demand for students with skills in modeling, understanding of systems level thinking, and deep understandings of the roles of networks and diversity grows.

The academic minor in Complex Systems is designed to give students an understanding of the basic concepts of complexity science and to learn how those concepts can be applied within a functional area. It provides an opportunity for majors in other departments to take a coherent curriculum in complexity and modeling that complements their major field of study. This academic minor requires foundational courses in complex systems theory and modeling. Students are encouraged to attend research seminars and book club meetings run by CSCS. This will provide an opportunity for undergrads to engage intellectually with students and faculty from a range of fields.

*Effective Fall 2011*

## Advising

### Academic Minor Advising

The CSCS Director and core faculty will serve as advisors to students. The CSCS Key Administrator, Mita Gibson, will be the initial point of contact.

## Prerequisites

There will be no formal prerequisites but students who have not taken calculus may find some of the courses difficult. Therefore, previous experience with calculus is strongly recommended.

## Requirements

### Minimum Credits: 15

Students are required to elect 15 credits (5 courses) including upper-level courses in complex systems within one of four areas of focus: (1) social sciences, (2) biological science, (3) physical science and engineering or (4) complex systems theory and methods.

- A. **Core Courses** (Take 2 of 4). We require students to take at least one of the modeling courses so that students develop the skills necessary for the upper level classes.
  - CMPLXSYS 270: Introduction to Agent-Based Modeling (ABM)
  - CMPLXSYS 281 / POLSCI 381: Applied Complex Systems: Emergent Challenges
  - CMPLXSYS 501: An Introduction to Complex Systems
  - CMPLXSYS 511: Theory of Complex Systems
- B. **Elective Courses.** Students must take two courses from one section and one course from another section. The final course can be from this list or a course not on this list as long as it is approved by the CSCS Director. Additional cross-cutting courses such as MATH 295: Honors Mathematics I can also be taken as an elective and will count for any of the four areas, with approval from the CSCS Director.
  - I. **Physical Science & Engineering**
    - BIOINF 463 / MATH 463 / BIOPHYS 463: Mathematical Modeling in Biology
    - BIOPHYS 463 / MATH 463 / BIOINF 463: Mathematical Modeling in Biology
    - CMPLXSYS 470 / PHYSICS 470: Experiments in Nonlinear Dynamics
    - CMPLXSYS 520 / PHYSICS 580: Empirical Analysis of Nonlinear Systems
    - CMPLXSYS 535 / PHYSICS 508: Network Theory
    - CMPLXSYS 541 / PHYSICS 413: Introduction to Nonlinear Dynamics and the Physics of Complexity
    - EECS 492: Introduction to Artificial Intelligence
    - EECS 587: Parallel Computing
    - EECS 598: Special Topics *section titled "Algorithms for Robotics"*
    - ENGR 371 / MATH 371: Numerical Methods for Engineers and Scientists
    - HONORS 493: College Honors Seminar *section titled "Introduction to Networks"*
    - MATH 176: Explorations in Topology and Analysis (Nonlinear Systems and Chaos)
    - MATH 371 / ENGR 371: Numerical Methods for Engineers and Scientists
    - MATH 463 / BIOINF 463 / BIOPHYS 463: Mathematical Modeling in Biology
    - MATH 471: Introduction to Numerical Methods
    - PHYSICS 413 / CMPLXSYS 541: Introduction to Nonlinear Dynamics and the



Physics of Complexity

- PHYSICS 470 / CMPLXSYS 470: Experiments in Nonlinear Dynamics
- PHYSICS 508 / CMPLXSYS 535: Network Theory
- PHYSICS 580 / CMPLXSYS 520: Empirical Analysis of Nonlinear Systems

**II. Social Science**

- CMPLXSYS 250: Social Systems & Energy
- CMPLXSYS 260 / SOC 260: Tipping Points, Bandwagons and Cascades: From Individual Behavior to Social Dynamics
- EECS 594: Introduction to Adaptive Systems *section titled "Complexity & Emergence"*
- HONORS 493: College Honors Seminar *section titled "Complexity & Emergence"*
- MATH 217: Linear Algebra
- MATH 425 / STATS 425: Introduction to Probability
- NRE 550: Systems Thinking for Sustainable Development
- POLSCI 598: Mathematics for Political Scientists
- POLSCI 793: Methods Seminar *section titled "Advanced Modeling in Political Science"*
- PSYCH 447: Current Topics in Cognition and Perception *section titled "Complexity & Emergence"*
- PUBPOL 513: Calculus for Social Scientists
- SOC 260 / CMPLXSYS 260: Tipping Points, Bandwagons and Cascades: From Individual Behavior to Social Dynamics
- STATS 425 / MATH 425: Introduction to Probability
- STRATEGY 566: Systems Thinking for Sustainable Development

**III. Biological Science**

- BIOINF 800: Special Topics *section titled "Computation and Neuroscience"*
- BIOINF 463 / MATH 463 / BIOPHYS 463: Mathematical Modeling in Biology
- BIOPHYS 463 / MATH 463 / BIOINF 463: Mathematical Modeling in Biology
- CMPLXSYS 425 Evolution in Silico (W18)
- CMPLXSYS 430 Modeling Infectious Diseases
- CMPLXSYS 510 / MATH 550: Introduction to Adaptive Systems *section titled "Introduction to Dynamics for Biocomplexity"*
- EEB 315 / ENVIRON 315: The Ecology and Evolution of Infectious Diseases
- EEB 401: Advanced Topics in Biology *section titled "Interrogating Data with Models"*
- EEB 466 / MATH 466: Mathematical Ecology
- ENVIRON 315 / EEB 315: The Ecology and Evolution of Infectious Diseases
- MATH 463 / BIOINF 463 / BIOPHYS 463: Mathematical Modeling in Biology
- MATH 466 / EEB 466: Mathematical Ecology
- MATH 550 / CMPLXSYS 510: Introduction to Adaptive Systems *section titled "Introduction to Dynamics for Biocomplexity"*
- MATH 559: Selected Topics in Applied Mathematics *section titled "Computation and Neuroscience"*
- MICRBIOL 510: Mathematical Modeling for Infectious Diseases

**IV. Theory & Methods**

- BIOINF 800: Special Topics *section titled "Computation and Neuroscience"*
- BIOPHYS / CMPLXSYS / PHYSICS 445: Introduction to Information Theory for the Natural Sciences (*only if taken FA20 or later*)
- CMPLXSYS 501: Basic Readings
- CMPLXSYS 520 / PHYSICS 580 / MATH 552: Empirical Analysis of Nonlinear Systems
- CMPLXSYS 530: Computer Modeling of Complex Systems

- CMPLXSYS 531: Basic Computing Skills for Programming Agent Based Models (ABM)
- EECS 594: Introduction to Adaptive Systems *section titled "Complexity & Emergence"*
- HONORS 493: College Honors Seminar *sections titled "Complexity & Emergence" and "Introduction to Networks"*
- MATH 425 / STATS 425: Introduction to Probability
- MATH 462: Mathematical Models
- MATH 552 / CMPLXSYS 520 / PHYSICS 580: Empirical Analysis of Nonlinear Systems
- MATH 559: Selected Topics in Applied Mathematics *section titled "Computation and Neuroscience"*
- PHYSICS 580 / CMPLXSYS 520 / MATH 552: Empirical Analysis of Nonlinear Systems
- PSYCH 447: Current Topics in Cognition and Perception *section titled "Complexity & Emergence"*
- STATS 425 / MATH 425: Introduction to Probability

## Computer Science Major

The program not only provides a solid foundation in computer software, hardware, and theory, but also gives the student ample opportunity to take advanced electives in areas of computer science such as databases, operating systems, security, networks, artificial intelligence, and graphics, or in emerging interdisciplinary areas such as cloud computing, smart phone or web apps, and computer game design.

*Effective Fall 2012*

### Grade Policies

Students may repeat a pre-major course once, for a maximum of two attempts at each course, and only the final grade for the course will be used to compute the premajor GPA. Only courses with grades of C+ or below can be repeated for this purpose.

Grades of C or better must be achieved in all courses taken to satisfy Computer Science requirements.

### Prerequisites

To declare in the LSA Computer Science (CS) major a student must first complete 4 pre-courses for the major. These are: EECS 203, EECS 280, MATH 115, MATH 116. Performance in these classes is indicative of student aptitude for the Computer Science program, and students who do not perform well are encouraged to meet with a CS-LSA advisor.

## Requirements

At least 27 credits must be upper-level.

**1. Core Courses:**

- a. *Computer Science*: EECS 281, 370, 376.
  - b. *Probability and Statistics*: STATS 250, 280, 412, 426, STATS 265/IOE 265, ECON 451 (F17), or TO 301 (F17).
- 2. Capstone Course** ( which may not be counted as CS Upper Level Technical Elective below): **Senior Thesis** (EECS 443), **Major Design Experience Course** (check with the department for current list of approved MDE courses), or **Social Computing Systems** (EECS 480) (*only if elected FA19 or later*).
- 3. Upper-Level CS Technical Electives.** 16 credits. Check with the department for an up-to-date list of approved Upper Level CS elective courses. The department can suggest groupings of electives that pursue different tracks such as software development, robotics, or bioinformatics, among various others.

Comprehensive and up-to-date information about the computer science program can be found on the web at: <https://cse.engin.umich.edu/academics/undergraduate/computer-science-lsa/>

## Distribution Policy

No course used to fulfill a major requirement may be used toward the [LSA Distribution Requirement](#). In addition, courses in the EECS subject area may not be used toward the Distribution Requirement.

## Honors

Students wishing to complete an Honors major in Computer Science must have earned a 3.2 or higher GPA in the four required pre-courses for the major (MATH 115, 116, EECS 203 and 280). Student must also have earned an overall GPA of 3.4 or higher (as required by LSA for Honors), and must have a final major GPA in Computer Science of 3.5 or higher. Students must complete the Senior Thesis course (EECS 443), write a thesis, and make an oral presentation of the thesis results, with the faculty advisor and a second faculty member determining whether the thesis is of a quality that qualifies the students for Honors.

# Computer Science Minor

The program not only provides a solid foundation in computer software, hardware, and theory, but also gives the student ample opportunity to take advanced electives in areas of computer science such as databases, operating systems, security, networks, artificial intelligence, and graphics, or in emerging interdisciplinary areas such as cloud computing, smart phone or web apps, and computer game design.

*Effective Winter 2016*

**Exclusions:**

*A minor in Computer Science is not open to students with a major in the Department of Electrical Engineering and Computer Science. Since Data Science is owned jointly by the department of Statistics and EECS, DS-LSA and DS-Eng students are not eligible for the CS Minor.*

Grade Policies

Grades of C or better must be achieved in all courses taken to satisfy Computer Science requirements.

Prerequisites

MATH 115, and prior programming experience: EECS 183, ENGR 101, or their equivalent.

You must satisfy the prerequisites before declaring. The best time to declare is during or after the academic term you take your first core course (EECS 203 or 280). Note that you will need to declare before you will be allowed to enroll in any of the electives.

Requirements

**Minimum Credits: 16**

1. **Three Core Courses** (4 credits each):
  - EECS 203: Discrete Mathematics
  - EECS 280: Programming and Introductory Data Structures
  - EECS 281: Data Structures and Algorithms

EECS 281 has both EECS 203 and 280 as prerequisites. All of the electives have EECS 281 as a prerequisite. Thus, completing the minor requires a minimum of three academic terms.

2. **Electives:** At least one 4-credit elective selected from EECS 388, 482, 483, 484, 485, 487, 490, 492, and 493.

## Creative Writing Minor

Students wishing to pursue an academic minor in Creative Writing must develop a specific plan for its completion in consultation with an English Department undergraduate advisor.

Being able to work creatively with ideas through words is elemental to a humanistic education, and can complement information-based learning in productive and exciting ways. An academic minor in Creative Writing allows students with a strong interest in the writing of either poetry or

prose fiction to develop and explore their craft through both workshop-formatted courses as well as through courses in literary history.

*Effective Winter 2019*

**Exclusions:**

*Not open to students with a major in English, a major in Creative Writing in the Residential College, a minor in English, or a minor in Writing through the Sweetland Center for Writing.*

Advising

Students are encouraged to discuss their academic program and related concerns with an English department advisor. Appointments are scheduled on the [English Department's website](#) under academic advising. For questions of immediate concern or general questions about the major, students may speak with the Undergraduate Administrator by phoning 734.764.6330 or by coming to 3187 Angell Hall.

**Peer Advising Program**

The English Undergraduate Office offers Peer Advising hours where students can come in and ask questions about the various programs and declare their major while getting a student's perspective on what it's like to be an English major. Check on the website or in the main office for their advising hours.

Grade Policies

All courses taken in the English creative writing minor must be C- or better.

The English creative writing minor GPA will be calculated using all English courses taken toward the minor (including the pre-requisite course, 298).

Prerequisites

ENGLISH 223.

Students may declare a creative writing minor in consultation with an English Creative Writing Advisor. Appointments are scheduled at <http://www.lsa.umich.edu/english/undergraduate/advising/appts.asp>.

Requirements

**Minimum Credits: 15**

15 credits, including:

- An intermediate and advanced course in Creative Writing in one area of focus (total 6 credits): ENGLISH 323/423, prose fiction; ENGLISH 324/424, poetry; or ENGLISH 325/425, creative nonfiction)

Note: English 423, 424, or 425 will also satisfy the Upper-Level Writing Requirement.

- Three English literature courses (9 credits) at the 200-level or above.
  - At least one of these courses (3 credits) must be at the 300-level or above.
  - One Creative Writing course at the 300 or 400-level in a genre other than the student's primary focus may be used toward this requirement.
  - Eligible 200-level courses for this requirement are:
    - ENGLISH 201: Readings in U.S. Literatures: "American" and Other Fictions
    - ENGLISH 203: Intro to Rhetoric
    - ENGLISH 215: Great Women Writers
    - ENGLISH 216: Intro to Disability Studies
    - ENGLISH 221: Literature Outside the Classroom
    - ENGLISH 230: Intro to Short Story and Novel
    - ENGLISH 232: Intro to Visual Cultures
    - ENGLISH 235: Intro to Autobiography
    - ENGLISH 240: Poetry for Non-majors
    - ENGLISH 242: Interdisciplinary Studies in English
    - ENGLISH 244: Introduction to Literary Journalism
    - ENGLISH 245: Intro to Drama and Theatre
    - ENGLISH 250: Intro to Language Studies
    - ENGLISH 258: Bible as Literature
    - ENGLISH 260: Intro to British Literature
    - ENGLISH 267: Shakespeare and his World
    - ENGLISH 270: Intro to American Lit
    - ENGLISH 274: Intro to Afro-American Lit
    - ENGLISH 275: Intro World Lit in English
    - ENGLISH 280: Intro to Digital Cultures
    - ENGLISH 282: Native American Literature
    - ENGLISH 285: Intro to 20th C Lit
    - ENGLISH 290: Topics in Lang & Lit
    - ENGLISH 292: Themes in Lang & Lit (mini-course)
    - ENGLISH 293: Great Works of Lit (mini-course)

## Residency

One course from transfer credit or study abroad may be used toward elective English creative writing minor credits.

# Creative Writing & Literature Major

The [Residential College's Creative Writing and Literature Major](#) combines the sustained, disciplined practice of writing with the serious study of literature. The main goal of the program is to help students develop their creative abilities through a continuous, interrelated cycle of writing, rewriting, and literary analysis. Creative writing courses are taught as workshops and tutorials in which students work individually with faculty members. Students are required to take courses in literature in order to understand better the art of writing.

*Effective Winter 2020*

## **Exclusions:**

*Not open to those electing the minor in Writing or the minor in Creative Writing.*

## Advising

1813 East Quadrangle

(734) 647-2745

[www.lsa.umich.edu/rc](http://www.lsa.umich.edu/rc)

The Residential College (RC) is a four-year undergraduate liberal arts program with about 900 students and 60 faculty, situated within LSA. All RC advisors are RC faculty members and are available to meet with students to discuss RC and LSA requirements, possible majors, graduation requirements, etc. The RC [Board on Academic Standing](#) considers petitions submitted by RC students relating to requirements, deadlines, and academic circumstances. Appointments with academic advisors can be scheduled by calling the RC Academic Services Office at (734) 647-2745 or by stopping by the offices at 1813 East Quadrangle.

## Prerequisites

None.

## Requirements

**Minimum Credits: 28**

Students wishing to pursue a sustained practice in creative writing take a combination of writing courses in a selected genre and literature courses, distributed as follows:

1. A minimum of four creative writing classes, three at the upper level (300 and above), mixing seminars (RCHUMS 220, 221, 222, 242, 320, 321, 322) and tutorials (RCHUMS 325, 326, 425, 426)

2. A minimum of five upper level (300 and above) literature courses at least one of which must be ancient (RCHUMS 309, CLCIV 390, ENGLISH 401) or medieval (RCHUMS 310, ENGLISH 370) literature.

### Distribution Policy

No course used to fulfill a major requirement may be used toward the [LSA Distribution Requirement](#).

## Crime and Justice Minor

The past thirty years have seen a dramatic increase in prison populations — fueled by the centrality of crime and fear of crime to American politics. This minor melds concepts from the history of crime and criminal law, theories of crime and punishment, and societal circumstances that propel unequal demographics of criminality.

*Effective Winter 2019*

### Exclusions:

*A minor in C&J is not open to students pursuing a major in the Dept of Sociology with an LJSC subplan nor to students majoring in Social Theory and Practice in the RC.*

*Students electing the Crime and Justice minor may not declare a minor in History of Law and Policy.*

### Advising

1813 East Quadrangle

(734) 647-2745

[www.lsa.umich.edu/rc](http://www.lsa.umich.edu/rc)

The Residential College (RC) is a four-year undergraduate liberal arts program with about 900 students and 60 faculty, situated within LSA. All RC advisors are RC faculty members and are available to meet with students to discuss RC and LSA requirements, possible majors, graduation requirements, etc. The RC [Board on Academic Standing](#) considers petitions submitted by RC students relating to requirements, deadlines, and academic circumstances. Appointments with academic advisors can be scheduled by calling the RC Academic Services Office at (734) 647-2745 or by stopping by the offices at 1813 East Quadrangle.

Students wishing to pursue an academic minor must develop a specific plan for its completion in consultation with the program's designated advisor.



## RC academic minors are open to all LSA students

### Prerequisites

None for the Academic minor *per se*, although individual courses elected to meet the requirements of the minor may have course prerequisites.

### Requirements

#### Minimum Credits: 15

A minimum of five courses (at least 15 credits), to be elected from categories as stated:

1. **Core Course:** SOC 368. Criminology
2. **Electives.** One course from each of the following three areas (at least two of which must be at the 300-level and above).  
***No more than three courses may be selected from any single department or program.***
  - A. *Contexts and Social Perspectives on the Problems of Crime and Punishment*
    - AAS 262 / HISTORY 272: The Modern Civil Rights Movement
    - AAS / SOC 303: Race and Ethnic Relations
    - AAS 322 / ENVIRON 335: Introduction to Environmental Politics: Race, Class and Gender
    - AAS 324: Dealing with the Past : Doing Justice in Africa: South Africa, Rwanda, Sierra Leone
    - AAS / RCSSCI 330: Urban and Community Studies, I
    - AAS 334 / AMCULT 336: Popular Culture in Contemporary Black America
    - AAS 420 / ANTHRCUL 347: Race and Ethnicity
    - AAS 426 Urban Redevelopment and Social Justice
    - AAS / SOC 434: Social Organization of Black Communities
    - AAS 454 / ANTHRCUL 453 African-American Culture
    - AMCULT / SOC 304: American Immigration
    - AMCULT 336 / AAS 334: Popular Culture in Contemporary Black America
    - AMCULT 337: A Survey of American Blues Music
    - AMCULT / HISTORY 369: U.S. Mass Culture from Minstrelsy to Hip Hop
    - AMCULT / HISTORY 374: Politics and Culture of the “Sixties”
    - AMCULT 399: Race in America
    - AMCULT 421 / SOC 423: Stratification
    - ANTHRCUL 235: Anthropology of Crime, Criminalization and Punishment (*only if elected Fall 2019 or later*)
    - ANTHRCUL 347 / AAS 420: Race and Ethnicity
    - ANTHRCUL 453 / AAS 454 African-American Culture
    - ARCH / UP 357 Architecture, Sustainability, and the City: Ideas, Force, and People Shaping the Built Environment
    - CEE 307 / ENVIRON 407: Sustainable Cities
    - COMM / PSYCH 318: Media and Violence
    - ENVIRON 222: Introduction to Environmental Justice

- ENVIRON 335 / AAS 322: Introduction to Environmental Politics: Race, Class and Gender
- ENVIRON 407 / CEE 307: Sustainable Cities
- ENVIRON 408: Land Use Policy, Law, and the Environment
- HISTORY 272 / AAS 262: The Modern Civil Rights Movement
- HISTORY / AMCULT 369: U.S. Mass Culture from Minstrelsy to Hip Hop
- HISTORY / AMCULT 374: Politics and Culture of the “Sixties”
- HISTORY / WGS 375 (WGS 375): History of Witchcraft: The 1692 Salem Trials in Historical and Cross-Cultural Perspective
- PHIL 224: Global Justice
- PHIL 355: Contemporary Moral Problems
- POLSCI 307: Topics in American Political Thought
- POLSCI 319 Politics of Civil Liberties and Civil Rights
- PSYCH 318 / COMM 318: Media and Violence
- RCSSCI / AAS 330: Urban and Community Studies, I
- SOC / AAS 303: Race and Ethnic Relations
- SOC / AMCULT 304: American Immigration
- SOC 423 / AMCULT 421: Stratification
- SOC / AAS 434: Social Organization of Black Communities
- SOC 435: Urban Inequality and Conflict
- UP / ARCH 357 Architecture, Sustainability, and the City: Ideas, Force, and People Shaping the Built Environment
- WGS 375 (WGS 375) / HISTORY 375: History of Witchcraft: The 1692 Salem Trials in Historical and Cross-Cultural Perspective

B. *Disciplinary Studies of the Problems of Crime and Punishment*

- AAS 248: Crime, Race, and the Law
- AAS 450 / 451: Law, Race and the Historical Process I, II
- ANTHRCUL 333: Non-Western Legal Systems
- ANTHRCUL / WGS 428 (WGS 428) / RCSSCI 428: Sex Panics in the U.S. and UK since 1890
- COMM 425: Internet, Society, and the Law
- HISTORY / JUDAIC 265: Introduction to Jewish Law: Sources, Legal History, and Legal Theory
- HISTORY / JUDAIC 257: Law in the Pre-modern World
- HISTORY 345 / RCSSCI 357: History and Theory of Punishment
- HISTORY 477: Law, History, and the Dynamics of Social Change
- HISTORY 496: History Colloquium (appropriate topics may count, with permission)
- HISTORY 497: History Colloquium (*section titled “War on Crime / War on Drugs”*; other appropriate topics may count, with permission)
- JUDAIC / HISTORY 257: Law in the Pre-modern World
- JUDAIC / HISTORY 256: Introduction to Jewish Law: Sources, Legal History, and Legal Theory
- PHIL 359: Law and Philosophy
- POLSCI 364: Public International Law
- PSYCH 488 / SOC / WGS 465 (WGS 465): Sociological Analysis of Deviance
- RCSSCI 357 / HISTORY 345: History and Theory of Punishment

- RCSSCI / ANTHRCUL / WGS 428 (WGS 428): Sex Panics in the U.S. and UK since 1890
  - SOC / WGS 270 (WGS 270): Gender and the Law
  - SOC 454: Law and Society
  - SOC 465 / PSYCH 488 / WGS 465 (WGS 465): Sociological Analysis of Deviance
  - WGS 270 (WGS) / SOC 270: Gender and the Law
  - WGS 428 (WGS) / ANTHRCUL / RCSSCI 428: Sex Panics in the U.S. and UK since 1890
  - WGS 465 (WGS 465) / PSYCH 488 / SOC 465: Sociological Analysis of Deviance
- C. *Direct Encounters with the Problems of Crime and Punishment*
- ARTDES 312: Art Workshops in Prison
  - PSYCH 211: Project Outreach (appropriate sections)
  - RCCORE 301: Community-Based Internship – Semester in Detroit (appropriate placements) and  
RCCORE 302: Community-Based Internship Reflection Seminar
  - RCCORE 334: Special Topics *section titled “The Atonement Project”*
  - RCHUMS 334: Special Topics in the Humanities *section titled “Theater and Incarceration”*
  - THTREMUS 399: Topics in Drama *section titled “The Atonement Project”*

## Cultures and Literatures of Eastern Europe Minor

The minor in Cultures and Literatures of Central Europe is intended for students interested in developing their knowledge and understanding of Slavic studies but who are unable to dedicate time to language study to complete a rigorous program of study.

This minor affords such students the opportunity to build their new interest into a recognized program of academic study with a framework that would enable coordinated study over several terms. This program has been designed specifically for students who have either:

- become interested in Slavic studies later in their academic careers and are thus unable to complete a language requirement; or
- demanding majors that do not include flexibility to take on an extensive course of language study but are interested in the literatures and culture of Eastern Europe.

The minor is divided between Russian Studies, and Polish, BCS, Czech, Eastern-European Jewish studies, and cross-cultural Slavic studies (reflecting the overall distribution of course offerings in the Dept). Students must take courses from both of these groups, and may choose to specialize in Russian studies, or in one or more other areas of Eastern and Central European culture. Thus, a student completing this minor will have acquired relatively detailed knowledge

in at least one area of the department's specialization, while also having been exposed to the diversity of cultures found between the Danube and the Pacific Ocean.

*Effective Winter 2013*

#### **Exclusions:**

*Academic minors in Slavic Languages and Literatures are not open to those electing a major or any other academic minor in the department of Slavic Languages and Literatures, nor to those electing a major in the Center for Russian, East European, and Eurasian Studies (REES). Students may concurrently pursue an academic minor in both REES and Slavic with the following restrictions:*

1. REES minors may not count any courses for which Slavic is the home unit
2. Slavic minors may not count REES 397 or any courses for which REES is the home unit, which includes SLAVIC 395 and 396.

#### Advising

Students wishing to pursue an academic minor in the Department of Slavic Languages and Literatures must develop a specific plan for its completion in consultation with Professor Michael Makin, the department's designated advisor.

Appointments are scheduled online at [www.lsa.umich.edu/slavic/undergraduate/advising](http://www.lsa.umich.edu/slavic/undergraduate/advising)

#### Prerequisites

None. No knowledge of the languages of Eastern Europe is required.

#### Requirements

##### **Minimum Credits: 15**

At least **fifteen credits** elected in the following courses in Eastern European Literatures and Cultures, of which only one course may be below the 300-level. Students may take as many courses as they like in one of the two groups, but must elect a **minimum of six credits** in the other group:

##### **Group A:**

- POLISH 214, 215, 314, 325, 326;
- CZECH 315, 484;
- BCS 436;
- SLAVIC 225, 240, 245 (W19), 261 (W19), 270, 281, 312, 470, 471 (W19), 481, 488, 490.

### **Group B:**

- SLAVIC 313, 315, 316;
- RUSSIAN 231, 322, 346, 347, 348, 356, 358, 361, 375 (W19), 444, 450, 453, 454, 460, 462, 463, 464, 466, 467, 468, 469, 473, 474.

## **Czech Language, Literature, and Culture Minor**

The minor in Czech Language, Literature, and Culture is designed to give students a fundamental competence in Czech language upon which they can build, as well as a knowledge of some of the major cultural achievements and individual masterpieces of Czech literature and cinema.

The intended audience comprises all undergraduates with substantial interest in Czech studies. Such students might include those who envision doing professional work in the Czech Republic, those intending to pursue graduate work in areas related to Czech culture and society, as well as those who may wish to learn more about their own heritage.

The minor presents the opportunity to gain basic competence in Czech language, upon which one can build toward whatever higher level of proficiency one requires. Furthermore, the minor gives students exposure to and knowledge of the work of some of the major figures in Czech culture, including such internationally acclaimed authors as Jaroslav Hašek, Karel Capek, and Milan Kundera, as well as the Nobel Prize winning poet Jaroslav Seifert. The ways in which Czech culture met the challenges of World War II, and of the subsequent forty years of Communist rule, is given major emphasis in several of the courses. Students may also learn about the important contributions of Czech filmmakers to world culture. Thus, the minor will have substantial value for all students who have an intellectual interest in Czech culture, even in cases where Czech studies do not figure directly in the student's career plans. This might be the case particularly for students who trace part of their own family heritage to the Czech lands. Finally, several of the courses address question about ethnic discriminations as they have been dealt with in literature and film, a feature which would deepen students' understanding through the comparative perspective it would provide.

*Effective Fall 2012*

### **Exclusions:**

*Academic minors in Slavic Languages and Literatures are not open to those electing a concentration or any other academic minor in the department of Slavic Languages and Literatures, nor to those electing a concentration in the Center for Russian, East European, and Eurasian Studies (REES). Students may concurrently pursue an academic minor in both REES and Slavic with the following restrictions:*

1. REES minors may not count any courses for which Slavic is the home unit
2. Slavic minors may not count REES 397 or any courses for which REES is the home unit, which includes SLAVIC 395 and 396.

### Advising

Students wishing to pursue a minor in the Department of Slavic Languages and Literatures must develop a specific plan for its completion in consultation with the department's designated advisor, Jindrich Toman. Appointments are scheduled online at [www.lsa.umich.edu/slavic/undergraduate/advising](http://www.lsa.umich.edu/slavic/undergraduate/advising).

### Prerequisites

CZECH 241 or equivalent.

### Requirements

**Minimum Credits: 16**

16 credits of courses, including CZECH 242 (4 credits) and 12 credits in courses selected from the following two categories, with at least 6 credits from category B.

**Category A: Courses on Central European Slavic Culture** (no more than 6 credits from Category A may count in the minor):

- SLAVIC 225: Arts and Cultures of Central Europe
- SLAVIC / RCHUMS 312: Central European Cinema
- SLAVIC 423: Central European Literature in the Twentieth Century

Students may count up to 3 credits of Third-Year Czech (CZECH 341 and 342) toward the minor.

**Category B: Courses on Czech culture, literature, and cinema** (at least 6 credits are required from Category B):

- CZECH / FTVM 315: Czech Cinema
- CZECH 480: Supervised Czech Reading
- CZECH 483: Czech Literature from the Middle Ages to the Enlightenment
- CZECH 484: Modern Czech Literature
- SLAVIC 470: Topics in Cultural Studies of Central, Eastern, and Southern Europe (appropriate sections)
- SLAVIC 490: Issues of the Cultures of Eastern Europe (appropriate sections)

# Data Science Major

Data Science is a multidisciplinary undergraduate major, co-located in the College of Engineering (CoE) and the College of Literature, Science, and the Arts (LSA) and is jointly managed by the Division of Computer Science and Engineering (CSE) in the College of Engineering (CoE) and the Department of Statistics in LSA. The students from CoE will receive a BSE in Data Science and the students in LSA will receive a B.S. with a Data Science major.

The program draws on our expertise in Computer Science, Statistics, and Mathematics, complementing them with exposure to application domains to provide a multidisciplinary degree to develop future generations of data scientists. To provide exposure to application domains and to broader issues in data science, the data science program will include technical electives from LSA, Engineering, School of Information, and other U-M schools and colleges.

The undergraduate program in Data Science will provide sufficient background in mathematics (linear algebra and advanced calculus) and build a strong foundation in data science, covering data structures, algorithms, database management, and machine learning (courses in Computer Science) and data collection, data mining, modeling, and inference (Statistics). The Data Science program is designed to produce students with a deeper and broad intellectual understanding of both statistical and computing principles when working with big data, with those principles being applicable to a variety of domains. Students completing this program should be able to:

- find excellent jobs in industry where substantial experience in data science is desired
- attend graduate schools to pursue research in data science-related areas.

*Effective Winter 2021*

## **Exclusions:**

*Those completing the major in Data Science may not earn a minor in Computer Science or Statistics.*

## Advising

Faculty advisors are available on both Central and North campuses with a common coordinator across the two programs.

## Grade Policies

A grade of C or higher is required for all the required courses including the four required mathematics courses, all the EECS and STATS courses used toward the degree requirements, all the advanced technical electives in Data Science used toward the degree requirements and the capstone experience course.

The grade requirement applies to these courses irrespective of whether they are pre-major or major requirements.

## Prerequisites

(each with minimum grade of C or higher)

- *Calculus*: MATH 115, 116, and 215 (each completed with a minimum grade of C or higher)
- *Linear Algebra*: MATH 214 or 217 (completed with a minimum grade of C or higher)
- *Introductory Programming*: One of EECS 183, ENGR 101, or ENGR 151

## Requirements

**Minimum Credits:** 42

A minimum of 42 credits is required (each with a minimum grade of C or higher), distributed as follows.

### I. Core:

1. *Computing and Discrete Mathematics*
  - EECS 203: Discrete Mathematics (preferred)  
or  
MATH 465: Introduction to Combinatorics
  - EECS 280: Programming and Elementary Data Structures.
2. *Computing and Statistics*
  - EECS 281: Data Structures and Algorithms.
  - STATS 412: Introduction to Probability and Statistics.
  - STATS 413: The General Linear Model and Its Applications
3. *Machine learning and data mining* (minimum 4 credits):
  - EECS 445: Machine Learning  
or  
▪ STATS 415: Data Mining
4. *Data management and applications* (minimum 4 credits):
  - EECS 484: Database Management Systems  
or  
▪ EECS 485: Web Database and Information Systems
5. *Data Sciences Applied to a Domain* (minimum 4 credits): A student must take at least one 400-level or higher course in which data science techniques are applied to a domain area.
  - 400+ courses in Statistics and CSE on analytics in healthcare human behavioral analytics, financial analytics
  - 400+ level courses in bioinformatics (specify: is this bioinformatics courses in any SUBJECT or courses in BIOINF)

- II. **Capstone Experience.** One course of at least 4 credits approved as satisfying the Data Science Capstone Experience requirement. STATS 485 and the proposed Data Science-oriented CSE courses that also meet the Major Design Experience (MDE) requirements as playing this role.

If a student takes a required course that can also be used to provide capstone experience, the student must either not double count the credits or make up any overlapping credits by taking advanced elective courses.



III. **Advanced Technical Electives in Data Science:** At least 8 credits of advanced technical electives (at the 300-level or higher) that build on the foundation provided by the core courses and includes courses in data collection methods, scientific visualization, algorithms, security and privacy, mathematical modeling in biology, biostatistics, and optimization techniques. These courses must be selected from the list of courses below, or other courses by exception selected with advisor approval prior to taking the course.

- BIOINF 463 / BIOPHYS 463 / MATH 463: Mathematical Modeling in Biology
- BIOINF 527: Introduction to Bioinformatics & Computational Biology
- BIOINF 545 / STATS 545 / BIOSTAT 646: High Throughput Molecular Genomic and Epigenomic Data Analysis
- BIOINF 547 / MATH 547 / STATS 547: Probabilistic Modeling in Bioinformatics
- BIOPHYS 463 / BIOINF 463 / MATH 463: Mathematical Modeling in Biology
- BIOSTAT 449 / STATS 449: Topics in Biostatistics
- BIOSTAT 646 / BIOINF 545 / STATS 545: High Throughput Molecular Genomic and Epigenomic Data Analysis
- EECS 388: Introduction to Computer Security
- EECS 442: Computer Vision
- EECS 467: Autonomous Robotics
- EECS 477: Introduction to Algorithms
- EECS 484: Database Management Systems
- EECS 485: Web Database and Information Systems
- EECS 492: Introduction to Artificial Intelligence
- EECS 498: Special Topics (approved sections only. By default, EECS 498 sections will not count towards the Data Science advanced technical electives)
- EECS 4xx: Data Science and Healthcare
- EECS 4xx: Data Science and Human Behavior and Emotion Analytics
- EECS 545: Machine Learning
- EECS 549 / SI 650: Information Retrieval
- IOE 310: Introduction to Optimization Methods
- MATH 463 / BIOINF 463 / BIOPHYS 463: Mathematical Modeling in Biology
- MATH 547 / STATS 547 / BIOINF 547: Probabilistic Modeling in Bioinformatics
- MATH 548 / STATS 548: Computations in Probabilistic Modeling in Bioinformatics
- SI 639: Web Archiving
- SI 649: Information Visualization
- SI 650 / EECS 549: Information Retrieval
- STATS 403: Introduction to Quantitative Research Methods
- STATS 406: Introduction to Statistical Computing
- STATS 414: Special Topics in Statistics, section titled "Introduction to Bayesian Data Analysis"
- STATS 426: Introduction to Theoretical Statistics
- STATS 449 / BIOSTAT 449: Topics in Biostatistics
- STATS 470: Introduction to Design of Experiments
- STATS 480: Survey Sampling Techniques
- STATS 508: Statistical Analysis of Financial Data
- STATS 531: Analysis of Time Series
- STATS 545 / BIOINF 545 / BIOSTAT 646: High Throughput Molecular Genomic and Epigenomic Data Analysis
- STATS 547 / MATH 547 / BIOINF 547: Probabilistic Modeling in Bioinformatics

- STATS 548 / MATH 548: Computations in Probabilistic Modeling in Bioinformatics

## Other Department Policies

### Dual Majors with Computer Science

For a dual major with Computer Science, the student will need to take an additional 14 credits in pertinent technical subjects, with advisor approval in both Computer Science and Data Science, beyond satisfying the requirements for each of the majors.

### Residency

A minimum of fifteen (15) credits for the major must be taken on the Ann Arbor campus.

### Distribution Policy

No course used to fulfill a major requirement may be used toward the [LSA Distribution Requirement](#). In addition, courses in the STATS subject area may not be used toward the Distribution Requirement.

### Honors

Any LSA Data Science student with a current grade point average of at least 3.4 may apply for admission to the LSA Data Science Honors major program. Such application is made through a Statistics Department undergraduate advisor. Students in the Honors program must complete the regular major program with an overall GPA of at least 3.5. In addition, LSA Data Science Honors majors must elect the Senior Honors Seminar (STATS 499) and complete a project or a thesis under the direction of a member of the Statistics Department or EECS faculty.

## Digital Studies Minor

[Digital Studies](#) encompasses new and diverse practices and methodologies immediately relevant to contemporary concerns. The field includes scholars who create digital archives, analyze on-line materials, and / or disseminate text, image, and video using new platforms and computational tools. Other academics study the everyday practice of digital culture in specific cultural contexts. Rapid technological transformations are altering our expectations for engaged citizenship and civic practices as well as scholarly research and publishing.

The Digital Studies minor is aimed at students with academic interests in the role that digital media play in U.S. culture, history, and media, and provides students with the methods and tools for studying, analyzing, and writing about their everyday engagements with electronic forms of community and culture in the U.S. The courses offer both humanistic and social scientific approaches to the study of all things digital.

Students can use the Digital Studies minor to supplement and make more coherent their understanding of the knowledge formed in a traditional discipline. As digital media use becomes ubiquitous and an increasingly important driver of the U.S. economy, as well as a cultural force in its own right, students in History, Women's Studies, English, African-American and other Ethnic Studies, Political Science, Communication Studies, Sociology, and Screen Arts &

Cultures find themselves attracted to the topic as a way to engage with their main areas of study. For instance, students with interests in digital media, history, and culture who wish to focus on topics not consistently covered in a traditional humanities or social science discipline can enhance and deepen their work in another major by taking a systematic supplement of courses in Digital Studies. An appropriate student for the Digital Studies minor may be putting together an ensemble of courses focusing on, for example, digital economies and intellectual property debates; digital labor, race, gender and identity in online spaces; algorithmic cultures and computing history; digital games studies; online communities; shifting distribution channels.

Students wishing to pursue a minor in Digital Studies must develop a specific plan for its completion in consultation with one of the department's designated advisors.

*Effective Winter 2018*

### Advising

Students wishing to pursue a minor in Digital Studies must develop a specific plan for its completion in consultation with one of the department's designated advisors.

Appointments with the respective advisor can be scheduled online at:

<https://lsa.umich.edu/digitalstudies/undergraduates/advising.html>

### Prerequisites

None.

### Requirements

**Minimum Credits: 16**

1. **Core Course:** AMCULT 202: Digital Culture, ENGLISH 280: Introduction to Digital Cultures, or SAC 202: Introduction to Digital Media Studies (NOTE: Students can receive credit toward the minor *for only one of* AMCULT 202, ENGLISH 280, or SAC 202.)
2. **Electives:** Four additional courses, three of which must be at the 300-level or above:
  - AMCULT 301: Topics in American Culture, *section titled "Politics of Code"*
  - AMCULT 334 / FTVM 334 / COMM 334: Race, U.S. Culture, and Digital Games
  - AMCULT / DIGITAL 347: Politics of Code (*only if elected WN20 or later*)
  - AMCULT 358: Topics in Digital Studies
  - AMCULT / DIGITAL 360: Radical Digital Media (*only if elected WN20 or later*)
  - AMCULT 379: Privacy, Politics, Power
  - AMCULT / DIGITAL / SI 410: Ethics and Information Technology
  - AMCULT 498: Capstone Seminar in American Culture, *sections titled "Race on the Internet" or "Fakes, Phonies, and Copies"*
  - ANTHRCUL / HISTART 354: Art, Science, and Technology
  - ARTDES 200: Introductory Studios, *section titled "Programming for Poets"*
  - ARTDES 372: Video Games

- ASIAN 282 / FTVM 282 / RCHUMS 283: Asia Goes Viral: Asian Pop Culture in the Age of Social Media
- COMM 312: TV in a Digital Age
- COMM 271: Communication Revolutions
- COMM 315: Critical Approaches to the Internet
- COMM 334 / AMCULT 334 / FTVM 334: Race, U.S. Culture, and Digital Games
- COMM 350: The Rise of Mass Culture
- COMM 362: Digital Media Foundations
- COMM 365: Visual Culture and Visual Literacy
- COMM 418: Designing Web Research
- COMM 423: Computer Mediated Communication
- COMM 424: Race, Gender and New Media
- COMM 425: Internet, Society and the Law
- COMM 461: Visuality and New Media
- DIGITAL / AMCULT / SI 410: Ethics and Information Technology
- EDUC 222: Video Games and Learning
- EDUC 333: Video Games and Learning
- ENGLISH 216: Narrating Disability Cultures
- ENGLISH 403: Topics in Language and Rhetorical Studies, *section titled "Digital Rhetorics"*
- ENGLISH 420: Technology and the Humanities
- FTVM 202: Intro to Digital Studies Media
- FTVM 282 / RCHUMS 283 / ASIAN 282: Asia Goes Viral: Asian Pop Culture in the Age of Social Media
- FTVM 334 / AMCULT 334 / COMM 334: Race, U.S. Culture, and Digital Games
- FTVM 354: New Media History
- FTVM 367: Digital Media and Identity
- FTVM 368: Topics in Digital Media Studies, *section titled "Video Games as Culture / Form" and "Virtuality and Digital Identity"*
- FTVM 376: New Media Theory
- HISTORY 379 / RCSSCI 379 / SI 379: History of Computers and the Internet
- PHIL 340: Minds and Machines
- RCHUMS 283 / FTVM 282 / ASIAN 282: Asia Goes Viral: Asian Pop Culture in the Age of Social Media
- RCSSCI 379 / HISTORY 379 / SI 379: History of Computers and the Internet
- SI 315: Interpersonal and Psychological Implications of Social Media
- SI 379 / RCSSCI 379 / HISTORY 379: History of Computers and the Internet
- SI / AMCULT / DIGITAL 410: Ethics and Information Technology
- SI 429: Online Communities: Analysis and Design of Online Interaction
- SOC 295: Topics in Sociology, *section titled "Soc Life in the Digital World"*
- WRITING 200: New Media Writing
- WRITING 201: New Media Writing Mini-Course

Other courses as approved by the department advisor.

# Drama Major

The [RC Drama program](#) offers a unique course of study at U-M: the understanding of drama both as art form and literature. They learn to understand all the stages of the dramatic process - from the circumstances of a work's composition to the history of theater methods and presentation. Students attune their sense of theater aesthetic through practice and experimentation. They immerse themselves in the dramatic process as actors and directors as well as learning about all the aspects of production: costuming, scenery, lighting and sound design.

The Drama major is operated in collaboration with the Department of Theatre and Drama. The major combines the strengths and faculty resources of the RC and Theatre and Drama.

- The RC brings strengths in a humanities approach to drama and the dramatic arts, most notably in its Text-to-Performance orientation that combines the literary, the historical, and the theatrical.
- Theatre and Drama contributes expertise in design, production, and practicum work, thereby exposing students to the best of both worlds.

Both programs offer students a variety of hands-on experiences and opportunities to study, explore, and perform.

Students have the opportunity to explore the fields of dramaturgy, directing, the teaching of dramatic literature, and practical theatre as it relates to theory; and to study dramatic texts and experience performance and production. It consists of 35 credits that move from introductory courses to those along two distinct upper-level tracks. The major culminates in a play production capstone seminar that brings all the elements of this major into focus.

The Program regards drama as an art form that is both literary and theatrical, drawing on these and many other arts for its expression but claiming methods and purposes which are finally its own. A proper appreciation of drama requires the recognition and study of several stages in the making of a play, primarily those of the playwright and his conditions of work, the text and form of the play, the performance of the play, and the audience and society from which the play arises and to whom it is addressed. This demands a practical as well as a theoretical encounter with all the components of the dramatic experience. Accordingly, the method of study employed by the Drama Program combines active experiment and dynamic presentation with critical analysis and appropriate conditions for interpreting, enjoying, and evaluating the living work of dramatic art.

*Effective Fall 2015*

[Advising](#)

1813 East Quadrangle

(734) 647-2745

[www.lsa.umich.edu/rc](http://www.lsa.umich.edu/rc)

The Residential College (RC) is a four-year undergraduate liberal arts program with about 900 students and 60 faculty, situated within LSA. All RC advisors are RC faculty members and are available to meet with students to discuss RC and LSA requirements, possible majors, graduation requirements, etc. The RC [Board on Academic Standing](#) considers petitions submitted by RC students relating to requirements, deadlines, and academic circumstances. Appointments with academic advisors can be scheduled by calling the RC Academic Services Office at (734) 647-2745 or by stopping by the offices at 1813 East Quadrangle.

### Prerequisites

None.

### Requirements

#### **Minimum Credits: 35**

1. *Theater History sequence*: THTREMUS 321 and 322
2. *Fundamentals of acting and script analysis*:
  - A. One of RCHUMS 281 or RCHUMS 282
  - B. One of THTREMUS 101 or 110 or 102
3. *The Senior Capstone*. RCHUMS 481.
4. *Category Requirement*. Five courses, with at least two in each category, for a total of at least 18 credits
  - A. *Actor and Text*. Choose at least two from:
    - RCHUMS 383, 387, 389, 390, 483, 485
    - THTREMUS 233, 323
    - AAS 342
    - ENGLISH 349
  - B. *Design and Production*. Choose at least two from:
    - RCHUMS 482
    - THTREMUS 227, 240, 241, 250, 251
    - ENGLISH 227

### Other Department Policies

**RC Players.** The RC Players is a student-run theater organization that provides students all over campus with the opportunity to showcase their talent in acting, directing, producing, and more. RC Players provide leadership opportunities and venues for creative and dramatic expression through its various student-written and published theatrical pieces in East Quad. Past productions have included Evenings of Scenes, premieres of original student-written works, student-senior theses that reflect and re-enact their undergraduate experiences, various experimental texts, and the modestly (in)famous Kamikaze Theater. We are open to all students across campus, but provide the unique advantage to become active and creative within the East Quad and RC community, even without any prior experience. [www.umich.edu/~rcplayer/](http://www.umich.edu/~rcplayer/)

**Shakespeare in the Arb.** A theater production of the LSA Residential College that moves through different areas of the Nichols Arboretum. The unique experience of Shakespeare in the Arb comes from the environmental staging of the plays. There is no fixed stage-instead, the audience follows the action through different locations in the Arboretum. The staging takes advantage of the vistas and valleys, the special arrangements of the natural settings. Performances held Thursday-Sunday evenings in June. This beloved annual tradition is eagerly anticipated by the community and commands sold-out performances.

<http://www.lsa.umich.edu/rc/currentstudents/shakespeareinthearb>

**German Theatre Program.** U-M RC Deutsches Theater is part of the RC Intensive German Language Program. It has staged plays in German annually since 1985. The group travels to Munich or Berlin each year to see theater. <http://www-personal.umich.edu/~jshie/>

#### Distribution Policy

No course used to fulfill a major requirement may be used toward the [LSA Distribution Requirement](#). In addition, courses in the THREMUS subject area may not be used toward the Distribution Requirement.

## Drama: Text-to-Performance Minor

Students in this academic minor learn about the complete process from how a theater text evolves into a fleshed-out performance. The program teaches students a variety of different theatrical styles - both in textual expression and dramatic interpretation and exposes them to a breadth of original texts. Directorial methods, acting methods, scenery are all covered to help students create different and alternative connections between a piece's original message and the voice they would give it.

*Effective Fall 2012*

#### Exclusions:

*Not open to students pursuing an academic minor or major in the Department of Theatre and Drama.*

#### Advising

1813 East Quadrangle

(734) 647-2745

[www.lsa.umich.edu/rc](http://www.lsa.umich.edu/rc)

The Residential College (RC) is a four-year undergraduate liberal arts program with about 900 students and 60 faculty, situated within LSA. All RC advisors are RC faculty members and are available to meet with students to discuss RC and LSA requirements, possible majors, graduation requirements, etc. The RC [Board on Academic Standing](#) considers petitions submitted by RC students relating to requirements, deadlines, and academic circumstances. Appointments with academic advisors can be scheduled by calling the RC Academic Services Office at (734) 647-2745 or by stopping by the offices at 1813 East Quadrangle.

Students wishing to pursue an academic minor must develop a specific plan for its completion in consultation with the program's designated advisor.

## **RC academic minors are open to all LSA students**

### [Prerequisites](#)

None for the Academic Minor *per se*, although individual courses elected to meet the requirements of the Academic Minor may have course prerequisites.

### [Requirements](#)

#### **Minimum Credits: 15**

A minimum of 5 courses (at least 15-20 credits), to be elected from categories as stated:

1. **Core Courses** (both are required, and must be taken in sequence; ideally, the electives should be completed in the interval between taking RCHUMS 281 and 481):
  - A. RCHUMS 281: Introduction to Comedy and Tragedy
  - B. RCHUMS 481: Play Production Seminar.
2. **Electives.** Each student will select three electives in consultation with the T-t-P advisor. One course must be from Group A and two courses from Group B.
  - A. *Texts and Scenes*
    - RCHUMS 380: Greek Theatre.
    - RCHUMS 381: Shakespeare on the Stage.
    - RCHUMS 382: Molière and His Theatre.
    - RCHUMS 383: Ibsen and Strindberg.
    - RCHUMS 385: The Theatre of Bertolt Brecht.
    - RCHUMS 389: The Modern Theatre.
    - RCHUMS 390: Special Period and Place Drama.
  - B. *The Varieties of Literature for the Theatre*
    - RCHUMS 386 / MEMS 421: Medieval Drama.
    - AAS 341 / THTREMUS 222: Introduction to Black Theatre.
    - AAS 342 / THTREMUS 233: Acting and the Black Experience.
    - ASIAN 310: The Theater of China and Japan.
    - CLCIV 386: Greek Drama.
    - ENGLISH 267: Introduction to Shakespeare.
    - ENGLISH 349 / THTREMUS 323: American Theatre and Drama.
    - ENGLISH 367 / MEMS 367: Shakespeare's Principal Plays.



- ENGLISH 368 / MEMS 368: Shakespeare and his Contemporaries.
- ENGLISH 445: Shakespeare's Rivals.
- ENGLISH 446: World Drama: Congreve to Ibsen.
- ENGLISH 447: Modern Drama.
- ENGLISH 448: Contemporary Drama.
- GERMAN 320: German Expressionism in English Translation.
- GERMAN 360: Art and Politics in the Weimar Republic.
- GERMAN 381: Eighteenth to Nineteenth-century Drama.
- GERMAN 382: Nineteenth to Twentieth-century Drama.
- MEMS 367 / ENGLISH 367: Shakespeare's Principal Plays.
- MEMS 368 / ENGLISH 368: Shakespeare and his Contemporaries.
- MEMS 421 / RCHUMS 386: Medieval Drama.
- ITALIAN 471: Italian Theater.
- SPANISH 425: Latin-American Theater.
- SPANISH 460: The Spanish Comedia.
- SPANISH 468: Modern Spanish Theater.
- RUSSIAN 463: Chekhov.
- THREMUS 222 / AAS 341: Introduction to Black Theatre.
- THREMUS 233 / AAS 342: Acting and the Black Experience.
- THREMUS 323 / ENGLISH 349: American Theatre and Drama.
- THREMUS 324: Contemporary Black Theatre.
- THREMUS 332: Performing Gender: Drama from Oral Sources.
- THREMUS 402: Ideas of Theatre: Dramatic Theory and Criticism.

## Earth and Environmental Sciences Major

The Earth and Environmental Sciences major trains students to receive a broad foundation in the natural sciences, to understand how the Earth system works, and to tackle grand challenges facing our planet and society such as climate, energy, mineral resources, natural hazards, water, pollution, and sustainability. From our field camp in Wyoming to research on campus and across the world, Michigan students have opportunities to explore the Earth and environmental sciences in engaging ways. The Department of Earth and Environmental Sciences offers:

- an Earth and Environmental Sciences Major
- optional sub-plans within the major: (1) Earth Sciences, (2) Environmental Sciences
- an Honors Plan
- a Teacher's Certificate Program, for prospective science teachers who are candidates for a secondary teaching certificate in earth science and general science; and,
- Academic minors in Earth Sciences, Environmental Geology, Geology, Oceanography, and Paleontology

Students are required to learn material from several core areas representing physical, chemical, and biological aspects of the geosciences. The program also includes a field requirement that takes students off campus to study and apply their knowledge. Within the Earth and Environmental Sciences major students may elect a sub-plan in (1) Earth Sciences or (2) Environmental Sciences. These sub-plans are optional and are designed for students who intend

to pursue graduate studies and/or a career in the Earth and environmental sciences. Finally, students are encouraged, but not required, to complete a specialization in a subject area of their choosing. Students in this program of study can earn either a Bachelor of Arts or Bachelor of Science degree. A Bachelor of Science degree requires students complete at least 60 credits in science and math courses.

*Effective Winter 2019*

### Advising

A plan for the major in the Department of Earth and Environmental Sciences is developed in consultation with a department advisor. A proposed plan *must be approved* in its entirety by the appropriate advisor prior to registration for the first term of major. Thereafter, progress through the plan and future elections *must be reviewed, and approved in advance*, whenever a change is proposed and in any case no less frequently than at the beginning of each new academic year of residence. Certification must also be obtained from an advisor, on an official *LSA Major Release Form*, immediately prior to submission of the application for the degree.

Information about appointments with department advisors is available on the web at:  
[lsa.umich.edu/earth/undergraduate-students.html](http://lsa.umich.edu/earth/undergraduate-students.html)

Students wishing to pursue a minor in the department must develop a specific plan for its completion in consultation with the department's designated advisor. Appointments are scheduled online [lsa.umich.edu/earth/undergraduate-students.html](http://lsa.umich.edu/earth/undergraduate-students.html)

### Prerequisites

Prerequisites to the major provide students with background knowledge in topics related to Earth and environmental science and in core natural science areas. These should be completed as soon as possible.

#### **1. Earth and Environmental Science Requirements.**

Choose one from each of the following two categories:

- Category I: An introductory geoscience course with a laboratory (EARTH 116, 119&118, or 120).
- Category II: An introductory environmental science or oceanography course with a laboratory (EARTH 202, 219, or 222&223).

#### **2. MATH 115 (Calculus I) or equivalent**

#### **3. Choose at least 2 out of the following 4 options for chemistry, physics, and biology courses:**

- Option I: [EARTH 131: Earth and Environmental Chemistry **-or-** CHEM 130: General Chemistry] with CHEM 125+126 (lab + discussion) highly recommended
- Option II: PHYSICS 135 and 136: Physics for the Life Sciences I and lab **-or-** PHYSICS 140 and 141: Physics I and lab **-or-** PHYSICS 160 and 161: Honors Physics I and lab

- Option III: BIOLOGY 171: Introductory Biology Ecology and Evolution, BIOLOGY 172: Introductory Biology Molecular, Cellular, and Developmental, BIOLOGY 174: Introduction to Cell and Molecular Biology, **or** BIOLOGY 195: Introductory Biology AP.
- Option IV: Choose one from:
  - MATH 116: Calculus II,
  - MATH 214 or 216: Differential Equations,
  - CHEM 230: Physical Chemistry or 210/211: Organic Chemistry and Lab,  
or
  - PHYSICS 240/241: Physics II and Lab.

## Recommended Prerequisites

Recommended introductory field experience. Students are encouraged in their first year of declaring the major to participate in a departmental international or domestic field trip over spring break or summer.

Students interested in continuing on to graduate school or professional work in the geosciences are encouraged to choose their prerequisites in consultation with a department advisor. See also the other recommendations listed below.

## Requirements

**Minimum Credits:** 30

The major requires a minimum of 30 credits of coursework not including prerequisites. Students who choose a sub-plan will complete a minimum of 38 credits.

Students may pursue one of three options within the major:

- (1) an Earth and Environmental Sciences major with no sub-plan;
- (2) an Earth and Environmental Sciences major with a sub-plan in Earth Sciences
- (3) an Earth and Environmental Sciences major with a sub-plan in Environmental Sciences

The requirements for each option are described below:

**Earth and Environmental Sciences major with no sub-plan:** this option is intended to provide flexibility and is suitable for students interested in careers in environmental law, policy, economics, business, sustainability, and related fields.

### 1. Core Courses

Core courses in the Earth and Environmental Sciences Major are designed to provide students with training in the physical, chemical, and biologic processes relevant to the present form, and evolution of the Earth.

Students should choose four courses from the following **Core Course Options**:

- EARTH 305: Earth's Surface and Sediments
- EARTH 313: Geobiology
- EARTH 314: Global and Applied Geophysics
- EARTH 315: Earth Materials
- EARTH 325: Environmental Geochemistry
- EARTH 331: Climate and Climate Change
- EARTH 351: Earth Structure
- EARTH 412: Geochemistry of the Solid Earth
- EARTH 442 Earth Surface Processes and Soils

## **2. Field Experience Requirement**

A fundamental aspect of studying the Earth and environmental sciences is exposure to hands-on approaches for data collection and problem-solving. For this reason, the Earth and Environmental Sciences major requires students to complete a field-based course at Camp Davis, Wyoming, where students learn how to collect and interpret Earth and Environmental science data.

Students must choose one course from EARTH 450 (or prior to Spring 2014, EARTH 341) or EARTH 440. Students interested in completing EARTH 440 are strongly encouraged to complete EARTH 305 and 351 prior to taking EARTH 440. Students who take EARTH 450 must take either EARTH 119&118 or 116 or 120 AND EARTH 201 or 202 or 219, or ENVIRON 209 or 202 or 229 or 281, or BIOLOGY 281. Students who take EARTH 450 are also strongly encouraged to take EARTH 442 prior to taking EARTH 450. Students interested in a career in Oceanography may elect to take, with approval from a department advisor, a marine based field course.

## **3. General Electives**

Nine EARTH credits at the 300 or higher level. Earth and Environmental Sciences majors are required to take these additional EARTH credits at the 300 or higher level to develop additional expertise in a specialization or area of their choosing. Students may wish to consider a specialization in an area listed in the core courses, or create their own specialization in consultation with a department advisor.

Remaining core courses listed above may be elected as well as other department course offerings. Students interested in graduate school and/or professional employment in the geosciences are encouraged to take as many 400-level courses as possible.

A maximum of one credit of research or independent study (EARTH 299, 489, 490, 494, 498, 499) can be used for these electives.

## **4. Upper Level Writing Requirement**

The College requires that every student satisfy an upper-level writing requirement before

graduation. Students in major programs in the department must satisfy this requirement by completion of EARTH 333 or 380 with a C- minimum or by a program of writing that is explained in detail on the departmental web page:

[www.lsa.umich.edu/earth/undergraduate](http://www.lsa.umich.edu/earth/undergraduate).

**Earth and Environmental Sciences major with an Earth Sciences sub-plan:** This option is intended to provide a strong foundation in core areas of the Earth sciences and skills and experience in the collection and interpretation of data, and is suitable for students who are interested in pursuing a career and/or graduate studies in geology, geophysics, and geochemistry and related fields.

### 1. Core Courses

Core courses in the Earth Sciences sub-plan are designed to provide students with training in the physical, chemical, and geological processes relevant to the present form and evolution of the Earth. Recognizing that core areas of the environmental sciences are also central to sub-disciplines in the Earth sciences, the Earth Sciences sub-plan also requires at least one core course from the Environmental Sciences sub-plan. Finally, an upper-level core course builds on knowledge and concepts from the core

Students take all five of the following **Earth Sciences Core Courses**:

- EARTH 305 Earth's Surface and Sediments
- EARTH 314 Global and Applied Geophysics
- EARTH 315 Earth Materials
- EARTH 351 Earth Structure
- EARTH 412 Geochemistry of the Solid Earth

Students choose one of the following **Environmental Sciences Core Courses**:

- EARTH 313 Geobiology
- EARTH 325 Environmental Geochemistry
- EARTH 331 Climate and Climate Change
- EARTH 442 Earth Surface Processes and Soils

### 2. Upper-Level Analytical Methods

Skills in the collection, analysis, and interpretation of data are critical to the Earth Sciences. For this reason, the Earth Sciences sub-plan requires students to complete one of the following **Upper-Level Analytical Methods Courses**:

- EARTH 408 Introduction to GIS
- EARTH 444 Analytical Paleobiology
- EARTH 455 Determinative Methods
- EARTH 468 Data and Models

### 3. Field Experience Requirement

- EARTH 440 Geology Field Methods (Students interested in completing EARTH 440 are strongly encouraged to complete EARTH 305 and 351 prior to taking EARTH 440.)

### 4. Earth Sciences Electives

At least one of the following:

- EARTH 344 Sustainable and Fossil Energy
- EARTH 415 Economic Geology
- EARTH 418&419 Paleontology
- EARTH 420 Earth Physics
- EARTH 422 Principles of Geochemistry
- EARTH 428 Mineral Surfaces
- EARTH 429 Computational Mineralogy
- EARTH 432 Plant Paleobiology
- EARTH 437 Evolution of Vertebrates
- EARTH 442 Earth Surface Processes and Soils
- EARTH 444 Analytical Paleobiology
- EARTH 449 Marine Geology
- EARTH 467 Stratigraphy and Basin Analysis
- EARTH 477 Hydrogeology
- EARTH 483 Seismology

### 5. Upper Level Writing Requirement

The College requires that every student satisfy an upper-level writing requirement before graduation. Students in concentration programs in the department must satisfy this requirement by completion of EARTH 333 or 380 or by a program of writing that is explained in detail on the departmental web page: [www.lsa.umich.edu/earth/undergraduate](http://www.lsa.umich.edu/earth/undergraduate).

**Earth and Environmental Sciences major with an Environmental Sciences sub-plan:** This option is intended to provide a strong foundation in core areas of the environmental sciences and skills and experience in the collection and interpretation of data, and is suitable for students who are interested in pursuing a career and/or graduate studies in climatology, hydrology, oceanography, environmental chemistry, and related fields.

#### 1. Core Courses

Core courses in the Environmental Sciences sub-plan are designed to provide students with a foundation in the physical, chemical, biological, and geological processes relevant to environmental processes. Recognizing that core areas of the Earth sciences are also central to sub-disciplines in the environmental sciences, the Environmental Sciences sub-plan also requires at least one core course from the Earth Sciences sub-plan.

Students take all four of the following **Environmental Sciences Core Courses**:

- EARTH 313 Geobiology
- EARTH 325 Environmental Geochemistry
- EARTH 331 Climate and Climate Change
- EARTH 442 Earth Surface Processes and Soils

Students choose one of the following **Earth Sciences Core Courses**:

- EARTH 305 Earth's Surface and Sediments
- EARTH 314 Global and Applied Geophysics
- EARTH 315 Earth Materials
- EARTH 351 Earth Structure
- EARTH 412 Geochemistry of the Solid Earth

## **2. Sustainability Course**

Human activity exerts strong influence on the environment and is now an integral part of the Earth system. Hence, a course that focuses on human issues surrounding resources, economics, sustainability, and environment is required for the Environmental Sciences sub-plan. Students choose one of the following:

- EARTH 333 Inexhaustible Seas? Marine Resources and Environmental Issues
- EARTH 380 Mineral Resources, Economics, and the Environment

## **3. Upper-Level Analytical Methods**

Skills in the collection, analysis, and interpretation of data are critical to the environmental sciences. For this reason, the Environmental Sciences sub-plan requires students to complete one of the following **Upper-Level Analytical Methods Courses**:

- EARTH 408 Introduction to GIS
- EARTH 455 Determinative Methods
- EARTH 468 Data and Models

## **4. Field Experience Requirement**

- EARTH 450 Ecosystem Science (Students who take EARTH 450 must take either EARTH 119&118 or 116 or 120 AND EARTH 201 or 202 or 219, or ENVIRON 209 or 202 or 229 or 281, or BIOLOGY 281. Students who take EARTH 450 are also strongly encouraged to take EARTH 442 prior to taking EARTH 450.)

## **5. Environmental Sciences Electives**

At least two of the following:

- EARTH 344 Sustainable and Fossil Energy
- EARTH 413 Geomicrobiology
- EARTH 421 Introduction to Physical Oceanography
- EARTH 427 Environmental and Technological Applications of Mineralogy
- EARTH 428 Mineral Surfaces
- EARTH 429 Computational Mineralogy
- EARTH 431 Terrestrial Biomes
- EARTH 446 Paleoclimate
- EARTH 452 Paleoceanography
- EARTH 465 Biogeochemistry
- EARTH 477 Hydrogeology
- EARTH 478 Geochemistry of Natural Waters

## **6. Upper Level Writing Requirement**

The College requires that every student satisfy an upper-level writing requirement before graduation. Students in concentration programs in the department must satisfy this requirement by completion of EARTH 333 or 380 or by a program of writing that is explained in detail on the departmental web page: [www.lsa.umich.edu/earth/undergraduate](http://www.lsa.umich.edu/earth/undergraduate).

## **Sample specializations**

Students who choose the Earth and Environmental Sciences major are encouraged to build a specialization that suits their own interests by taking additional upper-level courses in the department. They may elect to use additional relevant courses from other departments as well. Students should build their specialization in close consultation with their department advisor.

The following includes titles of a few example specializations that students may consider pursuing. Recommended courses associated with each of these specializations are available on the department website. These are only examples, and other specializations may be considered in consultation with a department advisor.

- Geology
- Environmental Geoscience
- Energy and Mineral Resources
- Geochemistry
- Geophysics
- Oceanography
- Paleontology and Geobiology

## **Other recommendations**

Students interested in graduate school or a career in geological and environmental sciences, or oceanography, are strongly encouraged to plan their curriculum in close consultation with an



Earth and Environmental Sciences department advisor as soon as possible. Example curricula are given below.

Recommended courses for students interested in graduate study or professional employment in **Geological Sciences** include:

- MATH 116: Calculus II, MATH 214 or 216: Differential equations.
- CHEM 230: Physical Chemistry or CHEM 210 and 211: Organic Chemistry
- PHYSICS 240 and 241: Physics II and Lab
- EARTH 305, 310, 313, 315, 351, 418, 420, 422, 440
- Completion of a senior or Honors thesis after at least two semesters of research with faculty in the department.

Recommended courses for students interested in graduate study or professional employment in **Environmental Geology** include:

- MATH 116: Calculus II, MATH 214 or 216: Differential equations.
- CHEM 230: Physical Chemistry or CHEM 210 and 211: Organic Chemistry
- PHYSICS 240 and 241: Physics II and Lab, or BIOLOGY 162, 171, or 172.
- EARTH 305, 315, 325, 380, 420, 442, 450 (or prior to Spring 2014, EARTH 341), 465, 477.
- Completion of a senior or Honors thesis after at least two semesters of research with faculty in the department.

Recommended courses for students interested in graduate study or professional employment in **Oceanography** include:

- MATH 116: Calculus II, and one of MATH 214, 215, or 216: Differential equations
- STATS 250
- CHEM 230: Physical Chemistry or CHEM 210 and 211: Organic Chemistry
- PHYSICS 240 and 241: Physics II and Lab
- EARTH 222 and 223, 305, 310, 320, 321, 325 or 422, 409, 420, 449, 452
- Completion of a senior or Honors thesis after at least two semesters of research with faculty in the department.

### Distribution Policy

No course used to fulfill a major requirement may be used toward the [LSA Distribution Requirement](#). In addition, courses in the EARTH subject area may not be used toward the Distribution Requirement.

### Honors

Effective: Winter 2012

The Honors plan consists of a series of special academic opportunities supplementary to any of the regular majors. The Honors plan is tailored to fit the needs and interests of individual students. Honors students in the Department of Earth and Environmental Sciences should complete EARTH 490 for one credit during two of the four terms of the junior and senior years for:

1. reading and discussion of the professional literature;
2. library research and reporting on a special research problem;
3. research as an assistant to a faculty member or as part of a graduate seminar; or
4. individual research and reporting on a problem or graduate seminar.

A thesis is required to complete the program. The Honors plan offers well-qualified students an opportunity to increase the breadth and depth of their undergraduate experience. To be eligible for the Honors plan, students must have at least: (1) a 3.4 grade point average in EARTH courses elected in the department; and (2) a cumulative grade point average of at least 3.4 at the time of acceptance. Students admitted to the Honors plan must complete the requirements for their principal major program.

Ideally, the selection of candidates for Honors plan is made at the beginning of the junior year, but qualified students may be admitted to the plan as late as the end of the junior year. *Interested students should contact the departmental office for referral to the Honors advisor, 2534 C.C. Little Building, (734) 764-1435.*

### Teaching Certificate

The Department of Earth and Environmental Sciences offers prospective secondary school science teachers an opportunity to earn a bachelor's degree from the College with a major in the department while satisfying the requirements for a provisional secondary school teaching certificate with a teaching major in earth science or general science. An outline with specific information about the teaching major and minor in earth science, general science, and the other teaching certificate requirements should be obtained from the School of Education Office of Academic Services. Interested students should consult the teaching certificate advisor as early as possible.

## Earth Sciences Minor

The Earth Sciences minor is designed to give students a broad introduction to geology, oceanography and related sciences. It allows a wide selection of courses to suit both general and specific interests. The Earth Sciences minor would be particularly suitable for non-science majors, such as pre-law, business, economics, history, and English.

Our innovative and flexible majors provide an interesting path for students to follow on their way to an LSA degree. From our field camp at Camp Davis in Wyoming, to lab work on campus, Michigan students have an opportunity to explore the geological sciences in exciting ways.

The Department of Earth and Environmental Sciences offers:

- an [Earth and Environmental Sciences Major](#) and an **Honors Plan**
- a **Teacher's Certificate Program**, for prospective science teachers who are candidates for a secondary teaching certificate in earth science and general science; and,

- Academic minors in *Earth Sciences*, [Environmental Geology](#), [Geology](#), [Oceanography](#), and [Paleontology](#).

*Effective Winter 2021*

#### **Exclusions:**

*A minor in Earth Sciences is not open to students with any major or any other minor in the Department of Earth and Environmental Sciences.*

#### Advising

Students wishing to pursue a minor in the Department of Earth and Environmental Sciences must develop a specific plan for its completion in consultation with the department's designated advisor. Appointments are scheduled online [www.lsa.umich.edu/earth/undergraduate](http://www.lsa.umich.edu/earth/undergraduate)

#### Prerequisites

None.

#### Requirements

##### **Minimum Credits: 15**

1. **One introductory Geology course** must be taken from one of the following two groups:
  - Group 1. Courses with laboratory: EARTH 116, 118&119, 120, 201, 218&219, 222&223.
  - Group 2. Courses without laboratory (EARTH 119, 125, 135, 175, 205+206, 219)
2. **One General Interest course.** Up to four additional credits may be elected from 200-level and up courses in Earth and Environmental Sciences, including 200-level courses listed in Category 1 (above).
3. **Upper-level Electives:** The remainder of the credits for the minor must be elected from 300- and 400-level courses in Earth and Environmental Sciences.

## **East European Studies Minor**

Slavic Languages and Literatures offers an interdisciplinary minor to students who wish to:

- a. better understand the history and culture of Central and Eastern Europe and
  - b. gain insight into the political, economic, and social transitions taking place in this region.
- The minor in East European Studies does not have prerequisites or require knowledge of a language of the region.

*Effective Fall 2019*

**Exclusions:**

*Not open to those electing a major or another minor in Russian, East European, and Eurasian Studies.*

Advising

Undergraduate advisors in Slavic Languages and Literatures are available to meet with undeclared students who would like to learn more about the program, and also with current majors and minors who would like to discuss course selection, degree requirements, major/minor releases, and other matters of concern. Appointments can be made through our online appointment calendar. Students may also contact [slavic@umich.edu](mailto:slavic@umich.edu) for any inquiries. The Slavic Department is currently located at 3040 Modern Languages Building, 812 E. Washington St. Ann Arbor, MI.

Prerequisites

None.

Requirements

**Minimum Credits: 15**

At least 15 credits of courses on East European topics, selected in consultation with and approved by the Slavic undergraduate academic advisor. A minimum of 3 courses that will be counted toward the minor must be upper-level (300- or 400-level).

1. REES 396 or REES 397
2. *Disciplinary distribution:* At least one 3-credit course in each sub-area (arts/culture, history, and social science).

Constraints

Bosnian/Croatian/Serbian, Czech, Polish, or Ukrainian language courses may not count toward the minor.

## Ecology and Evolutionary Biology Minor

The minor trains biologists interested in the origins and complex interactions of the earth's biodiversity and ecosystems with both the fundamental knowledge in these areas and the basic skills of scientific inquiry. The minor covers the material of the major to a lesser depth for students who wish to supplement a major in another area with additional biological expertise.

*Effective Fall 2018*

## Exclusions:

*Students who elect a minor in Ecology and Evolutionary Biology may not elect the following majors: Biology, Biology, Health, and Society (formerly known as General Biology), Plant Biology, Ecology and Evolutionary Biology, Microbiology, or Biochemistry. They may also not elect a minor in Biology or Plant Biology.*

The minor in Ecology and Evolutionary Biology is not recommended for students interested in graduate work in the biological sciences.

## Advising

Students are advised by a combination of Undergraduate Biology Office staff and faculty department advisors. Advising topics include investigating majors, declaring a major, course planning, research and Honors, major releases, graduate school and career advice. Students who are interested in the EEB major or minor should consult a general advisor during the freshman year, and are strongly encouraged to meet with a department advisor early in their academic career, but no later than the second term of their sophomore year. It is not necessary to complete every prerequisite before declaring a major. To make an appointment, go to the Program in Biology website at <http://lsa.umich.edu/biology/undergraduates/advising.html>.

## Grade Policies

### Total Credits and GPA Requirement for Ecology and Evolutionary Biology Minor:

Minimum 15 cr. in Minor

Minimum 2.0 GPA in Minor

GPA is calculated from all mandatory prerequisites, all courses used for minor requirements, and all courses in BIOLOGY, EEB, and MCDB.

## Prerequisites

### Introductory Biology Sequence:

Choose Sequence A, B, or C:

- A. BIOLOGY 171, BIOLOGY 172 or 174, & BIOLOGY 173; or
- B. BIOLOGY 195 (AP/IB) & BIOLOGY 173; or
- C. BIOLOGY 191 (transfer credit), BIOLOGY 192, & BIOLOGY 173

## Requirements

**Minimum Credits: 15**

### Core Courses:

Select at least two of the three courses listed. (Courses with an asterisk (\*) may overlap with the lab requirement.)

- Ecology: BIOLOGY 281 or EEB 381\*
- Genetics: BIOLOGY 305
- Evolution: EEB 390, 391, or 392\*

### **Laboratory/Field Course:**

(This requirement may OVERLAP with other minor reqs.)

- Choose one laboratory/field course from the following: BIOLOGY 207, 226, 230, 252, 255, 288; EEB 300\*, 313, 320, 321, 330, 341, 348, 372, 381, 392, 400\*, 405, 416, 431, 433, 436, 441, 443, 450, 451, 453, 455, 457, 459, 463, 468, 477, 482, 483, 486, 489, 493, 556; MCDB 300\*, 306, 308, 400\*, 416, 419, 423, 424, 429  
*\*EEB/MCDB 300 or 400 (Independent Research), elected for a minimum of 3 credits in a single term, may be used to fulfill a lab requirement. (3 credit max applies; see CONSTRAINTS below)*

### **Biodiversity Course:**

(Courses with an asterisk (\*) may overlap with the lab requirement)

- Choose one course: BIOLOGY 207\*, 230\*, 252\*, 255\*, 256, 288\*; EEB 330\*, 341\*, 380 (F17), 420, 431\*, 433\*, 436\*, 440, 442\*, 443\*, 450\*, 451\*, 453\*, 457\*, 468\*, 470, 486\*, 556\*

### **Additional Courses:**

Choose additional specific EEB courses, to reach 15 minor credit hours.

- BIOLOGY 241, BIOLOGY 299, EEB 301, EEB 302, EEB 800, and non-specific (departmental) transfer courses are EXCLUDED

### **Constraints**

- Prerequisites, introductory science courses, and non-specific (departmental) transfer courses are excluded from the 15 cr. required for the minor.
- A maximum of three credits of independent research (BIOLOGY 200, EEB/MCDB 300, or EEB/MCDB 400) may be counted toward the minor.

# **Ecology and Evolution Biodiversity Major**

The Ecology, Evolution, and Biodiversity (EEB) major provides a comprehensive foundation in the biological sciences, places an emphasis on undergraduate research experience, and provides an integrated perspective on the origins and complex interactions of the earth's biodiversity and ecosystems. It focuses on numerous levels of biological organization over multiple time scales, including studies of genes and genomes, individual organisms, populations, communities and ecosystems. The major is highly suitable for students who wish to pursue career pathways in a wide variety of disciplines. These include graduate studies in the biological, public health and medical, dental, and veterinary professions, conservation and natural resource management, teaching at the K-12 level, positions in the local, state and federal governments, non-profit/non-governmental organizations, and private sector opportunities such as environmental consulting agencies.

*Effective Winter 2019*

## Exclusions:

*Students who elect a major in Ecology, Evolution, and Biodiversity may not elect the following majors: Biology; Biology, Health, and Society (formerly known as General Biology); Microbiology; Plant Biology; or Biochemistry. They may also not elect a minor in Biology; Ecology and Evolutionary Biology; Plant Biology; Chemistry; or Biochemistry.*

## Advising

Students are advised by a combination of Undergraduate Biology Office staff and faculty department advisors. Advising topics include investigating majors, declaring a major, course planning, research and Honors, major releases, graduate school and career advice. Students who are interested in the EEB major or minor should consult a general advisor during the freshman year, and are strongly encouraged to meet with a department advisor early in their academic career, but no later than the second term of their sophomore year. It is not necessary to complete every prerequisite before declaring a major. To make an appointment, go to the Program in Biology website at [www.lsa.umich.edu/biology/](http://www.lsa.umich.edu/biology/).

## Grade Policies

### Total Credits and GPA Requirement for Ecology and Evolutionary Biology:

Minimum 30 cr. in Major

Minimum 2.0 GPA in Major

GPA is calculated from all mandatory prerequisites, all courses used for major requirements (including cognates), and all courses in BIOLOGY, EEB, and MCDB.

The introductory biology sequence must be taken for a grade. Prerequisites other than introductory biology may be taken pass/fail; however, it is not recommended, especially for chemistry. Remember that at least a C- must be earned to pass a course taken pass/fail.

Courses used for the major may not be taken pass/fail.

## Prerequisites

### Introductory Biology Sequence:

Choose Sequence A, B, or C:

- A. BIOLOGY 171, BIOLOGY 172 or 174, & BIOLOGY 173; or
- B. BIOLOGY 195 (AP/IB) & BIOLOGY 173; or
- C. BIOLOGY 191 (transfer credit), BIOLOGY 192, & BIOLOGY 173

### Chemistry Sequence:

- CHEM 210 & 211

## Quantitative Analysis Sequence:

- Quantitative Analysis 1: CALCULUS I: MATH 115, 120 (AP), 175, 185, or 295; and,
- Quantitative Analysis 2: One course from: MATH 116, 121 (AP), 156, 176, 186, or 296; STATS 180 (AP), 250 or 280; STATS 400-level or above (min. 3 credits); BIOLOGY 202; BIOPHYS/PHYSICS 290; EECS 183, 203 or 280; EARTH 468; or other course with a MATH 115 prereq. chosen in consultation with a major advisor. *[Note: Any course used to fulfill this requirement cannot also be used as a major elective; i.e., a course cannot "double-count."]*

## Physics Sequence:

- Physics I (lecture & lab): One of the following combinations: PHYSICS 125 & 127, 135 & 136, 140 & 141, or 160 & 161. PHYSICS 139 (AP) will also fulfill this requirement.

## Requirements

### Minimum Credits: 30

## EEB Major Core:

- Ecology: BIOLOGY 281 and EEB 372 \*or\* EEB 381 (at UMBS)
- Genetics: BIOLOGY 305
- Evolution: EEB 390, 391, or 392
- Biochemistry or Quantitative Analysis 3 (min. 3 credits): Choose from: MCDB 310; BIOLCHEM 415; CHEM 351; STATS 401, 403, 412, or 425; EECS 281 or 376; EEB 408, 430, 480, or 490; or a second (non-AP) course at the 200-level or above from the QA2 options above.
- EEB capstone: EEB 410

## Upper-Level Electives for EEB:

(2 courses, minimum 6 credits)

- EEB 300-level or above
  - EEB 300/400, 301, 302, 397, 399, 499, 800, and non-specific (departmental) transfer courses are EXCLUDED.
- EEB or MCDB 300-level or above
  - EEB/MCDB 300/400, 301, 302, 397, 399, 499, 800, MCDB 412 (*if elected WN20 or later*), and non-specific (departmental) transfer courses are EXCLUDED.

## EEB Requirements:

(these may overlap with the Major Core or Electives):

- Biodiversity Focus (BD) [at least one]: BIOLOGY 207, 230, 252, 255, 256, 288; EEB 330, 341, 380 (F17), 420, 431, 433, 436, 440, 442, 443, 450, 451, 453, 457, 468, 470, 486, 556
- Field or Research Experience (FR) [at least one]: EEB 300\*, 321, 330, 348, 381, 392, 400\*, 405, 431, 443, 453, 455, 457, 482, 493, 556  
*\*EEB/MCDB 300 or 400 (Independent Research), elected for a minimum of 3 credits in a single term, may be used to fulfill the FR requirement. (6 credit max. applies; see CONSTRAINTS below.)*

## Additional Courses:

- Choose additional BIOLOGY, EEB, and MCDB courses at the 200-level and above, to reach 30 major credit hours.



- BIOLOGY 241, BIOLOGY 299, EEB/MCDB 301, EEB/MCDB 302, EEB/MCDB 800, MCDB 412, and non-specific (departmental) transfer courses are EXCLUDED.
- A maximum of two approved cognate courses may be used as additional courses: ANTHRBIO 365, 368, 461, BIOLCHEM 415\*; BIOMEDE 231; BIOPHYS 290; CHEM 230 and above\*; CLIMATE 320; CMPLXSYS 501, 530; EARTH 320, 418, 436, 437, 450, 453; ENVIRON 310, 317, 450, 453, 461; EPID 543, 560; HUMGEN 541; MATH 200 and above\*; MICRBIOL 405, 415, 460; PHYSICS 290 ; PSYCH 337, 338; SPACE 320; STATS 250\*, 280\*, 401

(\*Courses used as prerequisites or core options may not double-count as additional courses.)

### Constraints

- A maximum of six credits of independent research (BIOLOGY 200, EEB/MCDB 300/400) may be counted toward the major.
- Prerequisites, introductory science courses, and non-specific (departmental) transfer courses are EXCLUDED from the 30 cr. required for the major.

### Distribution Policy

No course used to fulfill a major requirement may be used toward the [LSA Distribution Requirement](#). In addition, courses in the BIOLOGY, EEB, MCDB, and MICRBIOL subject areas may not be used toward the Distribution Requirement.

### Honors

The Program in Biology administers an Honors Program to train students to conduct independent research in the biological sciences. Participating in the honors program allows students to develop their research skills, deepen their understanding of the field, and form productive relationships with faculty and other students. The achievement is noted on the diploma and official transcript.

In addition to completing all the requirements for the major, an honors degree requires:

1. a major GPA of at least 3.4, and
2. the completion of a significant piece of independent research that is
  - a. reported in an honors thesis and
  - b. presented in a public forum.

For more information, consult the [Program in Biology Honors Program Information page](#) or a Program in Biology advisor.

## Economics Major

Economists study the choices people make when allocating limited resources among competing uses. They seek to describe, explain, predict, and evaluate the behaviors of individual households, business enterprises, and government agencies. They also seek to describe, explain, predict, and evaluate the aggregate outcomes of those behaviors in individual markets, individual countries, and the world. While much of their work examines interactions among actors in market settings, economists also examine behavior inside households, inside companies, and inside government agencies.

Economists use a rich set of tools and methods, including abstract mathematical modeling and formal statistical analysis. Undergraduate economists need a solid background in calculus and statistics.

The study of economics prepares undergraduates exceptionally well for careers in business, consulting, finance, law, politics, public and private administration, and teaching. Many professional economists, including virtually all academic economists, have earned doctorates in the discipline.

Undergraduates study economics for many reasons. To accommodate this diversity, the Department of Economics offers a wide variety of courses, beginning with a mainstay of a liberal arts education, the two-semester sequence in the principles of economics. Given the multiplicity of paths through the departmental curriculum, students interested in majoring or minoring in economics should consult a departmental adviser as early as possible in their studies. The department's website presents several possible strategies for completing the major.

*Effective Winter 2021*

### Advising

Students interested in a major or minor in Economics should consult an economics department advisor. Appointments are scheduled online at:

<http://lsa.umich.edu/econ/undergraduates/departamental-advising.html>

Students are urged to consult with a department advisor each term before selecting courses for the following term.

**Economics Undergraduate Office.** The undergraduate office is located at 238 Lorch Hall, (734) 763-9242. The Student Services Assistant for the economics undergraduate program is available to answer questions about requirements for the major, course offerings, wait-list procedures, career/job information, economics networking program, and other matters concerning the undergraduate program. Walk-in advising is available every Monday and Thursday between 2-3pm.

### Prerequisites

ECON 101 and 102 and MATH 115, each completed with a grade of C or better. MATH 120 may not be substituted for MATH 115. MATH 116, 121, 156, 176 (*only topic Explorations in Topology and Analysis*), 185, 186, 215, 216, 255, 256, 285, 286, 295, or 296 may be substituted for MATH 115.

To declare an Economics major, schedule an appointment with an Economics Department advisor. Students must complete the prerequisites to the major before declaring and must have a GPA of 2.0 or better in the major.

Students interested in advanced economics are strongly encouraged to continue the study of mathematics beyond MATH 115. Note that MATH 116 (Calculus II) is a prerequisite for ECON 451 and that MATH 215 (Calculus III) and MATH 217 (Linear Algebra) are prerequisites for ECON 453.

## Requirements

### Minimum Credits: 30

#### 1. Core Economic Theory

- ECON 401, completed with a grade of C– or better.
- ECON 402, completed with a grade of C– or better.  
(ECON 401 should be elected before ECON 402.)

#### 2. Core Statistics and Econometrics

- STATS 206, STATS 250 or 280 (Basic), or STATS 426 or ECON 451 (Intermediate), or ECON 453(Advanced), completed with a grade of C– or better.
- ECON 251(Basic), or ECON 452 (Intermediate), or ECON 454 (Advanced); completed with a grade of C– or better.

#### 3. Electives: 15 additional credits in upper-level (300 and 400 level) ECON courses, including at least nine credits in 400 level courses with ECON 401 or ECON 402 as a prerequisite.

ECON 401 and 402, and STATS 206, STATS 250, STATS 280, ECON 250, 251, 451, 452, 453, and 454 do not count toward the elective requirement for the major.

Any 600-level course in Economics may be counted as an elective with ECON 401 or ECON 402 as a prerequisite, but undergraduate election of a 600-level course requires approval of the instructor.

All students intending to major in Economics should endeavor to complete the core requirements in economic theory and in statistics and econometrics before the second term of the junior year.

## Other Department Policies

### AP Credits

The Department of Economics does not give AP credit for ECON 101 or ECON 102. Whenever the department lists ECON 101 or ECON 102 as a prerequisite, the department does not accept AP credit as a substitute.

Students achieving a 4 or 5 on the AP Microeconomics exam receive 2 credits for ECON 101X, and students achieving a 4 or 5 on the AP Macroeconomics exam receive 2 credits for ECON 102X. As prerequisites for other courses in Economics and as prerequisites for the Economics major and minor, ECON 101X does not substitute for ECON 101, and ECON 102X does not substitute for ECON 102. Students receiving 2 credits for ECON 101X may take ECON 101 and receive 4 credits for ECON 101. Students who receive 2 credits for ECON 102X may take ECON 102 and receive 4 credits for ECON 102. Thus, anyone who intends to concentrate in economics, to minor in economics, or to take electives in economics at the 300 or 400 level should enroll in ECON 101 and/or ECON 102.

Students intending to apply to the BBA program should consult carefully the requirements of the Business School. As of this writing, the Business School does not accept ECON 101X as a substitute for ECON 101, and it does not accept ECON 102X as a substitute for ECON 102.

Advanced placement credits in MATH 121 may be substituted for MATH 115. Credits in MATH 120 alone do not satisfy the mathematics prerequisite for an economics major or minor.

Students with credit for MATH 120 may satisfy the mathematics prerequisite for the Economics major by completing, with a grade of at least C, MATH 115, MATH 116, or one of the Honors alternatives to these courses.

### Residency

#### **Ann Arbor campus requirement**

To count toward the major, any course not taken on the Ann Arbor campus of the University should be approved in advance by an Economics Department Advisor.

ECON 401 and 402 must be taken on the Ann Arbor campus of the University.

To count toward the major, at least four credits of 400-level electives with ECON 401 or ECON 402 as a prerequisite must be taken on the Ann Arbor campus of the University.

### Honors

Qualified students are encouraged to consider an Honors subplan in Economics. The standards for admission are a cumulative grade point average of at least 3.4. Application is made and admission is granted to the Honors plan in the fall term of either the junior or senior year.

Honors majors are required to complete the requirements for a regular major in Economics.

An Honors plan must include

1. One of: ECON 451 or ECON 453 or STATS 426
2. One of: ECON 452 or ECON 454.
3. At least one semester of ECON 497.

In addition, Honors majors must complete a senior Honors thesis. The senior Honors thesis is an independent research project completed by the student under the direction of a faculty advisor and the Director of the Honors Program in Economics. Honors majors are given priority in election of one section of ECON 495 (Seminar in Economics).

## **Economics Minor**

A minor in economics provides a useful background for students seeking careers in law, business, government, journalism, and teaching. Students concentrating in one of the other social sciences are often interested in economic issues and the study of economics provides them with tools useful for analyzing the economic aspects of issues in these other disciplines. The analytic skills and knowledge of economic institutions developed in the pursuit of the minor in economics will be useful to students in all disciplines who will be contributing to business and public policy decisions. Students completing the minor in economics develop analytical skills through exploring the paradigms of microeconomics and macroeconomics at the intermediate level and increase their understanding of economics institutions and of application of economic principles.

As a social science, economics is concerned with people in their roles as economic decision makers. Economists study how business and personal decisions are made under conditions of uncertainty and incomplete information, and they provide insight into problems involving both short- and long-term planning, such as investment and savings decisions.

Economic problems are central to modern society; they center around the utilization of limited resources to provide goods and services for society. Consequently, a broad understanding of the modern world requires some knowledge of economic systems. An individual's intelligent understanding of and participation in the solution of problems which face society is aided by an understanding of the point of view and techniques of analysis which have been developed by economists.

A major in Economics leads to a more detailed understanding of the modern economic world and provides a useful background for students seeking careers in law, business, government, journalism, and teaching. A strong grounding in both theoretical and applied aspects of economics allows students to use their knowledge to understand economic behavior and provides a basis for evaluating economic policy.

The introductory courses (ECON 101 and 102) offered by the department are designed to provide basic knowledge as well as to serve as a foundation for other courses in economics for students who wish to pursue the subject at an intermediate or advanced level.

Virtually all empirical work in economics relies on statistical and econometric analysis. No one can understand or evaluate empirical economics, let alone perform it, without solid grounding in the tools of econometrics. Our curriculum requires a two-course sequence in statistics and econometrics. Student may choose from three different sequences that differ in emphasis (practical, applications, concepts, or foundations) and in mathematical preparation (Calc I, Calc II, or Calc II + linear algebra).

Students who wish to attain professional competence as economists in preparation for careers in research or in college or university teaching normally plan on graduate work in economics.

*Effective Winter 2020*

**Exclusions:**

*Academic minor in Economics is not open to students with a major in the Department of Economics.*

Advising

Students interested in a major or minor in Economics should consult an economics department advisor. Appointments are scheduled online at:

[www.lsa.umich.edu/econ/undergraduatestudy/departentaladvising](http://www.lsa.umich.edu/econ/undergraduatestudy/departentaladvising)

Students are urged to consult with a department advisor each term before selecting courses for the following term.

**Economics Undergraduate Office.** The undergraduate office is located at 238 Lorch Hall, (734) 763-9242. The Student Services Assistant for the economics undergraduate program is available to answer questions about requirements for the major, course offerings, wait-list procedures, career/job information, economics networking program, and other matters concerning the undergraduate program. Walk-in advising is available on Mondays and Thursdays between 2-3pm.

### Prerequisites

ECON 101 and 102 and MATH 115, each completed with grade at least C. One of the Honors alternatives to MATH 115 may be substituted for MATH 115. Advanced placement credits in MATH 121 may be substituted for MATH 115. Credits in MATH 120 alone do not satisfy the mathematics prerequisite for an economics major or minor. Students with this credit may complete the economics mathematics prerequisite by completing, with a grade of at least C, MATH 115, MATH 116, or one of the Honors alternatives to these courses.

### Requirements

#### **Minimum Credits: 17**

17 credits in ECON at the 300-level and above, distributed as follows:

1. ECON 401: Intermediate Microeconomics and ECON 402: Intermediate Macroeconomics, each completed with a grade of at least C- [ECON 401 should be taken before ECON 402.]
2. Nine additional credits in upper level (300 and 400 level) ECON courses, including at least 3 credits in 400 level courses with ECON 401 or ECON 402 as a prerequisite.

One (but only one) of ECON 452 and 454 may be counted toward this requirement. Neither ECON 451 nor 453 may be counted toward this requirement.

### Other Department Policies

The Department of Economics does not give AP credit for ECON 101 or ECON 102. Whenever the department lists ECON 101 or ECON 102 as a prerequisite, the department does not accept AP credit as a substitute.

Students achieving a 4 or 5 on the AP Microeconomics exam receive 2 credits for ECON 101X, and students achieving a 4 or 5 on the AP Macroeconomics exam receive 2 credits for ECON 102X. As prerequisites for other courses in Economics and as prerequisites for the Economics major and minor, ECON 101X does not substitute for ECON 101, and ECON 102X does not substitute for ECON 102. Students receiving 2 credits for ECON 101X may take ECON 101 and receive 4 credits for ECON 101. Students who receive 2 credits for ECON 102X may take ECON 102 and receive 4 credits for ECON 102. Thus, anyone who intends to concentrate in

economics, to minor in economics, or to take electives in economics at the 300 or 400 level should enroll in ECON 101 and/or ECON 102.

Students intending to apply to the BBA program should consult carefully the requirements of the Business School. As of this writing, the Business School does not accept ECON 101X as a substitute for ECON 101, and it does not accept ECON 102X as a substitute for ECON 102.

Advanced placement credits in MATH 121 may be substituted for MATH 115. Credits in MATH 120 alone do not satisfy the mathematics prerequisite for an economics major or minor. Students with credit for MATH 120 may satisfy the mathematics prerequisite for the Economics major by completing, with a grade of at least C, MATH 115, MATH 116, or one of the Honors alternatives to these courses.

### Residency

#### **Ann Arbor campus requirement**

To count toward the minor, any course not taken on the Ann Arbor campus of the University should be approved in advance by an Economics Department Advisor.

ECON 401 and 402 must be taken on the Ann Arbor campus of the University.

To count toward the minor, at least three credits of 400-level electives with ECON 401 or ECON 402 as a prerequisite must be taken on the Ann Arbor campus of the University.

## **Education for Empowerment**

The *Education for Empowerment* minor offers undergraduate students who are interested in education the opportunity to explore the critical role education plays in building our individual and collective capacity to advance the aims of democracy and justice in civil society. The intended audience is those undergraduates majoring in a liberal arts discipline who would like to explore the intersections of that discipline and the work of education -- that is, learning and teaching, broadly defined, in a range of diverse roles and contexts. The minor invites students to grapple with questions such as:

- What is the relationship, both historically and today, between education and power?
- How do individuals, communities, organizations, and societies leverage learning and teaching as necessary tools for social change?
- Beyond schools and classrooms, what are the sites of educational and youth work that offer opportunities to advance justice in public life?

The Education for Empowerment minor is designed for students interested in examining the critical role of education in building our individual and collective capacity to advance the aims of justice and democracy in society.

**Students will explore questions such as the following:**

- What is the relationship, historically and today, between education and power?
- How do individuals, communities, organizations, and societies leverage teaching and learning as tools for social change and social movement?
- Beyond schools and classrooms, what are the sites of educational and youth work that offer opportunities to advance justice, in the United States and around the world?
- How might we develop our imagination for humanizing educational spaces—both within and beyond schools—that recognize everyday people’s power in the ongoing struggle for justice?

### Requirements

Total Credit Hours Required

15

### Foundation credits

3

Students choose one of the following courses:

- EDUC 118 – Introduction to Education: Schooling and Multicultural Society
- EDUC 119 – Education Policy in a Multicultural Society
- EDUC 200 – Learning for Social Change
- EDUC 250 – Growing Up in School: Education and Development in Global Contexts\*

*\* EDUC 250 is the recommended foundation course for the Education in a Global Context pathway.*

### Elective credits

9

Students choose any three from a single pathway ([see below](#)). A course may not be used as both a required foundation and an elective.

We currently offer three pathways from which to choose, but students may petition to create their own individualized strand of coherent coursework, with the support and approval of an advisor.

### Internship credits

2

Students complete EDUC 330 – The Education for Empowerment Internship.



The goal of the Education for Empowerment internship experience is to give students practical field experience in education work, broadly conceived. Although not tightly defined as formal teaching and learning activity, in all cases, the work must have some relevance to education and, specifically, to the student's selected pathway.

Each student in the Education for Empowerment minor shall register for two credits of internship experience. These two credits can be earned by enrolling in one or more internship experiences. The internship can be taken in a single semester (for 2 credits), or over two semesters (1 credit per semester).

### Capstone credits

1

Students complete EDUC 480 – The Education for Empowerment Capstone.

All students will complete the minor with a one-credit mandatory capstone course. The capstone asks students to consider their learning across all their courses and reflect on how the totality of their experiences informs their thinking about the role of education in the empowerment of children, youth, and/or adults. Students will create and present a multimedia presentation to illustrate their learning about education for empowerment.

### Pathways

Advancing Equity Through Education Policy

Children and Youth in Context

Design Your Own Pathway

Education in a Global Context

### AVAILABLE PATHWAYS

*Advancing Equity Through Education Policy*

For students working at the intersections of public policy and education, this pathway focuses on policy inquiry, design, and implementation that intervene in the problems of educational injustice and social inequities.

Course	Description
MUSED 111**	The Art of Music Teaching
<a href="#">EDUC 119</a>	Education Policy in a Multicultural Society
<a href="#">EDUC 210</a>	Mathematics and Social Justice
<a href="#">EDUC 211</a>	Introduction to Educational Policy, Inquiry and Advocacy

Course	Description
<a href="#">EDUC 220</a>	Coaching for Today's Society
<a href="#">EDUC 240</a>	Coaching as Leading and Leading as Coaching
<a href="#">EDUC 275</a>	Wellness for Learning, Teaching, Coaching, and Leadership
ECON 325	Economics of Education
<a href="#">EDUC 332</a>	Coaching and Consulting for Social Change
<a href="#">EDUC 362</a>	Michigan Student Caucus
RCSSCI 365	Excellence, Equity, and the Politics of Education
EDCURINS 382	Introduction to Environmental Education for Sustainable Development
<a href="#">EDUC 390</a> / ELI 390 / LING 390 / RCSSCI 390	Community-Engaged Learning in ESL Teaching Contexts
SOC 458	Sociology of Education
<a href="#">EDUC 460</a>	Equity in Everyday Practices

## Electrical Engineering Minor

As the lines between engineering and scientific disciplines become increasingly blurred, many students are forced to make tough decisions about which concentration to choose. An academic minor in Electrical Engineering (EE), offered through the ECE division of the EECS Department, is designed to provide an avenue for a diverse education for students outside of the EECS department. Due to the extensive breadth of EE discipline areas, students seeking an academic minor in EE have a spectrum of choices for the program paths they choose. Path options include Applied Electromagnetics, Circuits, Communications, Control Systems, Optics, Signal Processing, and Solid State.

**Intended Audience.** While the academic minor would be open to all qualified students in LSA, it is expected to be of interest primarily to students in the Physical Sciences (who both use complex electronics and signal processing to collect and analyze data, and also contribute to

improved electronic devices), Mathematics (improved algorithms for a wide variety of applications including signal processing, communications, and control), and Life Sciences (electronics, signal processing, and electromagnetics for research and patient treatment). It may also be of interest for students in pre-law programs planning a career in patent law, or in other areas.

A Minor in Electrical Engineering (EE) provides an avenue for a diverse education for students outside of the EECS department, and can enhance your experience with any number of other fields. EE provides you with all the tools you need to be a leader in technology, scientific discovery, or any career of your choice. Not to mention, EE gives you some of employers' most sought-after skillsets!

### Program Information

- Takes a minimum of 15 credits to complete
- Open to all non-EECS majors
- Choose from a wide range of electives (28 courses!)

For more information about the structure of this program, see the guide below:

<https://ece.engin.umich.edu/wp-content/uploads/sites/4/2019/08/EEMinor.pdf>

## Energy Science and Policy Minor

Energy underlies all of our modern technological, social, political, economic and ecological systems. Yet, the general public has little knowledge of the concept of energy and how it is woven into the very fabric of society. On the one hand energy is an abstract idea of physics, and on the other hand it is a material realization in fuels and machines. Energy is obviously visible in the gasoline we consume, less visible in the electricity we use, and almost invisible in a vast array of uses such as in delivery of medical treatment, education, social infrastructure, and public safety. Every academic discipline connects in some way to energy along its many paths from the extraction of fuels and materials to eventual end uses. Hence, the topic of energy can and should act as a medium and vehicle for the exchange of ideas among disparate fields. Ultimately, what we see as “energy” depends on resources extracted from nature and on the impacts that our uses of energy have on nature and the environment. The energy-use trajectory that the world is now tracking will, at some time, asymptotically or catastrophically, bump into fundamental constraints that will reshape the energy landscape. Broadly stated: Are our energy systems sustainable? If not, what could the world do differently?

In our current era, energy is so fundamental to every intellectual and practical endeavor that students should have the opportunity to study systematically energy problems in their various manifestations. Students will learn that “energy problems” are systems problems, in which system-constructs within various disciplines are interconnected across disciplines. The minor in ***“Energy Science and Policy”*** provides the fundamentals for understanding what energy is and provides students with a coherent and rigorous introduction to the technical, social, and cultural

contexts of contemporary problems related to “energy.” Generally, students will come to understand how the pedagogical aims of their chosen discipline – whether through critical writing, quantitative problem solving, or close analysis converge in the intersections of “energy problems.”

*Effective Winter 2016*

### Advising

Students interested in declaring either a major or a minor must attend an information session. Information sessions are held throughout the Fall and Winter terms. Appointments may be scheduled with Program advisors [on-line](#).

### Prerequisites

None.

### Requirements

**Minimum Credits: 15**

This minor requires no fewer than five courses for a total of at least 15 credits, with at least two courses at the 300-level or above.

1. **Introductory Course (one course; 3 credits minimum)** – students take one, or both, of the following courses that will provide a sound introductory scientific orientation that is fundamental to understanding the basic concepts of energy:
  - ENVIRON 250 / CMPLXSYS 250 / PUBPOL 250: Social Systems, Energy, and Policy
  - PHYSICS 210: Energy for the Future
2. **Topics Courses:** (four courses, and a minimum 12 credits, with at least two courses at the 300-level or above).  
Students must take at least two courses representing approaches outside of or different from that of their area of concentration (e.g., humanists will have to take two topics courses from outside the humanities).

### Select

- two courses from the Energy Economics & Policy group
- two courses from the Energy Production, Extraction & Technology group

### OR select

- two courses from one of the above categories
- one course from the other of the above categories
- one Breadth course

## **Energy Economics & Policy**

- ARCH 357 / UP 357: Architecture, Sustainability and the City: Ideas, Forces and People Shaping the Built Environment.
- CEE 307 / ENVIRON 407: Sustainable Cities.
- ECON 370 / ENVIRON 375: Environmental and Resource Economics.
- ECON 437: Energy Economics and Policy.
- EHS 588 / ENVIRON 475 / NRE 475: Environmental Law.
- ENVIRON 312 / POLSCI 380 / PUBPOL 312: Environmental Politics and Policy.
- ENVIRON 375 / ECON 370: Environmental and Resource Economics.
- ENVIRON 407 / CEE 307: Sustainable Cities.
- ENVIRON 475 / NRE 475 / EHS 588: Environmental Law.
- GEOG 472 / UP 572: Transportation and Land-Use Planning.
- INTLSTD 401: International Studies Advanced Seminar, section titled "Politics of Energy in the Developing World."
- NRE 475 / ENVIRON 475 / EHS 588: Environmental Law.
- POLSCI 380 / ENVIRON 312 / PUBPOL 312: Environmental Politics and Policy.
- POLSCI 389: Topics in Contemporary Political Science, section titled "Energy Politics".
- POLSCI 497: Undergraduate Seminar in Comparative and Foreign Government, section titled "Politics of Energy in the Developing World."
- PUBPOL 312 / ENVIRON 312 / POLSCI 380: Environmental Politics and Policy.
- PUBPOL 564: Government Regulation of Industry and Environment.
- UP 357 / ARCH 357: Architecture, Sustainability and the City: Ideas, Forces and People Shaping the Built Environment.
- UP 572 / GEOG 472: Transportation and Land-Use Planning.
- UP 671: Public Policy and Transportation.

## **Energy Production, Extraction & Technology**

- AUTO 533 / MECHENG 433: Advanced Energy Solutions.
- CEE 230: Energy and Environment.
- CEE 565 / ESENG 501: Seminars on Energy Systems, Technology and Policy.
- EARTH 344 / ENVIRON 344: Sustainable and Fossil Energy: Options and Consequences.
- EARTH 380 / ENVIRON 380: Mineral Resources, Economics and the Environment.
- EECS 498: Special Topics, section title "Grid Integration of Alternative Energy Sources".
- EECS 598: Special Topics, sections titled "Solar Cell Device Physics" or "Resonant Power Converters".
- ENVIRON 344 / EARTH 344: Sustainable and Fossil Energy: Options and Consequences.
- ENVIRON 380 / EARTH 380: Mineral Resources, Economics and the Environment.
- ENVIRON 404: Cars, Sustainability, and Energy Conversion
- ESENG 501 / CEE 565: Seminars on Energy Systems, Technology and Policy.
- MECHENG 433 / AUTO 533: Advanced Energy Solutions.
- MECHENG 438: Internal Combustion Engines.
- NRE 574 / PUBPOL 519 / RCNSCI 419: Sustainable Energy Systems.
- PHYSICS 406: Statistical and Thermal Physics.
- PUBPOL 519 / RCNSCI 419 / NRE 574: Sustainable Energy Systems.
- RCNSCI 419 / PUBPOL 519 / NRE 574: Sustainable Energy Systems.

## Breadth Courses

- AAS 359 / POLSCI 359: African Politics.
- AAS 432: Violent Environments: Oil, Development and the Discourse of Power.
- ANTHRCUL 439: Economic Anthropology and Development.
- AOSS 480 / NRE 480: Climate Change: The Move to Action.
- ARTDES 250: Art, Design and the Environment.
- CEE 265: Sustainable Engineering Principles.
- CHE 230: Material and Energy Balances.
- EARTH 284 / ENVIRON 284: Environmental Geology
- ECON 432: Government Regulation of Industry.
- ECON 445: The Economy of the People's Republic of China.
- ENGLISH 319: Literature and Social Change, section titled "The Literature of Climate Change".
- ENGLISH 320: Literature and the Environment, section titled Ecocriticism
- ENVIRON 221 / HISTORY 222: Global Environmental History.
- ENVIRON 224 / HISTORY 224 / PUBPOL 224: Global Nuclear Proliferation.
- ENVIRON 284 / EARTH 284: Environmental Geology
- ENVIRON 304: Literature and the Environment, section titled Ecocriticism.
- ENVIRON 365: International Environmental Policy.
- ENVIRON 412 / PUBPOL 412: Environmental Values in Public Policy.
- ES 445 / STRATEGY 445: Base of the Pyramid: Business Innovation for Solving Society's Problems.
- GERMAN 326: Intermediate German, section titled "Germany and the Environment"
- HISTORY 222 / ENVIRON 221: Global Environmental History.
- HISTORY 224 / ENVIRON 224 / PUBPOL 224: Global Nuclear Proliferation.
- HISTORY 241: America and Middle Eastern Wars.
- HISTORY 285 / RCNSCI 275: Science, Technology, Medicine, and Society.
- NRE 480 / AOSS 480: Climate Change: The Move to Action.
- POLSCI 359 / AAS 359: African Politics.
- POLSCI 364: Public International Law.
- PUBPOL 224 / HISTORY 224 / ENVIRON 224: Global Nuclear Proliferation.
- PUBPOL 412 / ENVIRON 412: Environmental Values in Public Policy.
- RCNSCI 275 / HISTORY 285: Science, Technology, Medicine, and Society.
- STRATEGY 445 / ES 445: Base of the Pyramid: Business Innovation for Solving Society's Problems.

## English Major

The following paragraphs describe typical patterns of study in the department and indicate the various ways in which a student can, with much opportunity for individual initiative, form a challenging and rewarding major within it.

*Effective Winter 2018*

### Exclusions:

*Students who elect a major in English may not also elect minors in English or English-Creative Writing.*

### Advising

Students are encouraged to discuss their academic program and related concerns with an English department advisor. Appointments are scheduled on the English Department's website under academic advising. For questions of immediate concern or general questions about the major, students may speak with the Undergraduate Administrator by phoning 734.764.6330 or by coming to 3187 Angell Hall.

### Peer Advising Program

The English Undergraduate Office offers Peer Advising hours where students can come in and ask questions about the various programs, and declare their major while getting a student's perspective on what it's like to be an English major. Check on the website or in the main office for their advising hours.

### Grade Policies

Students must complete a course with a grade of C- or better to have it count toward the major requirements.

### Prerequisites

ENGLISH 298: Introduction to Literary Studies

### Requirements

#### **Minimum Credits: 30**

The Department of English Language and Literature offers three main routes toward the major, the General Program, the Creative Writing Program, and Honors.

### The General Program

Students in the General Program must successfully complete 30 credits in ENGLISH courses. A maximum of six credits of coursework at the 200 level from the approved list of courses may be counted toward the 30 credits required for the major. 200 level courses cannot be used to satisfy the core requirements of the major listed below. These courses must include at a minimum:

- two courses on literature written primarily before 1830, at least one of which must be on literature written primarily before 1642
- one course on literature taken prior to 1900
- one course in American literature
- one poetry course
- one course designated "Identity and Difference"

The department will offer in any one term a considerable range of courses designed to meet these requirements. A list of which courses meet a given requirement will be available each year in the English Undergraduate Office, online at [www.lsa.umich.edu](http://www.lsa.umich.edu), or from an English department advisor.

Approved 200-level courses:

- ENGLISH 201: Readings in U.S. Literatures: "American" and Other Fictions
- ENGLISH 203: Intro to Rhetoric
- ENGLISH 215: Great Women Writers
- ENGLISH 216: Intro to Disability Studies
- ENGLISH 221: Literature Outside the Classroom
- ENGLISH 230: Intro to Short Story and Novel
- ENGLISH 232: Intro to Visual Culture
- ENGLISH 235: Intro to Autobiography
- ENGLISH 240: Poetry for Non-majors
- ENGLISH 242: Interdisciplinary Studies in English
- ENGLISH 245: Intro to Drama and Theatre
- ENGLISH 250: Intro to Language Studies
- ENGLISH 258: Bible as Literature
- ENGLISH 260: Intro to British Literature
- ENGLISH 267: Shakespeare and his World
- ENGLISH 270: Intro to American Lit
- ENGLISH 274: Intro to Afro-American Lit
- ENGLISH 275: Intro World Lit in English
- ENGLISH 280: Intro to Digital Cultures
- ENGLISH 282: Native American Literature
- ENGLISH 285: Intro to 20th C Lit
- ENGLISH 290: Topics in Lang & Lit
- ENGLISH 292: Themes in Lang & Lit (mini-course)
- ENGLISH 293: Great Works of Lit (mini-course)

Students considering the major in English should elect ENGLISH 298 during the sophomore year. Then, while fulfilling the requirements for the major, they may elect such a pattern of courses as will provide the course of study they find most helpful and satisfying.

### **The Creative Writing Program**

Students interested in the department's offerings in creative writing should begin with ENGLISH 223, an introduction to the reading and writing of modern poetry and prose fiction and to the workshop method of critiquing student writing. ENGLISH 223 is a prerequisite to ENGLISH 323: Advanced Creative Writing in Fiction and 324: Advanced Creative Writing in Poetry, but admission into ENGLISH 323 and 324 is based on a portfolio submission. There is a "permission of instructor" restriction on these courses. At the advanced level students may elect (with the instructor's permission) the advanced fiction workshop (ENGLISH 423) or the advanced poetry workshop (ENGLISH 424).



English majors who wish to specialize in the writing of poetry or prose fiction may, in the winter term of their junior year, apply to the Creative Writing Submajor, which is an optional path to a Bachelor of Arts degree in English. Students in the program take the creative writing workshops described above in sequence, and, in their last term, compile a major manuscript of poetry or prose fiction while working closely with the creative-writing faculty in a tutorial reserved for submajors (ENGLISH 428).

The program is small and highly selective; however, students not enrolled in the submajor may still pursue their interest in creative writing by applying to the appropriate upper-level workshops.

Students must complete a course with a grade of C- or better to have it count toward the requirements for the major.

### Constraints

- Majors should note that no more than two courses in expository or creative writing may be counted toward the minimum 30 credits at the upper level required for the major, although students may elect any number of such courses, subject to availability of spaces and to College limits on total elections of courses in any one department.
- No more than six upper-level credits of Independent Study may count towards the major.
- With written prior approval by the undergraduate administrator, courses elected in other departments or programs may on occasion be used as part of a plan for the major.
- Independent study projects cannot be used to meet Department program requirements.

### Other Department Policies

#### **Upper-Level Writing Requirement**

Majors in English may meet this requirement by taking ENGLISH 325, 398, 425, 428, or 496. A published list of English- approved courses can be found in 3187 Angell Hall. For those in the Honors and Creative Writing Programs, the writing requirement is met within their curriculum, which culminates in the supervised composition of the senior thesis.

### Residency

Students must take at least 18 credits of U-M English department classes for the major. The additional 12 credits may be transfer credits, though only one transfer course may count towards the core requirements.

## Distribution Policy

No course used to fulfill a major requirement may be used toward the [LSA Distribution Requirement](#). In addition, courses in the ENGLISH subject area may not be used toward the Distribution Requirement.

## Honors

### **Honors: The General Program**

Joining the English Department's Honors Program means becoming a part of a small, intensely committed group of teachers and students all working toward achieving excellence in the related disciplines of reading, understanding, and writing about texts. Honors courses and the program at large place a premium on discussion, on sustained elaboration of ideas inside and outside the classroom, on conceiving of projects in complex and engaging ways, on learning to do research, and on presenting the fruits of that research in expressive, lucid prose.

Students interested in the Honors Program should apply for admission as soon as possible after the beginning of their sophomore year. Since students generally have not decided to pursue Honors before they have completed the Sophomore prerequisites for the English major (ENGLISH 298), almost all applicants for admission to Honors come in the winter term of the sophomore year or the fall term of the junior year. Applications are due at the end of the seventh week of each term. Though the program occasionally accepts a few late applicants (i.e., students applying in the winter term of their junior year), admission is more difficult to achieve if students apply late, and students' chances for success in the program are greatest if, before the first term of your senior year, you have taken at least one theory course (preferably ENGLISH 390 or 490) and begun thinking about a possible focus for their thesis. The application consists of a cover sheet; a transcript; a 500-word statement of purpose; and a writing sample. Students must also be maintaining a 3.5 GPA or better in the major.

- Honors students take a course in literary theory, usually ENGLISH 390 or 490. It is recommended that this be done during the student's junior year.
- Two courses from ENGLISH 397 (or 497), 450 or 451.
- Honors students write a thesis of approximately sixty pages in length during the senior year - a project that is designed to be the single most important, most meaningful piece of work students undertake as English majors at the University. Students write most of their thesis in a required year-long course, "Research and Thesis Writing" (ENGLISH 495/496). Students are guided throughout much of their senior year by a faculty advisor chosen early in that year. The completed thesis is due in mid-March of the senior year.
- During graduation weekend, Honors students will participate in an Honors Symposium, at which students make brief presentations of their theses to interested faculty, friends, and family.

### **Honors: Creative Writing**

Those students who have earned at least a 3.5 GPA in the major may apply for Creative Writing Honors after they have been accepted to the submajor. Honors will be awarded, as warranted, on the basis of the thesis.

### Teaching Certificate

English majors in any of the programs above may also apply to be granted a teaching certificate. Students in the General Program must elect, in addition to the pattern of courses there prescribed, a course in composition (normally SWC 300 or 430) and a course in English language (ENGLISH 305, 308, or 406). Honors candidates must elect ENGLISH 305 in addition to the courses required for their program.

The general requirements for a teaching certificate are described elsewhere in this Bulletin, and are available from the School of Education Teacher Education Office, 1228 School of Education Building. A brochure summarizing these requirements is available in the English Office.

Application to the certificate program itself must be made through the School of Education. The deadline is January 15 for the following academic term. Please check their website:

[www.soe.umich.edu/](http://www.soe.umich.edu/).

## English Minor

The English Minor is designed to help students develop a broad understanding of the social, cultural, historical, and formal aspects of English language and literature. It provides a foundation in literary and cultural analysis, develops skills in presenting complex ideas orally and in writing, and develops knowledge of British, American, and Global Anglophone literary traditions.

*Effective Fall 2018*

### Exclusions:

Students who have declared an English Minor cannot also pursue an English Major or a Creative Writing Minor.

### Advising

Student seeking to make an advising appointment can schedule an appointment through the following link, <https://webapps.lsa.umich.edu/english/undergraduate/advising/default.asp>

## Grade Policies

All courses taken in the minor must be C- or better.

The minor GPA will be calculated using all English courses taken toward the minor (including the pre-requisite course, 298).

Students must earn an overall GPA of at least 2.0 in courses taken in the minor.

## Prerequisites

English 298: Introduction to Literary Studies (minimum grade of C-)

## Requirements

**Minimum Credits: 15**

English minors must elect a total of 15 credits of coursework including:

### 1. Upper-Level Core Requirements

Two of the core requirements listed below using two separate courses (6 credits):

Pre-1642  
Pre-1830  
Pre-1900  
American Lit  
Identity/Difference  
Poetry

Courses that may be used to meet these core requirements can be found on the English Department website at <http://www.lsa.umich.edu/english/undergraduate/courses/conReqs.asp>.

### 2. Elective courses

An additional nine credits which can include:

- a. English literature courses at the 300/400 level
- b. Two elective courses (6 credits) may be at the 200-level. Eligible courses are:
  - ENGLISH 201: Readings in U.S. Literatures: "American" and Other Fictions
  - ENGLISH 203: Intro to Rhetoric
  - ENGLISH 215: Great Women Writers
  - ENGLISH 216: Intro to Disability Studies

- ENGLISH 221: Literature Outside the Classroom
- ENGLISH 230: Intro to Short Story and Novel
- ENGLISH 232: Intro to Visual Cultures
- ENGLISH 235: Intro to Autobiography
- ENGLISH 240: Poetry for Non-majors
- ENGLISH 242: Interdisciplinary Studies in English
- ENGLISH 245: Intro to Drama and Theatre
- ENGLISH 250: Intro to Language Studies
- ENGLISH 258: Bible as Literature
- ENGLISH 260: Intro to British Literature
- ENGLISH 267: Shakespeare and his World
- ENGLISH 270: Intro to American Lit
- ENGLISH 274: Intro to Afro-American Lit
- ENGLISH 275: Intro World Lit in English
- ENGLISH 280: Intro to Digital Cultures
- ENGLISH 282: Native American Literature
- ENGLISH 285: Intro to 20th C Lit
- ENGLISH 290: Topics in Lang & Lit
- ENGLISH 292: Themes in Lang & Lit (mini-course)
- ENGLISH 293: Great Works of Lit (mini-course)

c. One course may be a creative or expository writing course. Creative/expository writing courses include English 323, 324, 325, 327, 328, 423, 424, 425, 427, WRITING 300 or any transferred writing course.

### Constraints

1 course (3 credits) from transfer credit or study abroad may be used toward elective minor credits.

## Entrepreneurship Minor

Having completed the minor, students should expect to:

- A. Encompass a creative vision of the social, cultural, and economic landscape of the present and future
- B. Have an ability to identify problems as opportunities and to develop creative and innovative solutions through invention or translation across categorical boundaries
- C. Possess a skill in developing and coordinating a structure that will produce an audience or market for the solutions
- D. Have confidence to take risks in order to function as an active agent in one's own life and as a citizen of the world

This 15-credit minor equips undergraduate students from any background or area of study with the necessary skills and experience to translate ideas into real impact in the arts, sciences, commercial, and social areas.

The Entrepreneurship Minor is open to all undergraduate students, no application is required. Students who wish to pursue the minor should schedule an advising appointment (see [information on this page](#) for appointment scheduling).

Student criteria:

- Sophomore standing and above
- Declared major
- In good academic standing

Entrepreneurial education is focused on equipping students to “Be The Difference.” It is therefore a truly multidisciplinary activity that includes teachings from a variety of disciplines and focuses at its core on an approach that values immersive experiences.

Interested students should email [EntrepreneurshipMinor@umich.edu](mailto:EntrepreneurshipMinor@umich.edu) for more information.

## The Environment Major

The Program in the Environment is an undergraduate degree program housed in the College of Literature, Science and the Arts (LSA). This collaborative venture includes courses taught by faculty in Literature, Science, and the Arts, School of Natural Resources and Environment, College of Engineering, Ford School of Public Policy, Stamps School of Art and Design, Taubman College of Architecture and Urban Planning and School of Public Health. The resulting curriculum presents an expanded range of opportunities for students interested in environmental careers.

The Program in the Environment trains students to ensure basic scientific literacy, familiarity with advanced problem-solving techniques, and an ability to integrate scientific and social scientific approaches in addressing environmental problems. The program’s interdisciplinary approach requires coursework in the natural sciences, social sciences and the humanities. It combines breadth, through exposing students to a variety of disciplines and methodological skills, and depth, through requiring a sequence of courses in one of three specialization areas: Environmental Sciences, Environmental Social Sciences, or Culture and Environment. Majors are required to spend time off campus in an organized field study or a supervised internship.

Students who complete the major in the Environment will earn either a B.S. or an A.B. degree, depending upon their course of study (the B.S. requires 60 credits of courses in science and mathematics). The degree is awarded collaboratively by LSA and SNRE and bears the names of both schools.

The major in Environment is intended to ensure scientific literacy, familiarity with advanced problem-solving techniques, and an ability to integrate scientific and social scientific approaches in addressing environmental problems. It serves students interested in environmental literacy as well as those interested in a wide range of career tracks related to environmental issues.

*Effective Fall 2017*

### Advising

Students interested in declaring either a major or a minor must attend an information session. Information sessions are held throughout the Fall and Winter terms. Appointments may be scheduled with Program advisors on-line at: [/lsa.umich.edu/pite/majors/advising.html](http://lsa.umich.edu/pite/majors/advising.html)

### Prerequisites

Prerequisites need not be completed prior to declaring an Environment major. To ensure a common background and understanding of disciplines relevant to environmental study, students take all of the following (many of these courses also satisfy LSA area distribution):

1. **One Introductory Interdisciplinary Course** (one of the following):
  - ANTHRARC 180: First-Year Seminar in Anthropological Archaeology, *section titled "Food at the University of Michigan" (only if taken WN17 or later)*
  - ANTHRBIO / ENVIRON 167: Evolution, Environment, and Global Health *(only if taken FA18 or later)*
  - BIOLOGY 109: Ecological Knowledge and Environmental Problem Solving *(only if taken FA16 or later)*
  - EARTH 144: Climate Change in the Age of Humans *(only if taken FA16 or later)*
  - EARTH 158: Environmental Impact of Energy Systems: What are the Risks? *(only if taken FA16 or later)*
  - EARTH / GEOG 201 / ENVIRON 209: Introduction Physical Geography *(only if taken FA16 or later)*
  - EARTH 219 / ENVIRON 229: Introduction to Environmental Science *(only if taken FA18 or later)*
  - ENVIRON / BIOLOGY 101: Food, Energy, and Environmental Justice
  - ENVIRON 110 / AOSS 171 / BIOLOGY 110 / EARTH / ENSCEN 171 / RCNSCI 110: Introduction to Global Change: The Science Behind Sustainability
  - ENVIRON 111 / AOSS / EARTH / ENSCEN 172 / GEOG 111: Global Change: The Sustainability Challenge
  - ENVIRON 139: First-Year Seminar in the Environment
  - ENVIRON 201 / RCNSCI 202: Ecological Issues

- ENVIRON 270: Our Common Future
- CEE 230: Thermodynamics and the Environment
- CEE 265: Sustainable Engineering Principles
- 2. One Introductory Biology Course:**
  - BIOLOGY 171: Introductory Biology: Ecology and Evolution; or
  - BIOLOGY 195: Introductory Biology (AP)
- 3. One Introductory Geology Course:**
  - EARTH 118: Introductory Geology Laboratory **AND** EARTH 119: Introductory Geology Lectures; or
  - EARTH 116: Introductory Geology in the Field
- 4. One Environmental Social Science Course:**
  - ECON 101: Principles of Economics I (*only if taken FA17 or later*)
  - ENVIRON 207: Sustainability and Society (*only if taken FA17 or later*)
  - ENVIRON / ORGSTUDY 208: Business and the Natural Environment
  - ENVIRON / RCSSCI 211: Social Sciences and Environmental Problems
  - ENVIRON 222: Introduction to Environmental Justice (*only if taken FA17 or later*)
  - ENVIRON 235: Economics of Natural Resources and Environment
  - ENVIRON / HISTORY 236: Environment and History in Preindustrial Europe (*only if taken FA17 or later*)
  - ENVIRON 290: Food: The Ecology, Economics, and Ethics of Growing and Eating
  - HISTORY 232: Interdisciplinary Topics in History, *section titled "Histories of Global Health"* (*only if taken FA17 or later*)

## Requirements

### Minimum Credits: 32

These courses expand students knowledge of environmental problems and solutions by exposing them to a wide range of natural science, social science, and humanistic disciplines. Students select one course at the 200 level or above in each of the following categories.

- 1. General Ecology** (one of the following):
  - BIOLOGY ENVIRON 281: General Ecology **AND** BIOLOGY / EEB 372: General Ecology Laboratory; or
  - ENVIRON / EEB 381: General Ecology at UM Biological Station; or
  - EARTH / ENVIRON 450: Ecosystem Science in the Rockies at Camp Davis, Wyoming
- 2. Analytics** (one of the following):
  - STATS 250: Introduction to Statistics and Data Analysis
  - STATS 280: Honors Introduction to Statistics and Data Analysis
  - SOC 210: Elementary Statistics
- 3. Culture and Environment** choose one from approved list or in consultation with a department advisor:
  - AAS 409, 432
  - AMCULT 284, 311 *section titled, "Green Indigeneity", 373*
  - ANTHRBIO 364, 365, 373
  - ANTHRCUL 256, 328, 408, 439, 440
  - ARCH 209 *section titled "Experiencing Architecture", 212, 213, 357, 423*
  - ARTDES 250



- ASIAN 257, 258
- CLARCH 222, 382, 350 section titled *"The Art and Life in Roman Villas"*
- CLCIV 382
- EARTH 238
- ENGLISH 290 section titled *"American Environments: History, Thinking, Reps"*, 317 section titled *"Greek Indigenety"*, 319 section titled *"Literature of Climate Change"*, 328, 346 section titled *"Embodiment / Environment / Community"*
- ENVIRON 221, 223, 238, 240, 244, 256, 270, 284, 301, 304, 320, 350, 370, 376, 377, 464
- HISTART 212, 213, 222, 243, 301, 394 section titled *"The Art and Life in Roman Villas"*
- HISTORY 222, 223, 238, 284, 285, 373
- ITALIAN 310
- MOVESCI 241
- PHIL 224, 240, 355, 356, 359, 361, 366, 376
- RCHUMS 334 section titled *"Experiencing Architecture"*
- RCIDIV 305
- STRATEGY 411, 445
- UC 254 section titled *"Much Depends on Dinner"*
- UP 357, 423
- WGS 344 (WGS 344) section titled *"Embodiment / Environment / Community"*

**4. Natural and Earth Systems Science:**

- choose one 200 level or above Natural Science course or chosen in consultation with the department advisor.

(NOTE: ENVIRON 201 does NOT count)

**5. Social Science** choose two - one must be 300 level or above:

- ARCH 423
- ANTHRCUL 256
- CEE 307
- COMM 413
- ECON 330, 360, 370
- EDCURINS 382
- EEB 316, 318
- EHS 588
- ENVIRON 203, 207, 208, 211, 222, 223, 237, 242, 256, 270, 290, 302, 306, 308, 312, 313, 316, 318, 320, 321, 335, 345, 350, 356, 367, 370, 375, 382, 390, 391, 405, 407, 408, 412, 413, 448, 449, 462, 475, 490
- HISTORY 223, 237
- NRE 449, 475
- ORGSTUDY 203, 208
- POLSCI 331, 380, 394
- PSYCH 384, 385
- PUBPOL 312, 412
- RCIDIV 316, 318, 390
- RCSSCI 211, 222
- SOC 222, 380
- UP 423

**6. Senior Capstone:**

- One course chosen in consultation with the department advisor.

**7. Practical Experience:**

- The experience can be satisfied by an internship or a residential field course that is taken for 3 credits or more.
- 8. Specialization:**
- To gain a deeper understanding of applicable skills in one discipline of environmental study, students take three related courses at the 300-level or above, approved by the specialization committee, in one of the following areas: Environmental Science, Environmental Social Science, or Culture and the Environment.

### Distribution Policy

No course used to fulfill a major requirement may be used toward the [LSA Distribution Requirement](#). In addition, courses in the ENVIRON subject area may not be used toward the Distribution Requirement.

### Honors

The Honors Program is open to all students who have achieved a cumulative grade point average of 3.50 or better. These students are automatically admitted into the Honors Program. (However, completion of the Honors Program requires the student to find a faculty advisor for their research.) Other students may request admission to the Honors Program by completing an application form available from the Program in the Environment office. **The application and faculty recommendation (if needed) must be submitted by December 1 of the junior year.** In order to remain in Honors and also to graduate with any level of Honors, all Honors student must have a cumulative GPA of at least 3.4.

### Honors Course Sequence

- **Junior Year, Fall Term:** Students hoping to pursue the Honors Program meet with the advisor(s) and instructor of the Junior Honors Seminar (ENVIRON 399). Students planning to study abroad will not be able to during the Winter semester of their Junior year.
- **Junior Year, Winter Term:** Junior Honors Seminar (ENVIRON 399). The goals of this 3-credit course are to develop research skills, identify a faculty advisor who will provide guidance and encouragement, and prepare the proposal for the thesis project. Students MAY NOT study abroad during this semester. ENV 399 will not be waived for study abroad because of the detailed instruction and information the student must gain from this course.
- **Senior Year, Fall and Winter Terms:** Seniors will register for independent study credits (ENVIRON 499) with their advisor during their senior year (6 credits over the Fall and Winter terms). The primary goal of the independent study is to carry out the Honors thesis research. In addition to regular meetings with their advisor, students will also meet monthly with the other Senior Honors students in the winter term. These sessions will be facilitated by the instructor(s) of ENVIRON 399 and provide an opportunity to talk about thesis progress and obstacles, discuss how to present findings in the written document and orally, and other concerns related to the trials and tribulations of getting the thesis done on time.
- **Oral Presentation:** A public oral presentation of a student's thesis research will be arranged by the Program in the Environment staff in consultation with the instructors of ENVIRON 399 and the faculty advisors for ENVIRON 499.

## Teaching Certificate

### Teacher Certification

For information about teaching certificates, please contact the Program in the Environment.

# The Environment Minor

The goals of this minor are to enhance the environmental literacy of undergraduates by exposing them to various disciplinary approaches to environmental issues and problems and by providing opportunities for field-based experience and for the acquisition of analytical skills useful in solving environmental problems.

The intended audience is students seeking some measure of environmental literacy or preparing themselves for careers with an environmental dimension.

*Effective Fall 2015*

### Exclusions:

*A minor in the Environment is not open to students concentrating in the Environment, to students in the School of Natural Resources and Environment, nor to those pursuing a minor in Global Change or minor in Sustainability.*

*Students can either pursue an Academic Minor in the Environment or the Academic Minor in Sustainability, but not both.*

## Advising

Students wishing to pursue a minor in the Program in the Environment must develop a specific plan for its completion in consultation with the program's academic advisor.

Students interested in declaring either a major or a minor must attend an information session. Information sessions are held throughout the Fall and Winter terms. Students wishing to pursue a minor in the Program in the Environment must develop a specific plan for its completion in consultation with the program's academic advisor. Appointments may be scheduled with Program advisors on-line at: [/lsa.umich.edu/pite/majors/advising.html](http://lsa.umich.edu/pite/majors/advising.html)

## Prerequisites

None for the Academic Minor *per se*, although individual courses elected to meet the requirements of the Academic Minor may have course prerequisites.

## Requirements

### Minimum Credits: 17

At least 17 credits of courses, to be elected from five categories as stated (at least two of the required courses must be at the 300-level or above):

- A. **Introductory interdisciplinary courses.** One course chosen from:
  - ENVIRON 110 / AOSS 171 / BIOLOGY 110 / EARTH / ENSCEN 171 / RCNSCI 110: Introduction to Global Change: The Science Behind Sustainability
  - ENVIRON 111 / AOSS / EARTH / ENSCEN / GEOG 111: Global Change: The Sustainability Challenge
  - ENVIRON 201 / RCNSCI 202: Ecological Issues
  - ENVIRON 270: Our Common Future
  - CEE 260: Environmental Principles
- B. **Environmental Natural Science.** One course chosen from the list of Environmental Natural Science courses, above.
- C. **Environmental Social Science.** One course chosen from the list of Environmental Social Science courses, below.
- D. **Culture and Environment.** One course chosen from the list of Culture and Environment courses, below.
- E. **Analytics or Field Experience** (one course):
  - 1. **Field Experience.** The field experience requirement may be satisfied in two ways: by a field course at the UM Biological Station, Camp Davis, or other approved field location; or by an approved off-campus internship that results in academic credit.
  - 2. **Analytics.** The analytics requirement may be satisfied by electing STATS 250 or SOC 210 or equivalent (STATS 265 or IOE 265).

### Environmental Social Science Courses for the academic minor.

These courses do not necessarily satisfy the SS distribution requirement.

- ARCH 423
- ANTHRCUL 256
- CEE 307
- COMM 413
- ECON 330, 360, 370
- EDCURINS 382
- EHS 588
- ENVIRON 203, 207, 208, 211, (221 prior to Fall 2016), 222, 223, 237, 242, 256, 270, 290, 302, 306, 308, 312, 313, 316, 318, 320, 321, 335, 345, 350, 356, 360, 361, 365, 367, 370, 375, 382, 390, 391, 405, 407, 408, 412, 413, 448, 449, 462, 475, 490
- HISTORY (222 prior to Fall 2016), 223, 237

- NRE 449, 475
- ORGSTUDY 203, 208
- POLSCI 331, 380, 394
- PSYCH 384, 385
- PUBPOL 312, 412
- RCIDIV 316, 318, 390
- RCSSCI 221, 222
- SOC 222, 330
- UP 423

### **Culture and Environment Courses** for the academic minor. (Fall 2014 - Current | Previous)

- AAS 409, 432
- AMCULT 284, 311 *section titled "Green Indigeneity", 373*
- ANTHRBIO 364, 365, 373
- ANTHRCUL 256, 328, 408, 439, 440
- ARCH 209 *section titled "Experiencing Architecture", 212, 213, 357, 423*
- ARTDES 250
- ASIAN 257, 258
- CLARCH 222, 382, 350 *section titled "The Art and Life in Roman Villas"*
- CLCIV 382
- EARTH 238
- ENGLISH 290 *section titled "American Environments: History, Thinking, Reps", 317 section titled "Green Indigeneity", 319 section titled "Literature of Climate Change", 328, 346 section titled "Embodiment / Environment / Community"*
- ENVIRON 221, 223, 238, 240, 244, 256, 270, 284, 301, 304, 320, 350, 370, 376, 377, 464
- HISTART 212, 213, 222, 243, 301, 394 *section titled "The Art and Life in Roman Villas"*
- HISTORY 222, 223, 238, 284, 285, 373
- ITALIAN 310
- MOVESCI 241
- PHIL 224, 240, 355, 356, 359, 361, 366, 376
- RCHUMS 334 *section titled "Experiencing Architecture"*
- RCIDIV 305
- STRATEGY 411, 445
- UC 254 *section titled "Much Depends on Dinner"*
- UP 357, 423
- WGS 344 (WGS 344) *section titled "Embodiment / Environment / Community"*

## **Environmental Geology Minor**

The Environmental Geology minor is designed to give students a broad introduction to processes shaping the Earth's surface, its physical and biochemical environment, and potential response to anthropogenic influences. Because society and the Earth's surface environment are intimately linked, students with interests in pre-law or majors such as business, economics, history, and English may find the minor in Environmental Geology an attractive complement to their training.

As well, students concentrating in other areas of the Natural Sciences may find the minor in Environmental Geology a way to diversify their background and apply fundamental scientific principles in an interdisciplinary way. Note that by LSA rules, only one course may be elected in common to a minor and a major.

Our innovative and flexible majors provide an interesting path for students to follow on their way to an LSA degree. From our field camp at Camp Davis in Wyoming, to lab work on campus, Michigan students have an opportunity to explore the geological sciences in exciting ways.

The Department of Earth and Environmental Sciences offers:

- an [Earth and Environmental Sciences Major](#) and an **Honors Plan**
- a **Teacher's Certificate Program**, for prospective science teachers who are candidates for a secondary teaching certificate in earth science and general science; and,
- Academic minors in [Earth Sciences](#), [Environmental Geology](#), [Geology](#), [Oceanography](#), and [Paleontology](#).

*Effective Winter 2021*

#### **Exclusions:**

*Not open to students electing the minor in Earth Sciences.*

#### [Advising](#)

A plan for the major in the Department of Earth and Environmental Sciences is developed in consultation with a department advisor. A proposed plan must be approved in its entirety by the appropriate advisor prior to registration for the first term of major. Thereafter, progress through the plan and future elections must be reviewed, and approved in advance, whenever a change is proposed and in any case no less frequently than at the beginning of each new academic year of residence. Certification must also be obtained from an advisor, on an official LSA Major Release Form, immediately prior to submission of the application for the degree.

Information about appointments with department advisors is available on the web at:

[lsa.umich.edu/earth/undergraduate-students.html](http://lsa.umich.edu/earth/undergraduate-students.html)

Students wishing to pursue a minor in the department must develop a specific plan for its completion in consultation with the department's designated advisor. Appointments are scheduled online [lsa.umich.edu/earth/undergraduate-students.html](http://lsa.umich.edu/earth/undergraduate-students.html)

#### [Prerequisites](#)

None.

#### [Requirements](#)

**Minimum Credits: 15**

1. **One introductory Geology course** must be taken from one of the following two groups:
  - *Group 1.* Courses with laboratory: EARTH 116, 118&119, 120, 201, 202 (as of Fall 2017).

- *Group 2.* Courses without laboratory: EARTH 119, 135 (prior to Fall 2017), 205&206.
- 2. **Core courses:** EARTH 218, 219 and 380 are required.
- 3. **Elective courses:** EARTH 325, 442, 444, 450, 477, 478, or permission of advisor.

## Ethnic Studies (Sub-Major)

The Ethnic Studies sub-major allows for students to work within existing Ethnic Studies programs, but also allows for cross-cutting and comparative plans of study. The sub-major will guide students interested primarily in the ethnic studies dimensions of American studies through a fruitful course of study, rewarding them with a mark of their achievement.

This sub-major builds on the existing American Culture major, but identifies a clear path within it modeled on the existing Ethnic Studies minors. Like the existing Ethnic Studies minors, students begin with an "Intro" course, which introduce key terms, concepts, and disciplinary approaches. Students are then asked to choose four additional electives from rich offerings in Ethnic Studies (ARABAM, ASIANPAM, LATINOAM, NATIVEAM, and AMCULT/AAS courses).

*Effective Winter 2014*

### Advising

Students are encouraged to discuss their academic program and related concerns with the American Culture department advisor. Appointments are scheduled on the American Culture Department's website under academic advising. For questions of immediate concern or general questions about the major, students may speak with the Undergraduate Administrator by calling 734.763.1460, emailing [ac.inq@umich.edu](mailto:ac.inq@umich.edu), or by coming to 3700 Haven Hall.

### Prerequisites

None.

### Requirements

**Minimum Credits: 28**

To have a notation of the Ethnic Studies submajor appear on your transcript, you must successfully complete the following in your American Culture elective credits in addition to the other American culture major requirements:

A) One of the following introductory ethnic studies courses:

AAS 201: Intro to Afro-American Studies

LATINOAM 213: Intro to Latina/o Studies

ASIANPAM 214: Intro to Asian/Pacific Islander American Studies

ARABAM 215: Intro to Arab American Studies

ARABAM 216: Intro to American Muslims

NATIVEAM 217: Intro to Native American Studies

B) four additional approved Ethnic Studies courses in consultation with an advisor.

Ethnic Studies electives may be chosen from any ARABAM; ASIANPAM; LATINOAM; NATIVEAM; AMCULT/AAS courses; or approved courses.

# Evolutionary Anthropology Major

Evolutionary Anthropology includes courses from the Department of Anthropology; the Departments of Earth and Environmental Sciences; Ecology and Evolutionary Biology; Molecular, Cellular and Developmental Biology; and Psychology; and the School of Natural Resources and the Environment. It combines anthropological and biological perspectives in the study of humans and related species. It is particularly appropriate for students planning to continue in the health sciences and for students interested in "whole organism" biology and ecology. Thus, many Evolutionary Anthropology majors are training for medical school, while others are planning to pursue careers in natural resource management, conservation, animal behavior, and other fields. Because evolutionary biology forms its primary theoretical basis, the major does not require courses in other sub-disciplines of anthropology. Students who are interested in biological anthropology and seek broader training in anthropological archaeology, linguistic anthropology, and sociocultural anthropology may pursue a degree as an Anthropology major. Students should contact the undergraduate advisor in the Department of Anthropology for further information.

*Effective Fall 2014*

## Advising

The department offers undergraduate majors for a bachelor's degree in Anthropology and Evolutionary Anthropology: minors are offered in Medical Anthropology, Biological Anthropology, and Anthropology (with tracks in Sociocultural Anthropology, Linguistic Anthropology, and Archaeological Anthropology).

All anthropology faculty members are available for informal discussion with students during scheduled office hours (check the Department office for times).

[Department advisors](#) are available to explain program objectives and requirements and to help with the planning of your program.

Students wishing to pursue a minor in the Department of Anthropology should contact the undergraduate advisor with any questions.

Appointments are scheduled in the Department office or online at:  
[www.lsa.umich.edu/anthro/undergraduates/advising](http://www.lsa.umich.edu/anthro/undergraduates/advising)

## Prerequisites

- ANTHRBIO 201
- BIOLOGY 171, 172, 173; or BIOLOGY 195 and 173

## Requirements

**Minimum Credits: 32**



At least 32 credits at the 200-level and above, distributed as follows:

- A. **Anthropology.** A minimum of five courses, with at least one course from each of the four groups below. Two courses must be at the 400-level or above. Courses listed in more than one group below cannot be counted twice:\*
1. **Paleoanthropology and morphology:**  
ANTHRBIO 351, 360, 365, 366, 465, 466, 474, 475, 476, 477, 479, ANTHRBI0 471-  
sections titled "Miocene Hominoid Palebiology" or "Paleocology and Paleodietary  
Reconstructions"
  2. **Ecology and behavior:**  
ANTHRBIO 342, 361, 362, 368, 373, 461, 463, 467, 468, 472, 478, ANTHRBI0 668 -  
section titled "Current Issues in Primate Behavior"
  3. **Human adaptation:**  
ANTHRBIO 364, 366, 373, 462, 471 - section titled "Skeletal Biology", 472
  4. **Evolution and genetics:**  
ANTHRBIO 342, 360, 361, 363, 365, 450, 452, 467, 475, 476, 479, ANTHRBI0 471 -  
section titled "Molecular Anthropology"
- \*Courses taken as ANTHRBI0 469: Topics in Biological Anthropology, or graduate-level  
topics courses can be counted in the appropriate group.
- B. **Biology.** A minimum of three courses representing both of the groups below:
1. **Molecular, Cellular, and Developmental Biology:**
    - ANAT 403, 541
    - BIOLCHEM 415
    - BIOLOGY 205, 207, 222, 225, 305
    - CHEM 351
    - EEB 341, 490
    - MCDB 308, 310, 352, 404, 405, 408, 417, 418, 422, 427, 462
    - PHYSIOL 201, 502, 541
    - PSYCH 337 (438), 532
  2. **Ecology, Evolution, and Behavior:**
    - BIOLOGY 252, 256, 281, 288
    - CMLXSYS 430
    - EARTH 418/419, 437, 438
    - EEB 315, 381, 390, 404, 412, 424, 430, 451, 470, 472, 476, 492
    - ENVIRON 281, 315, 415, 451, 476
    - NRE 415, 451, 476
    - PSYCH 335
- C. Remaining credits may be selected from other biological anthropology or biology courses within  
the major, or from relevant courses in other departments approved by the program advisors.

## Constraints

A maximum of 6 credits of independent research can be counted toward the major.

## Other Department Policies

Evolutionary Anthropology majors may NOT use any ANTHRBI0 courses toward the College  
Area Distribution requirement, but MAY use introductory Biology courses.

## Residency

At least 20 credits must be completed in residence at the University of Michigan.

## Distribution Policy

No course used to fulfill a major requirement may be used toward the [LSA Distribution Requirement](#). In addition, courses in the ANTHRBIO subject area may not be used toward the Distribution Requirement.

## Honors

The [Honors Plan](#) in Evolutionary Anthropology is individually arranged with the department advisor and requires a senior thesis. Recommendations for degrees with Honors are made by the department advisor after consultation with the Honors advisor in biological anthropology.

# Film, Television, and Media Major

The curriculum in Film, Television, and Media provides an integrated program of courses in the history, aesthetics, theory, and techniques of film and moving image electronic media (television, single-camera video, digital). Emphasis is placed on a liberal arts sequence that provides students with a solid foundation for understanding how film and electronic-based visual media arise out of varied cultural, historical, social, and technological circumstances. Two prerequisite courses prepare them for advanced study in the history and aesthetics of moving image media and for production courses. An introductory course in production gives students hands-on experience in film, video, and television. Courses in film history prepare students for electives in the films of specific cultures, nations, and time periods, as well as in the study of film style illuminated by the work of individual artists and in various genres. Television history allows them to assess trends in the social, technological, and formal development of the most influential medium of the second half of the twentieth century. Required courses in theory and criticism examine the methods that have been used to study film, television, and digital media.

Production core courses are designed to help majors work creatively in film and moving image electronic media (television, single-camera video, digital) as they become familiar, through electives, with interdisciplinary, humanistic perspectives on how moving image technology has been used in different cultures as a medium of communication and artistic expression, and how various kinds of institutional practice have characterized its use. The film-video curriculum is designed to prepare students for more advanced work in film writing and criticism, in creative film, video-making, and studio television work, and for advanced study in graduate programs in moving image media.

*Effective Fall 2018*

## Advising

Students who may be interested in a major in Film, Television, and Media are encouraged to consult with a department advisor. Appointments are scheduled online at:  
[https://webapps.lsa.umich.edu/AdvAppts/AA\\_StuSelfSvc1.aspx?ctgy=SAC](https://webapps.lsa.umich.edu/AdvAppts/AA_StuSelfSvc1.aspx?ctgy=SAC)

## Grade Policies

The prerequisite for the FTVM major may be taken for a grade or may be taken P/F.

A minimum grade of C– or better must be achieved in any course taken to satisfy the FTVM Major requirements.

## Prerequisites

FTVM / RCHUMS 150 (FTVM / RCHUMS 236) - Introduction to Film, Television, and Media completed with a minimum grade of C–.

Students will apply for entry to the major after having completed the prerequisite. In accord with LSA policies, students who do not meet the minimum grade requirement but still hope to declare the Film, Television, and Media major may retake the prerequisite course. If they meet the criteria above with the new grade they earn in the re-taken course, they may declare Film, Television, and Media as their major.

## Requirements

**Minimum Credits: 32**

### 1. **Core Required Courses** (25 credits).

#### *A. Two history courses:*

FTVM 352 - Film History: Origins to the French New Wave, and one additional history course selected from among the following:

- FTVM 353 - Film History: Post New Wave
- FTVM 354 - New Media History
- FTVM 355 - Television History.

#### *B. Two theory courses:*

FTVM 272-Classical Film Theory, and one additional history course selected from among the following:

- FTVM 372 - Contemporary Film Theory
- FTVM 375 - Television Theory and Criticism
- FTVM 376 - New Media Theory
- FTVM 461 - Explorations in Feminist Film Theory

#### *C. Introduction to production course:* FTVM 290- Introduction to Media Production.

#### *D. Two production or writing courses selected from the following:*

- FTVM 300 - Movie/Serial Television Production I
- FTVM 301 - Documentary I
- FTVM 302 - Multi-Camera Television Production
- FTVM 304 - Topics in Media Production I
- FTVM 305 - The Experimental Screen
- FTVM 306 - Animation and Digital Media Practices I
- FTVM 309 - Shorts from Short Stories
- FTVM 310 - Screenwriting I: The Feature Script

- FTVM 311 - Writing for Television I: The Spec Script
- FTVM 317 - WOLV TV
- FTVM 391 - Editing Theory & Practice
- FTVM 392 - Cinematography
- FTVM 393 - Screendance (*only if elected FA 20 or later*)

E. *One studies course selected from among the following in National, Regional, or Transnational Cinema, or in a 300 or 400-level Television or Digital Media course:*

- FTVM 250 / JUDAIC 250 / MIDEAST 280 - Jewish Film: Race, Ethnicity, and Nationality
- FTVM / SLAVIC / RCHUMS 313 - Russian and Ukrainian Cinema
- FTVM / POLISH 314 - Polish Cinema
- FTVM / ITALIAN 316 - Screening Italian-Americans
- FTVM 332 / GERMAN 330 - German Cinema
- FTVM / GERMAN 333 - Fascist Cinema
- FTVM / AMCULT / COMM 334 - Race, Gender, Sexuality and U.S. Culture in Video Games
- FTVM / ASIAN 341 - Bollywood and Beyond: An Introduction to Popular Indian Cinema
- FTVM / GERMAN / AMCULT 346 - Media Matter: From Print to Screen Culture
- FTVM 358 - Italian Film: History, Art, Entertainment
- FTVM 365 - Race and Ethnicity in Contemporary American Television
- FTVM 368 - Topics in Digital Media Studies
- FTVM / HISTART / HISTORY / JUDAIC 379 - Jewish Photographers Picture the Modern World (*only if elected WN20 or later*)
- FTVM / AMCULT / LATINOAM 380 - Studies in Transnational Media
- FTVM / AMCULT / LATINOAM 381 - Latinas/Latinos and the Media
- FTVM / AAS 440 - African Cinema
- FTVM 441 - National Screens
- FTVM / AAS 442 - Third World Cinema
- FTVM / ASIAN 458 - Film Culture in Korea
- FTVM / AAS 470 - Cultural Cinema
- FTVM 485 - The Global Screen
- ITALIAN 358 - Italian Cinema
- or a similar course pre-approved by the advisor.

**2. Required Electives:** 7 credits of FTVM coursework at the 300 or 400 level. One of these courses must be a 3-credit studies course (see lists below).

## Production Courses

- FTVM 300 - Movie/Serial Television Production I
- FTVM 301 - Documentary I
- FTVM 302 - Multi-Camera Television Production
- FTVM 303 - Mini Course in Media Production II
- FTVM 304 - Topics in Media Production I
- FTVM 305 - The Experimental Screen
- FTVM 306 - Animation and Digital Media Practices I
- FTVM 309 - Shorts from Short Stories
- FTVM 310 - Screenwriting I: The Feature Script
- FTVM 311 - Writing for Television I: The Spec Script
- FTVM 317 - WOLV TV
- FTVM 391 - Editing Theory & Practice
- FTVM 392 - Cinematography

- FTVM 400 - Movie/Serial Television Production II
- FTVM 401 - Documentary II
- FTVM 402 - Topics in Television Production
- FTVM 403 - Television Sketch Comedy
- FTVM 404 - Topics in Media Production II
- FTVM 405 - Screendance
- FTVM 406 - Animation and Digital Media Practices II
- FTVM 410 - Screenwriting II: The Rewrite
- FTVM 411 - Writing for Television II: Pilots
- FTVM 421 - TV Pilots
- FTVM 423 - Practicum for the Screenwriter
- FTVM 427 - Screenwriting III

### **Studies Courses**

- o FTVM / SLAVIC 313 - Russian and Ukranian Cinema
- o FTVM / POLISH 314 - Polish Cinema
- o FTVM / CZECH 315 - Czech Cinema
- o FTVM / ITALIAN 316 - Screening Italian-Americans
- o FTVM 320 - Documentary Film
- o FTVM 324 / COMM 251 - Understanding Media Industries
- o FTVM 325 - New Line and New Hollywood Cinema
- o FTVM / ENGLISH 330 - Major Director (rotating topics)
- o FTVM / ENGLISH 331 - Film Genres and Types (rotating topics)
- o FTVM 332 / GERMAN 330 - German Cinema
- o FTVM 333 - Fascist Cinema
- o FTVM / AMCULT 334 - Race, Gender, Sexuality, and U.S. Culture in Video Games
- o FTVM 340 - Writing Film Criticism
- o FTVM / ASIAN 341 - Intro to India Cinema
- o FTVM / AMCULT / GERMAN 346 - Media Matter: From Print to Screen Culture
- o FTVM 350 - The Silent Screen: Arts and Cultures
- o FTVM 353 - Film History: Post New Wave
- o FTVM 354 - New Media History
- o FTVM 355 - Television History
- o FTVM 358 - Italian Film: History, Art, Entertainment
- o FTVM / WGS 361 (WGS 361) - Women in Film
- o FTVM 365 - Race and Ethnicity in Contemporary American Television
- o FTVM 366 - Film, Television, and Popular Culture (rotating topics)
- o FTVM 367 - Introduction to Digital Media Studies
- o FTVM 368 - Topics in Digital Media Studies (rotating topics)
- o FTVM 372 - Contemporary Film Theory
- o FTVM 375 - Television Theory
- o FTVM 376 - Digital Media Theory
- o FTVM / AMCULT / LATINOAM 380 - Studies in Transnational Media
- o FTVM / AMCULT / LATINOAM 381 - Latinas(os) and the Media
- o FTVM 422 - Topics in Avant-Garde Film
- o FTVM 435 (335) – Authorship & the Archive: Exploring the Film, Theater, & TV Collections of the U of M Special Collections Library
- o FTVM 440 / AAS 440 - African Cinema
- o FTVM 441 - National Screens (rotating topics)
- o FTVM 442 / AAS 442 - Third World Cinema

- o FTVM 451 / AMCULT 490 - American Film Genres
- o FTVM 455 - Topics in Film (rotating topics)
- o FTVM / ASIAN 458 - Korean Film Culture
- o FTVM 460 - Technology and the Moving Image
- o FTVM / WGS 461 (WGS 461) - Explorations in Feminist Film Theory
- o FTVM 475 – Popular Film and TV Culture
- o FTVM 485 - The Global Screen

Optional Submajor: [Screenwriting](#)

## Other Department Policies

### **Screenwriting Submajor of Film, Television, and Media Major**

The department offers a sub-major in Screenwriting to undergraduate students in the Film, Television, and Media major who demonstrate a special talent for writing for the screen.

## Distribution Policy

No course used to fulfill a major requirement may be used toward the [LSA Distribution Requirement](#). In addition, courses in the FTVM and SAC subject areas may not be used toward the Distribution Requirement.

## Honors

The Honors plan in the Department of Film, Television, and Media offers qualified Film, Television, and Media majors a special opportunity. Upper-level students with strong academic records and a demonstrated ability to carry out the independent work required to complete an Honors thesis, screenplay, film, video or digital production are encouraged to apply. The Film, Television, and Media Honors major is not restricted to students who have been in the College Honors Program in their freshman and sophomore years.

Upon successful completion of the Honors plan, students may graduate with Honors, High Honors, or Highest Honors in Film, Television, and Media, depending on the evaluation of their thesis, screenplay, or project. These Honors designations appear on their diploma along with any College Honors designations they earn from their overall grade point.

Students accepted into the Honors plan also become members of the Honors Program of the College of Literature, Science, and the Arts. As members of the LSA Honors Program, they gain access to a variety of special services such as possible financial support for their Honors work. In addition, students may also apply for competitive scholarships administered by the Department of Film, Television, and Media to help with costs associated with Honors projects.

**Admission.** To be considered for the Honors major, students must have a grade point average of 3.5 or higher in the Film, Television, and Media major. Students must also identify a Film, Television, and Media faculty sponsor and file an application for admission to the Honors plan no later than three terms prior to the intended graduation date. For further information, contact the Film, Television, and Media Department at (734) 764-0147.

## **Food and the Environment Minor**

The Food and the Environment Minor is an interdisciplinary program of study with courses addressing questions of food production, consumption, and policy in relation to the environment, human health, and equity.

Today's global food system produces unprecedented quantities of food. Nevertheless, the World Health Organization estimates that over one billion people lack adequate food to satisfy the minimum standards of nutrition, despite more than adequate global supplies, a perplexing pattern that has been evident for many years. An even more perplexing pattern is the irony that obesity has become a major health problem for some, even as hunger continues to plague others. Moreover, the modern agricultural system that developed during the past century is increasingly recognized as environmentally unsustainable, in many cases causing environmental degradation and substantial losses in biological diversity. Finally, for the consumers, food safety has emerged as a critical issue and for the producers -- farmers and farm workers -- workplace safety and low compensation threaten the sustainability of their livelihoods.

A global food system that simultaneously produces hunger and obesity, that generates significant collateral environmental degradation and that compromises the well-being of consumer and producer alike, challenges the academic community to engage in serious analysis and action. This challenge has been partially met with the emergence of a new paradigm that emphasizes sustainability and social equity rather than profit and production at its core. Contributions to this new paradigm are emerging from many sectors of society, especially at the grassroots level (e.g., local food systems, increased demand for organic and fair-trade products, reinvigoration of inner cities through urban agriculture, new business models such as "community supported agriculture," etc.). The university is the ideal place to forge the intellectual foundation that will inform and guide the construction of a coherent path toward a sustainable and equitable food system, which helps to reinvigorate rural and urban communities, promote environmental protection and enhance economies at state, national and international levels.

This minor is intended for students with a keen interest in expanding their study of sustainable and equitable ways to produce and deliver nutritious food so as to improve people's health and livelihoods. The minor consists of courses analyzing the current food system across a range of disciplines, documenting some of its more unsustainable characteristics and proposing alternatives.

*Effective Fall 2015*

## Advising

Students interested in declaring either a major or a minor must attend an information session. Information sessions are held throughout the Fall and Winter terms. Appointments may be scheduled with Program advisors on-line at: [/lsa.umich.edu/pite/minors/advising.html](https://lsa.umich.edu/pite/minors/advising.html)

PitE staff and faculty advisors working in tandem with faculty advisors in other units will help students navigate the Food and the Environment Minor.

## Prerequisites

None.

## Requirements

**Minimum Credits: 15**

The Food Systems Minor consists of no less than 5 courses for a total of at least 15 credits, at least two courses must be 300 -level or above, from the following categories as stated:

1. **Introductory Courses.** Select at least one of the following as an orientation to the minor:
  - BIOLOGY 101 / ENVIRON 101: Food, Energy, and the Environment
  - ENVIRON 270: Our Common Future: Ecology, Economics and Ethics of Sustainable Development
  - ENVIRON 290: Food: The Ecology, Economics, and Ethics of Growing and Eating
  - UC 254: Sophomore Interdisciplinary Seminar, *section titled "Much Depends on Dinner"*
2. **Topical Courses.** Three courses chosen from the following:
  - Any course listed above not used to satisfy the introductory or synthetic course requirement
  - ANTHRBIO 364: Nutrition and Evolution
  - ANTHRCUL 458: Topics in Sociocultural and Linguistic Anthropology, *section titled "Anthropology of Food and Eating"*
  - ARCH 357 / URP 357: Architecture, Sustainability and the City: Ideas, Forces and People Shaping the Built Environment
  - BIOLOGY 102: Practical Botany
  - CLARCH 382 / CLCIV 382: Food in the Ancient World: Subsistence and Symbol
  - CLCIV 382 / CLARCH 382: Food in the Ancient World: Subsistence and Symbol
  - EARTH 154: Ocean Resources
  - EARTH 159: Toward a Sustainable Human Future
  - EARTH 333: Inexhaustible Seas?: Marine Resources and Environmental Issues
  - EHS 540: Maternal and Child Nutrition
  - EHS 642: Community Nutrition
  - ENVIRON 242: Topics in Environmental Social Science, *section titled "2.5 Million Years of Human Foods and Foodways: A Framework for Understanding Modern Diets"*
  - ENVIRON 302: Topics in Environmental Social Science, *section titled "The Measure of Our Meals"*
  - ENVIRON 390 / RCIDIV 390: Environmental Activism: Citizenship in a Republic
  - ENVIRON 421: Restoration Ecology



- HONORS 252: Honors Natural Sciences Seminar, *section titled "2.5 Million Years of Human Foods and Foodways: A Framework for Understanding Modern Diets"*
  - NRE 501: Graduate Experimental, *section titled "Urban Agriculture"*
  - NRE 565: Principles of Transition: Food, Fuel and Finance in a Biophysically Constrained, Ethically Challenged World
  - RCIDIV 390 / ENVIRON 390: Environmental Activism: Citizenship in a Republic
  - UC 370: UC Special Topics, *section titled "The Measure of Our Meals"*
  - URP 357 / ARCH 357: Architecture, Sustainability and the City: Ideas, Forces and People Shaping the Built Environment
3. **Synthetic Courses.** Select at least one of the following courses, which synthesize approaches and knowledge bases relevant to the issue, as a conclusion to the minor:
- ANTHRCUL 458: Topics in Sociocultural and Linguistic Anthropology, *section titled "Food, Politics, and Environment"*
  - ARTDES 300: Elective Studios, *section titled "Sustainable Food System Design"*
  - EEB 498: The Ecology of Agroecosystems
  - RCIDIV 316 / EEB 316 / ENVIRON 316: Introduction to Food Systems
- or*
- RCIDIV 318 / EEB 318 / ENVIRON 318: Food, Land, and Society

**Related Courses.** The Program in the Environment will provide students with a list of “cognate” or related courses that, while not labelled or primarily described as food systems courses, would nonetheless be of keen interest to our minors.

## French and Francophone Studies Major

A major in French allows students considerable flexibility in developing a program of study leading to competence in the French language and basic familiarity with French and Francophone cultures and literatures.

*Effective Fall 2021*

### Advising

The Department offers majors in French, Italian, Romance Languages & Literatures, and Spanish. It offers minors in French, Italian, Portuguese, and Spanish.

Appointments are scheduled [online](#) or at the department office, 4108 Modern Languages Building, (734) 764-5344.

### Prerequisites

FRENCH 230 or 232, or RCLANG 290 or 310, with a grade of C- or higher; or assignment by placement test.

## Requirements

### **Minimum Credits: 33**

FRENCH 235 and a minimum of 30 credits in French and Francophone Studies courses numbered FRENCH 240 and above. Of these, a minimum of 18 credits must be numbered 300 or above, or equivalent.

A maximum of two courses in the major may be chosen from French courses taught in English without language prerequisites. Students who begin their French coursework in the language program sequence (FRENCH 100-232) may replace one 240-level French course taught in English with three credits from FRENCH 232, FRENCH 230, or RCLANG 290.

Residential College students may substitute RCLANG 320 for FRENCH 235. Students who complete a second and/or a third RCLANG 320 course will receive major credit for a French elective at the 270 level.

Majors must take one of the following literature and culture courses in RLL at the Ann Arbor campus: FRENCH 350-379, 402, 450-499.

To ensure that French majors and minors gain a broad range of knowledge in the French language, literature, and culture, a maximum of nine credits from the French business and/or internship courses (FRENCH 281, 380, 381, and 414) as well as any of their equivalents accepted as transfer and/or study abroad credit can count toward the major or minor.

FRENCH AP or IB credit may count as one upper-200-level FRENCH course taught in French. For more details, visit: [lsa.umich.edu/rll/undergraduates/language-placement/ap-and-ib-credits.html](http://lsa.umich.edu/rll/undergraduates/language-placement/ap-and-ib-credits.html)

French majors are encouraged to consider the possibility of studying abroad.

Students pursuing graduate studies in French should be aware that most graduate programs expect substantial preparation in literature. For this reason, students interested in earning a graduate degree in French should give particular consideration, in choosing their courses, to FRENCH 270-274, 362-369, 378, and 400-level courses in literature and culture.

## Residency

A minimum of 18 of the required 33 credits must be taken either in residence or through a study abroad program affiliated with the University of Michigan

AP or IB credit is considered out-of-residence credit.

## Honors

Qualified students may be admitted to a program of advanced study during their junior year (or at the beginning of the senior year following foreign study), leading to the degree of Bachelor of

Arts with Honors in French. Admission to senior-level Honors work in French is by application only (forms are available on the department website at [www.lsa.umich.edu/rll](http://www.lsa.umich.edu/rll)). A grade point average of at least 3.5 in all courses, as well as in all French and Francophone courses, is required for admission and for graduation with Honors in French. The Honors Committee expects applicants to demonstrate superior ability for their level in both oral and written French, and to present evidence of serious interest in research.

French and Francophone Studies Honors majors are required to complete 36 credits of coursework and successfully defend a thesis:

### **Course Requirements:**

All regular French major requirements must be completed (33 credits) with 3 additional credits at the 300 level or above. 6 of the required 36 credits will consist of French 491 and 492, Senior Honors Courses, normally taken in the fall and winter terms, respectively, of a student's senior year.

### **Thesis Requirement:**

Composition of a thesis, in French, incorporating the results of individual research, demonstrating a substantial piece of work; and

A presentation and discussion of the thesis and of an agreed upon set of related readings with the student's faculty advisor and one other faculty reader.

Working under the direction of a faculty member who serves as thesis director, the student will research the thesis, complete a bibliography and prospectus, and begin drafting the writing process while enrolled in FRENCH 491. In the following academic term the student will enroll in FRENCH 492 and complete the thesis and its presentation and discussion.

### **Teaching Certificate**

Students who are interested in learning more about pursuing Teacher Education should contact Dr. Maria Coolican. For further information about teacher certification options in the School of Education, please review the Teacher Certification Options. To review the specific courses that are required for the various teaching majors, please see the Teaching Major and Minor Requirements.

## **French and Francophone Studies Minor**

The Department offers majors in French, Italian, Romance Languages & Literatures, and Spanish. It offers minors in French, Italian, Portuguese, and Spanish.

When combined with study in another field, knowledge of a Romance language will open doors to a wide variety of career and educational opportunities. Today, learning of other languages, peoples, and cultures is not only useful, it is imperative.

If you are majoring in another field, the French and Francophone Studies minor offers you an opportunity to complement the knowledge gained in your principal field, while adding a cultural and linguistic dimension to your academic experience.

*Effective Fall 2021*

**Exclusions:**

*The French and Francophone Academic minor is not open to students with a French major or any other minor in Romance Languages and Literatures.*

Advising

Appointments are scheduled [online](#) or at the department office, 4108 Modern Languages Building, (734) 764-5344.

Prerequisites

FRENCH 230 or 232 with a grade of C- or higher; or RCLANG 290 or 310, or assignment by placement test.

Requirements

**Minimum Credits: 21**

- FRENCH 235 and 18 credits of courses in FRENCH numbered FRENCH 240 and above, with a minimum of 9 credits at the 300 level. Residential College students may substitute RCLANG 320 for FRENCH 235. Students who complete a second and/or a third RCLANG 320 course will receive minor credit for a French elective at the 270 level.
- Students may take up to one French course taught in English without language prerequisites. Students who begin their French coursework in the language program sequence (FRENCH 100-232) may replace this course taught in English with three credits from FRENCH 232, FRENCH 230, or RCLANG 290.
- Minors must take one of the following literature and culture courses in RLL at the Ann Arbor campus: FRENCH 350-379, 402, 450-499.
- FRENCH AP or IB credit may count as one upper-200-level FRENCH course taught in French. For more details, visit: [lsa.umich.edu/rll/undergraduates/language-placement/ap-and-ib-credits.html](http://lsa.umich.edu/rll/undergraduates/language-placement/ap-and-ib-credits.html)

## Constraints

To ensure that French majors and minors gain a broad range of knowledge in the French language, literature, and culture, a maximum of nine credits from the French business and/or internship courses (FRENCH 281, 380, 381, and 414), as well as any of their equivalents accepted as transfer and/or study abroad credit, can count toward the major or minor.

## Residency

- Minors must take one of the following literature and culture courses in RLL at the Ann Arbor campus: FRENCH 350-379, 402, 450-499.
- At least 12 of the 21 credits for the Academic Minor must be taken in residence or in a study abroad program affiliated with the University of Michigan.
- AP or IB credit is considered out-of-residence credit.

# Gender and Health Major

The major offers a critical, feminist analysis of research, practice, and policies concerning gender and health. Specifically, the major allow students to examine the intersections of social categories, such as gender, race / ethnicity, social class, and sexuality, with conceptualizations of health, healthcare delivery, and health-related policies. Moreover, students, for example, investigate the limits of the biomedical model, apply a feminist lens to the understanding, critique, and construction of health, explore health- related issues within a global and transnational context, grapple with ethical dilemmas in real-world case studies, and critically analyze the impact of power inequalities in specific health-related areas (e.g., the use of medical technologies and treatment of epidemic diseases).

The major offers students a truly interdisciplinary, liberal arts experience with a variety of courses, spanning disciplinary approaches in the humanities and social sciences. It provides students with intellectually rich, challenging, and suitable academic preparation for a diverse series of jobs and advanced graduate or professional training.

*Effective Winter 2019*

### Exclusions:

*Gender and Health majors may not major in Women's and Gender Studies or minor in Gender and Health.*

## Advising

[Advising](#) appointments are made online. To make an advising appointment, please see the bottom left hand corner of the Women's and Gender Studies website main page:

[www.lsa.umich.edu/women](http://www.lsa.umich.edu/women).

Students wishing to pursue a minor in Women's and Gender Studies must develop a specific plan for its completion in consultation with the department's designated advisor. Advising appointments are made online. To make an advising appointment, please see the bottom left-hand corner of the Women's and Gender Studies website main page: [www.lsa.umich.edu/women](http://www.lsa.umich.edu/women).

## Grade Policies

To complete the major, students must receive a grade of C- or above in all required courses.

## Prerequisites

WGS / NURS 220 (WGS / NURS 220). Perspectives in Women's Health

## Requirements

### Minimum Credits: 33

#### I. Core:

- A. **Feminist Theory Seminar.** One of the following:
  - WGS 330 (WGS 330): Feminist Thought
  - WGS 331 (WGS 331): Feminist Theoretical Perspectives in Gender and Health
- B. The **Practicum course requirement** is intended to ensure that majors gain exposure to and participate in hands-on research or community service internships in which critical feminist approaches to gender and health are materially relevant. By approval of both the relevant instructor and the Women's and Gender Studies undergraduate office, students may satisfy this requirement with courses that allow them an immersive experience with gender and health-related research, service learning, or mentorships focused on gender and health issues.  
Some courses that will satisfy the practicum requirement are:
  - WGS 350 (WGS 350): Nonprofit Management, Community Engagement, and Feminist Practice
  - WGS 351 (WGS 351): Leading Feminism (W17)
  - WGS 384 (WGS 384): Independent Research (by department advisor approval) Students obtain approval from the instructor and the department advisor to do so via their participation in appropriately focused research or an apprentice-based research project that focuses on gender and health issues.
  - WGS / HS 404: Gender Based Violence: From Theory to Action.
  - SOC 225: Project Community: *various specifically approved topics - see department advisor*
- C. **Thematic Area Requirements.** Complete at least one course in each of four thematic areas. ***A course cannot be double counted to meet more than one thematic area requirement.***
  - 1. **LGBTQ and Sexuality Studies in Health.** These courses focus on sexual minority health and the contributions of feminist scholarship and queer theory as applied to the development of sexual identities, understandings of sexual health, and the experiences of LGBTQ people with healthcare delivery, health related

policies, and social justice movements, as well as the history of sexuality more generally.

- WGS 239 (WGS) / AMCULT 239: Gender, Sexuality, and Health in America
  - WGS 305 (WGS 305) / ALA 306: Interdisciplinary & Intersectional LGBTQ Health
  - WGS 314 (WGS) / ENGLISH 314: Gender and Sexuality Studies in Literature, *section titled "The Culture of AIDS"*
  - WGS 352 (WGS) / ASIAN 352: Gender, Sex & Power in Pre-Modern China (F19)
  - WGS 394 (WGS) / PSYCH 394: Sex, Sexuality, and Public Policy
  - WGS 407 (WGS 407): Intersexualities
  - WGS 432 (WGS 432): Advanced Topics in Gender & Health, *section titled "Diagnosis, Sex & Society"*
  - WGS 449 (WGS 449) / SOC 445: Diagnosis, Sex & Society
  - WGS 452 (WGS 452) / PSYCH 414: Sexuality and Science
  - WGS 494 (WGS) / PSYCH 494: Adolescent Sexuality
  - SOC 495: Topics in Sociology, *section titled "Diagnosis, Sex & Society"*
2. **Critical Race and Ethnic Studies in Gender and Health.** These courses will rely on a feminist perspective to examine how the intersections of gender, race, and ethnicity (and other salient categories of identity) impact health-related issues (e.g., conceptualizations of disease and well-being, social disparities in health and healthcare seeking, relations between healthcare providers and patients) with a primary focus on the United States.
- WGS 233 (WGS) / AMCULT 233: Genes and Society: Comparative and International Perspectives
  - WGS 239 (WGS) / AMCULT 239: Gender, Sexuality, and Health in America
  - WGS 291 (WGS) / PSYCH 291: Introduction to Psychology of Women and Gender
  - WGS 305 (WGS 305) / ALA 306: Interdisciplinary & Intersectional LGBTQ Health
  - WGS 343 (WGS 343): Special Topics in Gender, Race, and Ethnicity in the U.S. (*certain topics*)
  - WGS 356 (WGS 356) / AMCULT 331 / HISTORY 356: Health in America: Patterns, Experiences, and Inequalities
  - WGS 365 (WGS) / HISTORY 365 / AMCULT 331: Critical Race & Ethnic Studies in Health (W19)
  - WGS 443 (WGS) / AAS 443: Pedagogy of Empowerment: Activism in Race, Gender, and Health
3. **Gender and Health in Bioscience.** These courses present students with knowledge about basic biological processes, pertaining to healthy developmental periods, life transitions, or particular illnesses, in combination with critical feminist examinations about the process of conducting research in the biological sciences and the applications and societal impact of such work.
- WGS 233 (WGS) / AMCULT 233: Genes and Society: Comparative and International Perspectives

- WGS 296 (WGS) / HISTORY / PSYCH 296: Gender, Sex Differences, and Addiction: Girls Gone Wild
  - WGS 300 (WGS 300): Men's Health
  - WGS 342 (WGS 342): Special Topics in Gender and Health, *section titled "Biomedical Knowledge: Behavior, Science and Gender"* (only if elected WN20 or later)
  - WGS 400 (WGS 400): Women's Reproductive Health
  - WGS 407 (WGS 407): Intersexualities
  - WGS 432 (WGS 432): Advanced Topics in Gender and Health, *section titled "Gender and Contested Illness"* (only if elected WN20 or later)
  - WGS 452 (WGS 452) / PSYCH 414: Sexuality and Science
4. **Gender and Health in Global, Transnational, or Historical Perspectives.** In this thematic area, one set of courses offers a comparative cross-cultural perspective on health-related phenomena by relying upon feminist theories and global feminisms to place topics of study in a global, transnational context. Another set of courses provides students with the comparative vision promoted through in-depth understanding of the rich and complex historical background of many current health-related issues.
- WGS 212 / NURS 225: Global Perspectives on the HIV and AIDS Epidemic
  - WGS 233 (WGS) / AMCULT 233: Genes and Society: Comparative and International Perspectives
  - WGS 239 (WGS) / AMCULT 239: Gender, Sexuality, and Health in America
  - WGS 242 (WGS) / AMCULT 242: Gender and Violence in a Global Context
  - WGS 296 (WGS) / HISTORY / PSYCH 296: Gender, Sex Differences, and Addiction: Girls Gone Wild
  - WGS 307 (WGS 307) / ANTHRCUL / RCSSCI 327: Critical Theory in Medicine and Healing
  - WGS 324 (WGS 324) / ANTHRCUL 325: Childbirth & Culture
  - WGS 328 (WGS) / AAS 328: Women, Agency and Sexual Safety
  - WGS 342 (WGS 342): Topics in Gender & Health, *section titled "Histories of Women, Medicine and Reproduction"* (F17) or *"Biomedical Knowledge: Behavior, Science and Gender"* (only if elected WN20 or later)
  - WGS 345 (WGS 345): Topics in Gender in a Global Context, *section titled "Sexual Violence and the State"* (F17)
  - WGS 352 (WGS) / ASIAN 352: Gender, Sex & Power in Pre-Modern China (F19)
  - WGS 356 (WGS 356) / AMCULT 331 / HISTORY 356: Health in America: Patterns, Experiences, and Inequalities
  - WGS 365 (WGS) / AAS 365: Global Perspectives on Gender, Health, and Reproduction
  - WGS 432 (WGS 432): Advanced Topics in Gender and Health, *sections titled "Introduction to Global Health"* or *"Gender and Mental Health in the 19th Century"* (F16) or *"Women, Gender and Health in E*



*Asia: Historical and Contemporary Perspectives" (only if elected WN20 or later)*

- WGS 438: Gender, Health, and Well-being in Africa

II. **Gender and Health Electives.** *Electives must bring the total number of credits in the major up to 27 (excluding cognates).* Select at least three courses.

- Any of the courses in "thematic areas" section
- WGS 225 (WGS) / PSYCH 225: Psychology of Human Sexuality
- WGS 291 (WGS) / PSYCH 291: Introduction to the Psychology of Women and Gender
- WGS 313 (WGS 313): Special Topics in Gender and the Humanities, *sections titled "Gender, Autobiography and the Medical Body", "Disability Culture" or "Women and Well-Being in Literature" (only if elected WN 20 or later)*
- WGS 342 (WGS 342): Special Topics in Gender and Health
- WGS 402 (WGS 402): Gender and Health Policy
- WGS 410 (WGS 410): Reproductive Justice: Legal and Ethical Issues
- WGS (WGS) / SM 421: Gender and Sport
- WGS 432 (WGS 432): Advanced Topics in Gender and Health, *sections titled "Movements for Sexual and Reproductive Justice", "Introduction to Global Health"*
- ENGLISH 313: Topics in Literary Studies, *section titled "Gender, Autobiography and the Medical Body"*
- ENGLISH 317: Literature and Culture, *section titled "Disability Culture"*

III. **Gender, Culture and Representation Requirement.** One of the four thematic area courses or one of the elective courses must be a course that addresses "gender, culture and representation" on a health-related topic.

- ENGLISH 317: Literature and Culture, *section titled "Disability Culture"*
- WGS 233 (WGS) / AMCULT 233: Genes and Society: Comparative and International Perspectives
- WGS 239 (WGS) / AMCULT 239: Gender, Sexuality, and Health in America
- WGS 296 (WGS) / HISTORY / PSYCH 296: Gender, Sex Differences, and Addiction: Girls Gone Wild
- WGS 313 (WGS 313): Special Topics in Gender and the Humanities, *sections titled "Gender, Autobiography and the Medical Body", "Disability Culture", "Gender and Health in Literature" (W19), or "Women and Well-Being in Literature" (only if elected WN 20 or later)*
- WGS 314 (WGS) / ENGLISH 314: Gender and Sexuality Studies in Literature, *section titled "The Culture of AIDS"*
- WGS 342 (WGS 342): Topics in Gender & Health, *section titled "Histories of Women, Medicine and Reproduction" (F17)*
- WGS 352 (WGS) / ASIAN 352: Gender, Sex & Power in Pre-Modern China (F19)
- WGS 432 (WGS 432): Advanced Topics in Gender & Health, *section titled "Race, Gender, and Mental Health in the 19th Century" (F16) or "Women, Gender and Health in E Asia: Historical and Contemporary Perspectives" (only if elected WN20 or later)*

IV. **Cognate Requirement.** Two courses (for a total of six credits), neither in WGS (or WGS), nor cross-listed, are required. In order to compliment the interdisciplinary major in Gender and Health with training in a single discipline, students should take six cognate credits within the same discipline. Cognate courses should not be courses on gender and health but should provide supporting skills or contexts for the study of gender and health. Cognates are by

Women's and Gender Studies advisor approval. A preliminary list of suggested cognate courses follows:

- AMCULT 284 / HISTORY 284: Sickness and Health in Society: 1492 to the Present
- AMCULT 365: AIDS and America
- ANATOMY / PHYSIOL 541 / PSYCH 532: Mammalian Reproductive Physiology
- ANTHRBIO / ANTHRCUL 342: Nature/Culture Now!
- ANTHRCUL / ANTHRBIO 342: Nature/Culture Now!
- ANTHRCUL / HISTART 354: Art, Science, and Technology
- ANTHRCUL 437: The Anthropology of Death, Dying and the Afterlife
- ANTHRCUL 447: Culture, Racism, and Human Nature
- CHEM 210: Structure and Reactivity I
- CHEM 215: Structure and Reactivity II
- HISTART / ANTHRCUL 354: Art, Science, and Technology
- HISTORY 234: History of Medicine in the Western World from the 18th Century to the Present
- HISTORY / AMCULT 284: Sickness and Health in Society: 1492 to the Present
- HISTORY 285 / RCSSCI 275: Science, Technology, Medicine, and Society
- HMP / PUBHLTH 200 / PUBPOL 210: Health and Society: Introduction to Public Health
- PHYSIOL / ANATOMY 541 / PSYCH 532: Mammalian Reproductive Physiology
- PSYCH 337: Hormones and Behavior
- PSYCH 532 / PHYSIOL / ANATOMY 541: Mammalian Reproductive Physiology
- PUBHLTH / HMP 200 / PUBPOL 210: Health and Society: Introduction to Public Health
- PUBHLTH 305: The Environment and Human Health
- PUBHLTH 350: Global Public Health: Challenges and Transformations
- PUBPOL 210/ PUBHLTH / HMP 200: Health and Society: Introduction to Public Health
- RCSSCI 275 / HISTORY 285: Science, Technology, Medicine, and Society

### Constraints

A maximum of six credits of WGS (or WGS) independent study may be taken towards the major – excluding independent study credits that meet the practicum requirement.

### Residency

For completion of the major, 14 credits of gender and health courses must be taken in residence on the Ann Arbor campus, including WGS 440 (WGS 440): Senior Capstone and not including cognates. "In-residence" means courses elected on the Ann Arbor campus or at off-campus sites directed by Ann Arbor faculty. This includes STDABRD, Camp Davis, Biological Station, Michigan-in-Washington.

### Distribution Policy

No course used to fulfill a major requirement may be used toward the [LSA Distribution Requirement](#). In addition, courses in the WGS or WGS subject area may not be used toward the Distribution Requirement.

## Honors

Gender and Health majors who maintain an overall GPA of at least 3.4 through the first term of their junior year and a 3.5 in their Gender and Health courses will be eligible to complete their degree with a Gender and Health Honors designation. Most importantly, Gender and Health majors who wish to pursue an Honors Thesis will have an opportunity to complete a comprehensive, original independent project under the guidance of a Women's and Gender Studies faculty member with expertise in topics related to gender and health.

Student elect:

- WGS 389 (WGS 389): Junior Honors Seminar (may also count as an elective)

and the following additional courses:

- WGS 441 (WGS 441): Senior Honors Seminar 1
- WGS 442 (WGS 442): Senior Honors Seminar 2
- WGS 490 (WGS 490): Honors Thesis
- WGS 491 (WGS 491): Honors Thesis

## Gender and Health Minor

This minor allows students to develop a minor through courses that focus on gender and health across a variety of disciplinary perspectives. At the same time, this minor is designed to focus students' studies of gender and health from a feminist perspective. The minor provides an opportunity for students to develop their skills in critical analysis as they explore how the social category of gender and conceptualizations of health, health care, and health policy intersect.

Coursework on a range of topics allows students to engage critically with the biomedical model of health in order to broaden and deepen their understanding of what constitutes health by exploring, for example, the relationship between health and disease. In all courses, students will be challenged to consider the implications of a critical gender analysis of health for health care delivery, the health care professions, and health policy domestically and transnationally.

*Effective Fall 2016*

### **Exclusions:**

*Gender and Health majors may not minor in Gender and Health.*

## Advising

Students wishing to pursue a minor in Women's and Gender Studies must develop a specific plan for its completion in consultation with the department's designated advisor. Advising appointments are made online. To make an advising appointment, please see the bottom left-hand corner of the Women's and Gender Studies website main page:

[/lsa.umich.edu/women/undergraduates/advising](https://lsa.umich.edu/women/undergraduates/advising).

## Prerequisites

None.

## Requirements

### Minimum Credits: 15

Five courses totaling at least 15 credits, to be chosen from the following categories as stated:

1. **Foundational Course:** WGS 220 (WGS) /NURS 220: Perspectives in Women's Health
2. **Electives:** Four electives from the listing below (at least two courses must be upper-level courses, with at least one at the 400-level). One of these courses must be an upper-level seminar and one must be from a transnational, global, or historical perspective as indicated below. (A single course may satisfy more than one of these requirements).
  - WGS 212 / HS 225: Global Perspectives on the HIV and AIDS Epidemic
  - WGS 225 (WGS) / PSYCH 225: Psychology of Human Sexuality
  - WGS 233 (WGS) / AMCULT 233: Genes and Society
  - WGS 239 (WGS) / AMCULT 239: Gender, Sexuality, and Health in America
  - WGS 242 (WGS) / AMCULT 242: Gender Violence in a Global Context
  - WGS 291 (WGS) / PSYCH 291: Introduction to the Psychology of Women and Gender
  - WGS 296 (WGS) / HISTORY / PSYCH 296: Gender, Sex Differences, and Addiction: GirlsGone Wild
  - WGS 300 (WGS 300): Men's Health
  - WGS 305 (WGS 305) / ALA 306: Interdisciplinary & Intersectional LGBTQ Health
  - WGS 307 (WGS 307) / ANTHRCUL / RCSSCI 327: Critical Theory in Medicine and Healing
  - WGS 320: Gender and Mental Health
  - WGS 324 (WGS 324) / ANTHRCUL 325: Childbirth and Culture
  - WGS 328 (WGS) / AAS 328: Women, Agency and Sexual Safety
  - WGS 342 (WGS 342): Special Topics in Gender and Health
  - WGS 356 (WGS) / HISTORY 356 / AMCULT 331: Health in America: Patterns, Experiences, Inequalities
  - WGS 365 (WGS) / AAS 365: Global Perspectives on Gender, Health, and Reproduction
  - WGS 394 (WGS) / PSYCH 394: Adolescent Sexuality
  - WGS 400 (WGS 400): Women's Reproductive Health
  - WGS 402 (WGS 402): Gender and Health Policy
  - WGS / HS 404: Gender Based Violence: From Theory to Action
  - WGS 405 (WGS 405): Pharma, Pills, & Policy

- WGS 407 (WGS 407): Intersexualities
- WGS 410 (WGS 410): Reproductive Justice: Legal and Ethical Issues
- WGS 412 (WGS 412): Reproductive Health Policy in a Global Context
- WGS (WGS) / SM 421: Gender and Sport
- WGS 432 (WGS 432): Advanced Topics in Gender and Health
- WGS 438: Gender, Health and Well-Being in Africa
- WGS 443 (WGS) / AAS 443: Pedagogy of Empowerment: Activism in Race, Gender, and Health.
- WGS 452 (WGS 452) / PSYCH 414: Sexuality and Science
- WGS 494 (WGS) / PSYCH 494: Adolescent Sexuality
- WGS 498 (WGS) / PSYCH 498: Gender and the Individual
- WGS 499 (WGS) / PSYCH 499: Psychology of Women

### **Upper-Level Seminars:**

- WGS 313 (WGS 313): Topics in Gender & the Humanities, *section titled "Gender and Health in Literature"* (WN19)
- WGS 328 (WGS) / AAS 328: Women, Agency and Sexual Safety
- WGS 331 (WGS 331): Feminist Theoretical Perspectives in Gender and Health
- WGS 342 (WGS 342): Special Topics in Gender and Health
- WGS 345 (WGS 345): Special Topics in Gender in a Global Context, *section titled "Sexual Violence and the State"*
- WGS 350 (WGS 350): Nonprofit Management, Community Engagement, and Feminist Practice
- WGS 351 (WGS 351): Leading Feminism
- WGS 352 (WGS) / ASIAN 352: Gender, Sex & Power in Pre-Modern China (F19)
- WGS 365 (WGS) / AAS 365: Global Perspectives on Gender, Health, and Reproduction
- WGS 374 (WGS 374): Gender, Race and Incarceration (SP19)
- WGS 405 (WGS 405): Pharma, Pills, and Policy
- WGS 407 (WGS 407): Intersexualities
- WGS 410 (WGS 410): Reproductive Justice: Legal and Ethical Issues
- WGS 412 (WGS 412): Reproductive Health Policy in a Global Context
- WGS 438: Gender, Health, and Well-being in Africa
- WGS 443 (WGS) / AAS 443: Pedagogy of Empowerment: Activism in Race, Gender, and Health
- WGS 449 (WGS 449) / SOC 445: Diagnosis, Sex, and Society
- WGS 494 (WGS) / PSYCH 494: Adolescent Sexuality
- SOC 225: Project Community: various specifically approved topics - see department advisor

### **Courses with a transnational, global, historical perspective:**

- WGS 233 (WGS) / AMCULT 233 : Genes and Society
- WGS 296 (WGS) / HISTORY / PSYCH 296: Gender, Sex Differences, and Addiction: Girls Gone Wild
- WGS 319 (WGS 319): Race, Class, and Reproductive Health (W18)
- WGS 324 (WGS 324) / ANTHRCUL 325: Childbirth and Culture
- WGS 327 (WGS) / HISTORY 327: The History of Sexuality
- WGS 328 (WGS) / AAS 328: Women, Agency and Sexual Safety

- WGS 352 (WGS) / ASIAN 352: Gender, Sex & Power in Pre-Modern China (F19)
- WGS 365 (WGS) / AAS 365: Global Perspectives on Gender, Health, and Reproduction
- WGS 412 (WGS 412): Reproductive Health Policy in a Global Context
- WGS 432 (WGS 432): Advanced Topics in Gender and Health, *sections titled "Race, Gender and Mental Health in the 19th Century" or "Introduction to Global Health" (F18) or "Special Topics in Gender and Health" (only if elected WN20 or later) or "Biomedical Knowledge: Behavior, Science and Gender" (only if elected WN20 or later)*
- WGS 435 (WGS 435): Advanced Topics in Gender in a Global Context, *section titled "Gender, Sexuality, and International Human Rights Law" (only if elected WN20 or later)*
- WGS 438: Gender, Health, and Well-being in Africa

## Gender, Race, and Nation Minor

This minor is designed to introduce students to a range of feminist scholarship on the intersection of gender with race and ethnicity and with nation. Courses examine race and ethnicity in contexts that are local, transnational, or both. They analyze the ways in which gender, race, and nation are constituted with and against each other, and how these constructions operate in discourses, institutions, politics, societies, and individual lives past and present. The minor can be tailored toward an international or domestic emphasis, but topics are likely to include the changing boundaries of race, gender, and nation; differential relations among nations; histories of imperialism, colonialism, and globalization; and postcolonial resistance and theory.

*Effective Winter 2014*

### Advising

Students wishing to pursue a minor in Women's Studies must develop a specific plan for its completion in consultation with the department's designated advisor. Advising appointments are made online. To make an advising appointment, please see the bottom left-hand corner of the Women's Studies website main page: [/lsa.umich.edu/women/undergraduates/advising](https://lsa.umich.edu/women/undergraduates/advising).

### Prerequisites

None.

### Requirements

**Minimum Credits: 15**

Five courses totaling at least 15 credits, to be chosen from the following categories as stated:

1. **Foundational Course.** One course chosen from:
  - WGS 240 (WGS 240) / AMCULT 240: Introduction to Women's and Gender Studies
  - WGS 250 (WGS 250): Gender, Race, & Nation
2. **Feminist Theory.** One course chosen from:

- WGS 330 (WGS 330): Feminist Thought
  - WGS 422 (WGS 422) / POLSCI 401: Feminist Political Theory
  - WGS 455 (WGS 455) / ANTHRCUL 455: Feminist Theory in Anthropology
3. **Electives.** Three electives (9 credits) that focus on women in specific racial and ethnic groups (At least two courses must be upper-level courses, with at least one at the 400-level), chosen from:
- AMCULT 498: Capstone Seminar, *section titled, "Skin Deep: Race and Beauty in American Culture"* (Only if elected WN17 or later)
  - WGS / ANTHRCUL / NURS 212: Global HIV/AIDS Epidemic
  - WGS 215 (WGS 215) / HISTART / ARCH 216: Contested Spaces: Art, Architecture, Politics (Only if elected FA20 or later)
  - WGS 220 (WGS 220) / NURS 220: Perspectives in Women's Health
  - WGS 233 (WGS 233) / AMCULT 233: Genes and Society
  - WGS 235 (WGS 235) / AMCULT / ARABAM 235: Harems to Terrorists: Representing the Modern Middle East in Hollywood Cinema
  - WGS 239 (WGS 239) / AMCULT 239: Gender, Sexuality, and Health in America
  - WGS 242 (WGS 242) / AMCULT 242: Gender Violence in a Global Context
  - WGS 243 (WGS 243) / AMCULT / LATINOAM 243: Latinas in the U.S.
  - WGS 270 (WGS 270) / SOC 270: Gender and the Law
  - WGS 291 (WGS 291) / PSYCH 291: Introduction to Psychology of Women and Gender
  - WGS 293 (WGS 293) / AMCULT 293: 20th-Century Writing by Women of Color
  - WGS 297 (WGS 297) / PSYCH 297: Promoting Equity and Inclusion in the University and the Workplace (Only if elected FA17 or later)
  - WGS 301 (WGS 301) / ASIAN 301: Writing Japanese Women
  - WGS 302 (WGS 302) / HISTART / ANTHRCUL 302: Sex and Gender in Japan
  - WGS 304 (WGS 304) / AAS 304: Gender and Immigration
  - WGS 305 / ALA 306: Interdisciplinary & Intersectional LGBTQ Health
  - WGS 306 (WGS 306) / AAS 306: Women of Color and Feminism
  - WGS 307 (WGS 307) / ANTHRCUL / RCSSCI 327: Critical Theory in Medicine and Healing
  - WGS 309 (WGS 309) / PSYCH 309: Psychology of Social Change: Gender and Global Feminisms (Only if elected WN19 or later)
  - WGS 312 (WGS 312): Queering US Immigration History
  - WGS 318 (WGS 318): Women, Politics, and Society in India
  - WGS 321 (WGS 321): Women's Lives in 20th-Century China
  - WGS 322 (WGS 322): Black Feminist Approaches to Health (Only if elected FA18 or later)
  - WGS 323 (WGS 323) / AAS 323 / HISTORY 388: Black Feminist Thought and Practice
  - WGS 324 (WGS 324) / ANTHRCUL 325: Anthropology of Childbirth
  - WGS 327 (WGS 327) / HISTORY 327: History of Sexuality
  - WGS 328 (WGS 328) / AAS 328: Women, Agency, and Sexual Safety
  - WGS 329 (WGS 329) / AMCULT 329: Native American Feminism
  - WGS 332 (WGS 332) / ASIAN 342: Gender and Power in Southeast Asia
  - WGS 335 (WGS 335): Gender and Globalization
  - WGS 336 (WGS 336) / AAS / HISTORY 336: Black Women in America
  - WGS 337 (WGS 337) / AAS / HISTORY 337: Black Women in the U.S.
  - WGS 343 (WGS 343): Special Topics in Gender and Ethnicity in the U.S.

- WGS 345 (WGS 345): Special Topics in Gender in a Global Context
- WGS 352 (WGS 352) / ASIAN 352: Gender, Sexuality, and Power in Pre-modern China
- WGS 354 (WGS 354) / AAS / RCHUMS / HONORS 354: Race and Identity in Music
- WGS 356 (WGS 356) / AMCULT / HISTORY 356: Health in America: Patterns, Experiences, Inequalities
- WGS 357 (WGS 357): Feminist Practices in a Global Context
- WGS 360 (WGS 360) / AMCULT 342 / HISTORY 368: History of the Family in the U.S.
- WGS 363 (WGS 363) / AMCULT / ASIANPAM 363: Asian Pacific American Women
- WGS 365 (WGS 365) / AAS 365: Global Perspectives on Gender, Health, and Reproduction
- WGS 366 (WGS 366) / AMCULT 366 / HISTORY 353: Sex and Sexuality in U.S. Popular Culture
- WGS 368 / AMCULT 368 / MIDEAST 378 / ARABAM 363: Women and War in the Middle East
- WGS 374 (WGS 374): Gender, Race and Incarceration (*Only if elected SP19 or later*)
- WGS 370 (WGS 370) / HISTORY 370 / AMCULT 375: Queer Histories of the United States, 1850 to present (*Only if elected FA18 or later*)
- WGS 376 (WGS 376) / JUDAIC 376: Women and the Bible (*Only if elected WN19 or later*)
- WGS / AMCULT 378: Violence Against Women of Color
- WGS 381 (WGS 381) / AAS 381 / ENGLISH 380: Intersections: Fictions and Feminisms of the African Diaspora
- WGS / AAS 390: Homophobia in the Black World
- WGS / HISTORY 397 / MIDEAST 387: Religion and Politics in Contemporary Iran (*Only if elected WN19 or later*)
- WGS 417 (WGS 417): Race, Gender & Mental Health in the 19th Century (*Only if elected FA18 or later*)
- WGS 425 (WGS 425) / AMCULT 425: Feminist Practice in Oral History
- WGS 427 (WGS 427) / AAS / ANTHRCUL 427: African Women
- WGS 432 (WGS 432): Advanced Topics in Gender and Health, *section titled "Race, Gender and Mental Health in the 19th Century"* (*Only if elected FA16 or later*) or *"Women, Gender and Health in E Asia: Historical and Contemporary Perspectives"* (*only if elected WN20 or later*)
- WGS 433 (WGS 433): Advanced Topics in Gender, Race and Ethnicity in the U.S.
- WGS 434 (WGS 434): Advanced Topics in Gender, Culture & Representation, *section titled "Race & Beauty in American Culture"* (*Only if elected WN17 or later*)
- WGS 434 (WGS 434): Advanced Topics in Gender, Culture & Representation, *section titled "Skin Deep: Race and Beauty in American Culture"* (*Only if elected FA20 or later*)
- WGS 435 (WGS 435): Advanced Topics in Gender in a Global Context
- WGS 438: Gender, Health, and Well-Being in Africa
- WGS 443 (WGS 443) / AAS 443: Pedagogy of Empowerment: Activism in Race, Gender and Health
- WGS / HISTORY 448: Gender and the Family in China



- WGS 471 (WGS 471) / HISTORY 429 / MIDEAST 432 / RELIGION 496: Gender and Sexuality in Pre-Modern Islam
- WGS 492 / REEES / SOC 490: Women and Islam
- WGS 496 (WGS 496) / MIDEAST / ISLAM 433: Gender and Representation in the Modern Middle East.

Students may also include:

- WGS 240 (WGS 240) or WGS 250 (WGS 250) (when not taken as a foundation course)

other special topics WGS or WGS courses on specific racial and ethnic groups approved by the Women's and Gender Studies department.

## Bachelor in General Studies

In 1968, the faculty of the College of Literature, Science, and the Arts voted to create the Bachelor in General Studies (BGS) degree. This degree remains an option for students with interdisciplinary or alternate academic interests, allowing them to pursue their interests in an individually designed degree program independent of departmental requirements.

The Bachelor in General Studies is an interdisciplinary degree which allows a student to combine subject areas and skills in a way that focuses intellectual development through a lens of interdisciplinarity.

*The B.G.S. is unique in that:*

- It does not require completion of distribution (Natural Sciences, Social Sciences, Humanities, etc.).
- It does not require completion of second language proficiency.
- It does not require a major.
- It DOES require 60 credits of coursework elected at the 300-level or above.

*Requirements specific to the 60 upper-level credits:*

- No more than 20 credit hours of upper-level courses may be counted from a single department. If an academic department has several subjects (e.g., American Culture includes divisions of Arab American Studies, Asian/ Pacific Islander American Studies, Latina/o American Studies, Native American Studies), a B.G.S. student may elect a maximum 20 credit hours of upper-level courses from each subject to complete the minimum 60 credit hours.
- Students may complete more than 20 credit hours in a single division provided that only 20 upper-level credits count toward the 60-credit minimum (e.g., 25 credit hours of upper-level courses may be completed in psychology provided that 65 upper-level credit hours are completed). Thus, the number of lower-level credits need not be half of the 120 total.
- A cross-listed course may count toward any one of the departments regardless of the department noted on the transcript.
- At least 40 of these upper-level credits must be LSA.
- Students may include coursework from as many departments and subjects necessary to meet the 60 credits minimum. Typically B.G.S. students have 7–9 departments or subjects represented in their upper-level coursework. B.G.S. is NOT 20-20-20.

- One course from the Program in Entrepreneurship or Graham Sustainability Supplemental Studies may overlap with the 60 upper-level credits required by B.G.S.
- A B.G.S. student must earn an overall GPA of at least 2.0 in the courses used to meet the requirement of 60 upper-level credits.

## Geology Minor

The Geology minor is designed to give students a specialization in geology, which includes the physics and chemistry of the solid Earth. The minor is suitable for students who wish to add a specialization in geology to their natural science degree.

Our innovative and flexible majors provide an interesting path for students to follow on their way to an LSA degree. From our field camp at Camp Davis in Wyoming, to lab work on campus, Michigan students have an opportunity to explore the geological sciences in exciting ways.

The Department of Earth and Environmental Sciences offers:

- an [Earth and Environmental Sciences Major](#) and an **Honors Plan**
- a **Teacher's Certificate Program**, for prospective science teachers who are candidates for a secondary teaching certificate in earth science and general science; and,
- Academic minors in [Earth Sciences](#), [Environmental Geology](#), [Geology](#), [Oceanography](#), and [Paleontology](#).

*Effective Winter 2013*

### Advising

Students wishing to pursue a minor in the department must develop a specific plan for its completion in consultation with the department's designated advisor. Appointments are scheduled online [www.lsa.umich.edu/earth/undergraduate](http://www.lsa.umich.edu/earth/undergraduate)

### Prerequisites

None.

### Requirements

**Minimum Credits: 15**

1. **An introductory geology course:** EARTH 116, 119, 120, or 205+206. Students who elect EARTH 119, 120, or 205+206 are strongly encouraged to also enroll in EARTH 118.
2. **Core course.** Choose one or more of: EARTH 305, 310, 314, 315, 351.
3. **Electives:** 311, 380, 417, 418/419, 420, 422, 436 (2 credits max), 440, 442, 449, 467, 483, 494 (one credit max)

# German Major

Germany has emerged as the strongest economy in Europe, and the State of Michigan has especially deep economic ties to Germany: Thus German is one of the most important languages for business and engineering. German is also centrally important for gaining a first-hand, fundamental knowledge of the aesthetic, philosophical, and scientific foundations of modern thought. By a wide margin, German is the most frequently required or recommended academic language.

At every level of our language program, we strive to appeal to the cognitive abilities and intellectual curiosity of our students. Our language courses focus systematically on the development of all four basic language skills (listening, speaking, reading, and writing), while emphasizing context and meaning at all levels and in all spheres of the language acquisition process. It is fundamental to our program that all language courses encourage students to explore other world-views and learn to think critically about culture.

The goals for the first two years of language study include increasing the level of proficiency in beginning and intermediate language students and meeting the needs and interests of the majority of students so that they will find the language requirement stimulating and useful. We believe that language learning is and should be enjoyable and stimulating, and we hope that our courses live up to this. Our special topics courses (GERMAN 232) are meant to provide an introduction to the discourse and substance of various disciplines in German and thus become stepping stones to coursework outside of the German major proper. These special topics include courses on German politics and economics, history, music, art, anthropology, film, engineering, and mathematical and scientific German. Upon completion of the fourth-term course, students are strongly encouraged to pursue an internship or study abroad in Germany. The German department and the Office of International Programs provide extensive assistance to students interested in doing this: students who go abroad each year come back excited about their experience and speak excellent German.

Intermediate and advanced courses are designed both to enhance language skills and to explore central issues in all areas of German Studies. These courses are open not just to majors and minors but also to all students who meet prerequisites regardless of major area.

Students who enter the University with a background in the German language are strongly urged to continue their study of the language without interruption during their first and second years.

The objectives of the major in German are:

1. to develop facility in the use of German;
2. to provide an integrated knowledge of major German writers in various disciplines; and
3. to gain insight into all aspects of German culture.

The major in German provides valuable background for work in all areas of today's global economy and in the traditional areas of application of language study, such as international relations, teaching, translating, and the tourism industry. Consequently, dual majors in German and another subject (History, Political Science, etc.) are strongly encouraged.

*Effective Winter 2017*

### Advising

*German Major* — A plan for the major in German is developed in consultation with and must be approved by Karl-Georg Federhofer or Mary Rodena-Krasan the department advisors. Appointments are scheduled online at [www.lsa.umich.edu/german/undergrad/advising](http://www.lsa.umich.edu/german/undergrad/advising).

German Department faculty are also available to students during regularly scheduled office hours which are posted on the bulletin board outside 3110 Modern Languages Building.

*German Minors* — Students wishing to pursue a minor in German Studies must develop a specific plan for its completion in consultation with Kalli Federhofer or Mary Rodena-Krasan, the department advisors. Appointments are scheduled online at [www.lsa.umich.edu/german/undergrad/advising](http://www.lsa.umich.edu/german/undergrad/advising).

*Scandinavian Minor* — Students wishing to pursue a minor in Scandinavian Studies must develop a specific plan for its completion in consultation with [Johanna Eriksson](mailto:johannaeriksson@umich.edu), [johannaeriksson@umich.edu](mailto:johannaeriksson@umich.edu).

### Grade Policies

Students must earn a grade of C- or better in all required courses.

### Prerequisites

GERMAN 230, 232, RCLANG 291, or the equivalent (AP/IB score, placement test, transfer credits).

### Requirements

**Minimum Credits: 30**

30 credits beyond GERMAN 232 must include GERMAN 325 or 326, three 300-level courses; GERMAN 425 or 426, three 400-level courses; and at least two additional GERMAN courses numbered GERMAN 300 or higher.

### Other Department Policies

#### **Placement Test and Retroactive Credit**

Students with high-school credit for German who intend to complete the A.B./B.S. language requirement in German must take a placement test administered by Germanic Languages. The placement test is advisory: students may attempt a higher course than their placement indicates

without departmental permission, but must obtain departmental permission to take a lower-level course than their score indicates. LSA students who have attained fourth-term proficiency (GERMAN 232 or the equivalent) are considered to have satisfied the language requirement and may elect more advanced courses. LSA students whose first German course at the U of M is GERMAN 232 are normally eligible for four additional retroactive credits if they complete the course with a grade of "B" or better. Students whose first course is at or above the 300-level are normally eligible for 8 additional retroactive credits. For details, consult the [Guidelines for Retroactive Credits](#) on this website.

Questions regarding placement and the placement test should be directed to Professor [Hartmut Rastalsky](#).

### **Information about graduate opportunities and careers**

Information about graduate opportunities and careers specifically available to students majoring or minoring in German may be obtained from the Department office.

### [Residency](#)

A minimum of 15 of the required 30 credits must be taken either in residence at Michigan or through a study abroad program affiliated with the University of Michigan.

### [Distribution Policy](#)

No course used to fulfill a major requirement may be used toward the [LSA Distribution Requirement](#). In addition, courses in the GERMAN, DUTCH, and SCAND subject areas may not be used toward the Distribution Requirement.

### [Honors](#)

In meeting the requirements stated above, students admitted to the Honors major must include GERMAN 491 and 492 (Honors proseminar and thesis). Completion of preliminary work is a prerequisite to acceptance in the Honors major in German. Admission is granted to qualified students at the end of the junior year. Students must maintain a GPA of 3.7 or higher in German and an overall GPA of 3.4 or higher.

For further information, consult [Karl-Georg Federhofer](#) ([kallimz@umich.edu](mailto:kallimz@umich.edu)) or [Mary Rodena-Krasan](#) ([mkrasan@umich.edu](mailto:mkrasan@umich.edu)).

### [Teaching Certificate](#)

To secure departmental recommendation for a teaching major, students have to complete a minimum of 34 credits. For a list of the requirements, students should go to: [www.soe.umich.edu/files/secondary\\_german\\_major\\_current.pdf](http://www.soe.umich.edu/files/secondary_german_major_current.pdf). We strongly recommend that students enroll in GERMAN 531 (Fall). To meet the requirements for a teaching minor in German, students should complete GERMAN 325 or 326, any two courses selected from among

GERMAN 381, 382, 383, 384, 385, and eight additional credits of senior work (GERMAN 425, 426 and 531 are particularly recommended).

All teaching certificate candidates should consult Karl-Georg Federhofer ([kallimz@umich.edu](mailto:kallimz@umich.edu)) or Mary Rodena-Krasan ([mkrasan@umich.edu](mailto:mkrasan@umich.edu)).

## German Studies Minor

The minor in German Studies provides students with an opportunity to gain and demonstrate competence in the German language above and beyond the level specified by the College language requirement. It also provides an opportunity for students to gain a deeper knowledge of a specific topic within the overarching discipline of German studies.

*Effective Winter 2019*

### Exclusions:

*A minor in German Studies is not open to students with a German major .*

### Advising

Students wishing to pursue a minor in German Studies must develop a specific plan for its completion in consultation with [Kalli Federhofer](#) or [Mary Rodena-Krasan](#), the department advisors. Appointments are scheduled online at [www.lsa.umich.edu/german/undergrad/advising](http://www.lsa.umich.edu/german/undergrad/advising).

### Grade Policies

Students must earn a grade of C- or better in all required courses.

### Prerequisites

GERMAN 221, 231, RCLANG 191, or the equivalent (AP/IB score, placement test, transfer credits).

### Requirements

#### Minimum Credits: 18

- 18 credits of courses at the level of GERMAN 230 or 232 or higher are required.
- 12 of the 18 credits must be taught in German and must include either GERMAN 325 or 326.
- At least one of the courses must be numbered 400 or above.

## Constraints

- AP/IB credits will count as prerequisites only and cannot count toward the 18 credits of the German minor.
- 4 credits from GERMAN 230/RCLANG 291 will count toward the German minor.
- Independent studies should not count for German-language credit.
- Translation courses (GERMAN 470 and 472) should count as if taught in the German language.

# Global Environment & Health (GEH) (Sub-Major)

In this sub-plan, students take courses that help them understand the latest knowledge on global trends in public health and in the natural environment as it intersects with the human experience. Among topics covered are global public health, comparative health policy, pandemics, comparative environmental policy-making, comparative history of mental health treatments across countries, environmental disasters, and climate change. Students gain an ability to analyze historical and global trends in these topics, and to compare experiences of diverse communities and peoples across time and space.

*Effective Winter 2021*

## Exclusions:

The Global Environment and Health (GEH) sub-plan is only available to declared International Studies majors and is not a major or minor. The sub-plan will be notated on the student's official transcript.

## Advising

The International Studies Advisor will assist students in developing a program of study. Advising for the Honors plan is provided by the PICS Director and the PICS Honors Thesis advisor. For more information, see: [www.i.i.umich.edu/pics/undergraduates/advising](http://www.i.i.umich.edu/pics/undergraduates/advising).

## Grade Policies

Students must earn a C- or better in all required PICS courses. Language requirement courses are not included in the minimum 34 credits required for the major nor in the major GPA.

## Prerequisites

The following requirements must be met before declaration:

- INTLSTD 101: Introduction to International Studies (Grade of C- or better).
- Students must have started or completed 4th-term language proficiency.

## Requirements

**Additional Pre-requisites and/or requirements are listed on the [International Studies Major page](#).**

1. **Language Requirement:** Sixth term proficiency.
2. **Core Courses (7 credits):**
  - INTLSTD 301: Topics in International Studies
  - INTLSTD 401: International Studies Advanced Seminar
3. **Research Methods Course (3 credits):** One research methods course chosen from the following list:
  - ECON 309: Experimental Economics
  - ECON 401: Intermediate Microeconomic Theory
  - ECON 451: Intermediate Introduction to Statistics and Econometrics
  - POLSCI 300: Quantitative Empirical Methods of Political Science
  - POLSCI 391/CMPLXSYS 391: Introduction to Modeling Political Processes
  - POLSCI 490: Game Theory & Formal Models
  - SOC 210: Elementary Statistics
  - STATS 206: Introduction to Data Science
  - STATS 250: Introduction to Statistics & Data Analysis
  - STATS 280: Honors Introduction to Statistics and Data Analysis

*Note: Completion of the Methods requirement is recommended prior to enrolling in INTLSTD 301.*

4. **Regional Course (3 credits):** One geographic emphasis course devoted to a single world region or country that is related to foreign language of study.
5. **GEH Courses (12 credits):** Four courses, chosen from an approved list (see below), to gain knowledge in sub-plan area.
  - At least one course must be at the 400 level.
  - Must include at least two academic subjects.

*Note: Complete term specific sub-plan course lists may be found on the [PICS courses website](#).*

6. **Three electives (9 credits):** The electives are designed to allow students to further personalize their major. Students will elect three advanced courses which will be expected to build upon the theme of their sub-plans. The selected courses should thus contribute to the coherence of the student's overall concentration. Students may select additional sub-plan, regional, or relevant study abroad courses, however there is no preapproved list of electives. Because there is no preapproved list, students *must* seek and obtain the approval of elective courses - on a course-by-course basis - **from a PICS advisor**. It is strongly advised that this approval be obtained *before* taking the class.

**GEH courses** include, but are not limited to:

- AAS / ANTHRCUL / HISTORY 355: Health and Illness in African Worlds
- AAS / WGS 365 (WGS 365): Global Perspectives on Gender, Health & Reproduction
- AAS 426: Cities in Africa, *section titled "Cities in Contemporary Africa"*
- AMCULT / HISTORY 284: Sickness & Health in Society: 1492 to the Present
- ANTHRCUL / WGS 212 (WGS 212) / NURS 225: The Global HIV/AIDS Epidemic
- ANTHRCUL 256 / ENVIRON 256: Culture, Adaptation and Environment



- ANTHRCUL 258: Honors Seminar in Anthropology, *section titled "Culture and Medicine"*
- ANTHRCUL 325 / WGS 324 (WGS 324): Childbirth & Culture
- ANTHRCUL 344: Medical Anthropology
- ANTHRCUL 355 / HISTORY 355 / AAS 355: Health and Illness in African Worlds
- ASIAN / RCSSCI 371: Natural Disasters in East Asia
- CMPLXSYS / ENVIRON / PUBPOL 250: Energy & Climate Change
- EARTH 201 / ENVIRON 209 / GEOG 201: Introduction to Environmental Science and Geography
- EARTH 219 / ENVIRON 229: Introduction to Environmental Science
- EARTH 222 / ENVIRON 232: Introduction to Oceanography
- EARTH / ENVIRON 262: Plants and People
- EARTH 314: Applied Geophysics
- EARTH / ENVIRON 380: Mineral Resources, Economics & the Environment
- EEB / ENVIRON 315: The Ecology and Evolution of Infectious Diseases
- ENVIRON 209 / EARTH / GEOG 201: Introduction to Environmental Science and Geography
- ENVIRON 222: Introduction to Environmental Justice
- ENVIRON 229 / EARTH 219: Introduction to Environmental Science
- ENVIRON 232/ EARTH 222: Introduction to Oceanography
- ENVIRON 235: Environmental Economics & Policy
- ENVIRON / CMPLXSYS / PUBPOL 250: Energy & Climate Change
- ENVIRON / ANTHRCUL 256: Culture, Adaptation and Environment
- ENVIRON / EARTH 262: Plants and People
- ENVIRON 270: Our Common Future: Ecology, Economics & Ethics of Sustainable Development
- ENVIRON 302: Topics in Environmental Social Science, *section titled "Energy Politics"*
- ENVIRON 306: Global Water
- ENVIRON / EEB 315: The Ecology and Evolution of Infectious Diseases
- ENVIRON 320: Environmental Journalism
- ENVIRON 345 / POLSCI 331 / SOC 380: Environmental Public Opinion Analysis
- ENVIRON 365: International Environmental Policy
- ENVIRON / EARTH 380: Mineral Resources, Economics & the Environment
- ENVIRON 453: Tropical Conservation & Ecology
- ENVIRON 490: War and Environment: A Lethal Reciprocity
- GEOG / EARTH 201 / ENVIRON 209: Introduction to Environmental Science and Geography
- HISTORY / AMCULT 284: Sickness & Health in Society: 1492 to the Present
- HISTORY / ANTHRCUL / AAS 355: Health and Illness in African Worlds
- HONORS 230: Honors Core SS, *section titled "Violent Environments: Oil, Development, and the Discourse of Power"*
- INTLSTD 387: Topics in Global Environment and Health, *section titled "Implementation Solutions for Global Health Equity"*
- INTMED 387: Implementation Solution for Global Health Equity
- NRE 501: Grad Experimental, *section titled, "Foundations of Sustainable Food Systems"*
- NURS 225 / ANTHRCUL / WGS 212 (WGS 212): The Global HIV/AIDS Epidemic
- NURS 421: Perspectives in Global Health
- POLSCI 331 / ENVIRON 345 / SOC 380: Environmental Public Opinion Analysis
- PSYCH 477: Current Topics in Clinical Psychology, *section titled "Mental Health and Culture: National and International Perspectives"*
- PUBPOL 250 / ENVIRON / CMPLXSYS: Energy & Climate Change
- RCIDIV 305: Literature in Environment and Social Justice
- RCSSCI / ASIAN 371: Natural Disasters in East Asia
- SEAS / UC 215: Contemporary Social Issues in SE Asia
- SOC 380 / POLSCI 331 / ENVIRON 345: Environmental Public Opinion Analysis
- SOC 475: Introduction to Medical Sociology
- UC / SEAS 215: Contemporary Social Issues in Southeast Asia

- WGS (WGS) / ANTHRCUL 212 / NURS 225: The Global HIV/AIDS Epidemic
- WGS 324 (WGS 324) / ANTHRCUL 325: Childbirth & Culture
- WGS 331: Theory of Gender and Health
- WGS (WGS) / AAS 365: Global Perspectives on Gender, Health & Reproduction

### Constraints

Students majoring in International Studies may only declare one sub-plan.

## Global History Minor

The Global History minor equips students to think in global dimensions and to approach the past outside the traditional constraints of national and temporal boundaries. Global History is not simply international history and is more than transnational and comparative studies—the fundamental purpose is to approach the past outside the boxes of nations and geographic regions of the world and to emphasize questions of connectivity, mobility, and scale. A global perspective historicizes regions, migrations, capital flows, and also the presentist concept of globalization itself by revealing how people have long imagined the world across traditional boundaries.

Global and world history coursework highlights comparative analysis and connections across time and space at the largest scales. The minor will prepare students for the contemporary challenges of our “globalizing” world while providing them with the knowledge and awareness that the history and processes of globalization go back a very long time.

*Effective Fall 2017*

### Exclusions:

*A minor in Global History is not open to students with a major or any other minor in the Department of History.*

### Advising

Appointments with History advisors are scheduled online from the department's webpage: [/lsa.umich.edu/history/undergraduates/advising.htm](https://lsa.umich.edu/history/undergraduates/advising.htm). Students should see an advisor as soon as they decide on their major or minor.

The History Department offers a three-tiered advising structure.

### **Tier 1: Faculty Advisors from the History Department's Undergraduate Committee**

- declaring a history major - obtaining general advice about the nature, purpose, and utility of a history degree
- recommending a faculty mentor
- approving study abroad and transfer credit
- declaring an academic minor in History

To make an appointment, go to <http://www.lsa.umich.edu/history/undergraduate/advising>.

### **Tier 2: The Assistant Director of Undergraduate Studies**

- obtaining general advice about the requirements for the major
- checking progress towards the major or minor
- completing the graduation checklist and release

To make an appointment, go to <http://www.lsa.umich.edu/history/undergraduate/advising>.

### **Tier 3: Individual Faculty Mentors**

- obtaining approval for a survey sequence and a major theme
- getting advice about course selection
- obtaining advice about career planning

Students generally meet with a Tier 2 advisor for help in selecting a mentor, but all subsequent advising will be done by that individual professor.

Faculty who go on leave will designate a substitute, and inform all their mentees of the temporary change.

Students must arrange appointments directly with their mentors, and are expected to do so at least once a term. It is the student's responsibility to take the initiative in setting up these meetings.

### **Prerequisites**

None.

### **Requirements**

**Minimum Credits: 15**

A minimum of 5 courses and 15 credits, distributed as follows

Survey Requirement: Students must take two (but may elect the third under the “Additional Courses” category below):

- HISTORY 238 (Zoom: A History of Everything)
- HISTORY 239 (The World Before 1492)
- HISTORY 240 (The World Since 1492)

Additional Courses: Three additional courses (a minimum of 3 credits each for at least 9 credits). At least two of the three additional courses must be at the 300-level or higher.

All courses must be from the approved list of classes that count for the Global History Minor.

### **Approved Courses list**

- HISTORY 101 / INTLSTD 205: What Is History?

- HISTORY 102: A History of the Present
- HISTORY 105: Introduction to Religion
- HISTORY 215: The History of Disaster (*only if elected WN 18 or later*)
- HISTORY 223 / ENVIRON 223 Trashed! A History of Garbage in the Modern World
- HISTORY 224 / PUBPOL 224: Global Nuclear Proliferation
- HISTORY 226 / AMCULT 226 / LATINOAM 226: The Latin Tinge: Latin Music in Social Context in Latin America and the U.S.
- HISTORY 227: The Rise and Fall of the British Empire
- HISTORY 229 / ANTHRCUL 226: Introduction to Historical Anthropology
- HISTORY 230: Humanities Topics in History, *sections titled "Tracking Human Rights"; "Global Cold War"; "The Family in the Modern World"; "Religion in the Making of African America"; "Angels and Demons in Early Christianity"; "Introduction to Islam"*
- HISTORY 232: Interdisciplinary Topics in History, *section titled "Mental Health in Global History"*
- HISTORY 234: History of Medicine in the Western World from the 18th Century to the Present
- HISTORY 237 / ENVIRON 237. Global Environmental History
- HISTORY 241: America and Middle Eastern Wars
- HISTORY 243 / MENAS 243 / ISLAM 243: The Dawn of Islamic History
- HISTORY 248 / ASIAN 248 / RELIGION 248: Jesus Comes to Asia: Conversion and its Consequences in Asia
- HISTORY 256 / JUDAIC 265: Introduction to Jewish Law: Sources, Legal History and Legal Theory
- HISTORY 257 / JUDAIC 257: Law in the Pre-Modern World
- HISTORY 282. History of the Economy
- HISTORY 285 / RCSSCI 275: Science, Technology, Medicine and Society
- HISTORY 287: Horror and Enchantment: A History of the Spanish and Portuguese Early Modern World (*only if elected WN 20 or later*)
- HISTORY 290 / JUDAIC 290 / AAPTIS 287: Jews and Muslims
- HISTORY 291: A World History of Happiness: Care of the Self from the Greeks to the Sufis (*only if elected WN 20 or later*)
- HISTORY 303: Topics in History, *section titled "Atlantic Slave Trade: Histories and Legacies"*
- HISTORY 309: After Alexander: The Hellenistic Age in the Mediterranean and the Near East
- HISTORY 310 / RCSSCI 310: Globalization in History: The Making of the Modern World
- HISTORY 314 / FRENCH 345: Empire, War, and Modernity: France and the World in the 20th Century
- HISTORY 327 / WGS 327 (WGS 327): History of Sexuality
- HISTORY 328: Humanities Topics in History, *section titled "The Great War and the Twentieth Century"*
- HISTORY 339 / ASIAN 365 / CLCIV 339: Doctors in the Ancient World: China, Greece, and Rome
- HISTORY 350 / HISTART 323 / MIDEAST 383 / JUDAIC 323 / RELIGION 324: History of Jewish Visual Culture: From Ancient Mosaics to Jew-Hop Videos
- HISTORY 363: The U.S. and the World Since 1945: Politics, Culture, and War in the American Century
- HISTORY / AMCULT / NATIVEAM 367: American Indian History (*only if elected WN 14 or later*)
- HISTORY 375 / WGS 375 (WGS 375): A History of Witchcraft: The 1692 Salem Trials in Historical and Cross-Cultural Perspective
- HISTORY 376: Epidemics: Plagues and Cultures from the Black Death to the Present
- HISTORY 379 / RCSSCI 379 / SI 379: History of Computers and the Internet
- HISTORY 407: Advanced Study in Comparative and International History, *section titled "Gender, Sexuality, and International Human Rights"*
- HISTORY 421 / AAS 421 / LACS 421 / RELIGION 421: Religions of the African Diaspora
- HISTORY 445: Topics in History, *sections titled "Debating Capitalism"; "Why the West Rules(d) the World"; "What is Capitalism?"*
- HISTORY 469: Precolonial Southeast Asia

- HISTORY 477: Law, History, and the Dynamics of Social Change (*only if elected FA 15 or later*)
- HISTORY 487: Conversions and Christianities in the Early Modern World and Beyond (*only if elected WN 18 or later*)
- HISTORY 489: The History of the Roman Catholic Church, 1775-2005
- HISTORY 495: The World the Mongols Made

### Constraints

**AP credit:** AP credits may not be used to satisfy requirements of the minor.

### Residency

Four of the five courses must be taken in-residence at the University of Michigan-Ann Arbor, or must count as in-residence credit (*i.e.*, relevant courses taken through UM-sponsored CGIS programs abroad).

## Global Media Studies Minor

The Global Media Studies minor exists for students interested in the study of film and electronically based visual media as national, regional, and global phenomena. This course of study is intended to aid students in obtaining culturally specific as well as cross-cultural understanding of the global impact of moving image media. The minor contributes to an understanding of the unique qualities of textual expression derived from specific cultural and historical contexts as well as to effects of more globalized developments in media technology, narrative and stylistic forms. Students will have the opportunity to study specific cultural modes of media production and reception including, but not limited to, the familiar U.S. cultural/industrial model. The coursework in this minor provides students with the opportunity to reflect on the expansive geographical scope and cultural diversity of film and moving image electronic media (television, single-camera video, digital).

*Effective Fall 2017*

### Exclusions:

*The minor in Global Media Studies is not open to students with a major in the Department of Film, Television, and Media.*

### Advising

Students who may be interested in a major in Film, Television, and Media are encouraged to consult with a department advisor. Appointments are scheduled [online](#).

## Grade Policies

A minimum grade of C– or better must be achieved in any course taken to satisfy the requirements for the Global Media Studies Minor.

## Prerequisites

None.

## Requirements

### Minimum Credits: 16

At least 16 credits (and five courses), with at least two courses at the 300-level or above:

1. **Required Core Courses:** seven credits from the following:  
FTVM / RCHUMS 150 (FTVM / RCHUMS 236): Introduction to Film, Television, and Media  
One of the following: FTVM 351, 352, or 353.
2. **Electives.** 3 electives, at least 2 of which must be from the approved list of Non-US, Transnational, Comparative Film/Media courses. A third course may be from Non U.S., Transnational, Comparative Film/Media or U.S. Media.

### Non U.S., Transnational, Comparative Film/Media

- AMCULT 380, 346, 420
- ASIAN 245, 440, 458, 475
- AAS 232, 440, 442, 470
- COMM 251
- CZECH 315
- GERMAN 172, 330, 333, 346
- JUDAIC 250
- POLISH 314
- RCHUMS 312, 313
- SLAVIC 312, 313
- SPANISH 420
- FTVM 232, 245, 250, 312, 313, 314, 315, 316, 320, 324, 332, 333, 346, 358, 361, 379 (*only if elected WN20 or later*), 380, 420, 422, 440, 441, 442, 458, 470, 475, 485
- FTVM 366, *sections titled:*
  - "Science Fiction in Film, TV & Popular Culture";
  - "Recent US Wars in Film & TV";
  - "Adaptations";
  - "Amateur Cinema";
  - "Nazi Cinema";
  - "Documentaries: From Vietnam to Iraq";
  - "East Asian Horror";
  - "Hollywood, Vietnam, & the Gulf";
  - "Television Genres";
  - "Race, Ethnicity, and the Media";

- *"Authorship in Film and Media";*
- *"Magic and Moving Image";*
- *"Documentary Cinema";*
- *"Subtitling";*
- *"Cinema Babel: Subtitling & Dubbing";*
- *"Television Cities, Spaces & People";*
- *"Sex and Media";*
- *"Sex in Media"*
- FTVM 455 sections titled:
  - *"Dialogue of Violence";*
  - *"TV Genres";*
  - *"Religion in Film";*
  - *"Philosophy of Film";*
  - *"Hollywood, Vietnam, Gulf Wars";*
  - *"The War Film";*
  - *"Cult, Camp, and Exploitation Cinema";*
  - *"Speaking with Ghosts: Mediums and New Media";*
  - *"Media Cultural Theory";*
  - *"Cinema of the Pacific War";*
  - *"Dialogues of Violence: WWII and Cinema"*
- PHIL 440
- WGS / FTVM 361 (FTVM / WGS 361)

## U.S. media

- AMCULT 334, 351, 490
- FTVM 202, 316, 325, 330, 331, 334, 354, 355, 365, 367, 368, 381, 435 (335), 451, 460, 461
- FTVM 366 sections titled:
  - *"Sex, Society & Censorship in Classical Hollywood";*
  - *"Fan Cultures and Popular Media";*
  - *"Self as Subject";*
  - *"TV Sports Programming";*
  - *"The Road Movie & American Culture";*
  - *"Media Spaces";*
  - *"Stardom & Ethnicity in US Cinema";*
  - *"Race, Ethnicity, & Stardom in US Cinema";*
  - *"The Situation Comedy";*
  - *"Fiction into Film";*
  - *"The Horror Film after Psycho";*
  - *"Film Noir";*
  - *"3-D Viewing";*
  - *"Exploitation Cinema";*
  - *"Countercultures, Subcultures, & Mass Media";*
  - *"Race Ethnicity & Stardom in Hollywood";*
  - *"Cult, Camp, Art & Exploitation";*
  - *"Television Genres: Cult TV";*
  - *"Motor City Movies"*
- FTVM 455 sections titled:

- *"Contemporary Film Industry";*
- *"Post-Classical Hollywood Cinema";*
- *"The Horror Film after Psycho";*
- *"Science Fiction in Film";*
- *"Internet as Popular Culture";*
- *"Musicals: In and Out of Hollywood";*
- *"Media Effects Topics";*
- *"Video Games, Cultures & Contexts";*
- *"American Independent Cinema";*
- *"Film Noir";*
- *"Zombies! Exhuming the Undead in American Culture"*

### Constraints

- Independent Studies (FTVM 499) may not be used toward the minor.
- Students may not use more than one course to satisfy the requirements of both a major and a minor.

## Global Theatre and Ethnic Studies (Minor)

“Ethnic studies” references ethnic, under-represented communities in the United States and their diaspora affiliations overseas. It includes, but is not limited to African American, Arab American, Asian/Pacific Islander American, Latino/a, and Native American communities. The scope of this minor includes the dramatic literature of these American communities and embraces global literature and performance practices that are in dialogues with these communities.

The goal of this minor is to introduce students to literature and performance histories of diverse cultures and to use studio practice to develop proficiency in creating new work from diverse cultural perspectives. The minor is designed for humanities students, arts students, and other students interested in performance practice (music, theatre, dance, or dramatic literature) based upon diverse cultural perspectives, and provides experience in non-western performance practice, playmaking, and theatre studies.

By completing this minor, students will develop skills in text analysis, historical/cultural research, critical thought and public performance. In addition, they will learn how performance practices can be used to critically interrogate global histories and social structures.

Students will learn:

- To research and articulate (through writing and performance) multicultural and intercultural performance histories.
- To read and analyze theatrical works emerging from diverse cultural contexts.
- To perform and create new dramatic works that represent diverse cultural perspectives
- To organize, networks, and interact with diverse cultural communities around performing arts practice.



The Global Theatre and Ethnic Studies minor teaches students how to analyze, perform, and create works emerging from diverse cultural contexts. Students will develop skills in multicultural and intercultural performance analysis, historical/cultural research, and critical thought and public performance. Students will also engage in organizing, networking, and interacting with diverse cultural communities.

The minor complements existing programs in SMTD, LSA, Art and Design, and the Residential College by providing students with global and diverse perspectives on performance. For performance majors (Theatre, Music, and Dance), the minor builds upon traditional arts training and enhances job prospects in an increasingly interdependent cultural economy. For non-theatre majors, the minor provides experiences in performance practice, playmaking, and theatre studies.

Applying and Advising: Students interested in the Global Theatre and Ethnic Studies minor should contact Professor [Mbala Nkanga](#).

Requirements: **Five courses or 15 credits of coursework.** Courses are a balance of studio practice classes and applied literary analysis. A capstone course immerses students in an international and/or community engagement experience.

#### Required Courses

THTRMUS 222: Introduction to Global Theatre and Ethnic Studies (3 credits)  
THEATRE 233: Modern Rituals/Traditional Practices (3 credits)  
THEATRE 324: Global Community Practicum or equivalent (3 credits)

Students may earn remaining credits among the following elective courses:

THEATRE 325: Contemporary American Drama (3 credits)  
THEATRE 326: Intercultural Drama (3 credits)  
THEATRE 332: Performing Archives and Oral Histories (3 credits)  
THEATRE 340: Devised Theatre (3 credits)  
THEATRE 440: Special Topics (3 credits)

## Greek (Ancient) Language and Literature Major

A major in Classical Studies equips its students with the knowledge, skills, intellectual agility, and different points of view to pursue a variety of careers, whether the student's next step is entry into the workforce or further education in professional or graduate school. Faculty advisers work with students to develop a program of study within their major and to articulate the connections between their education and career goals and aspirations.

## **Learning Goals for All Majors**

Every major in Classical Studies asks students to:

- explore the many facets of the ancient world—its history, societal and cultural practices, and intellectual endeavors (e.g., law, religion, political theory and practice, art and material objects, language and literature, philosophy, science)
- recognize and interpret the complexities of the ancient world, including such problematic aspects as slavery, gender inequality, and various types of bias
- understand different critical perspectives
- ask questions and engage in critical thinking, especially analysis and synthesis of information, ideas, and situations to solve complex problems
- work with a variety of primary sources, both textual (in the original language or translation) and material (aided by the resources of the Kelsey Museum and the papyrology collection)
- make inferences from the fragmentary and incomplete record of the past
- communicate complex ideas and persuasive arguments in writing and oral presentations
- conduct research using primary and secondary sources, including both traditional and digital media

The Classical Studies Department encourages its students to participate in the wide array of events and activities in which faculty and graduate students are involved, including UROP projects, student clubs, lectures, brown bag presentations, and reading groups. Students are also encouraged to study abroad.

Because many Classical Studies courses are small, majors have opportunities to work closely with their professors and professors get to know their students well.

## **Greek, Latin, or Classical Languages and Literatures (Greek and Latin)**

In addition to the learning goals mentioned above, each of the three language tracks asks students to:

- attain a sophisticated understanding of the ancient language(s) and a deepened understanding of how language constructs meaning
- attain a deep familiarity with foundational literary works and genres through close reading and critical analysis of the content and structure of texts in the original language(s)
- understand the ancient language(s) as the source for the terminology of medicine, law, and the sciences
- understand the wide-ranging influence of classical literature from antiquity to the modern era on cultural and creative enterprise
- draw on the rhetorical and narrative strategies of classical literature to strengthen and refine skills in writing clearly and persuasively

Our department provides free "drop-in" tutoring available to all students in the Elementary Latin and Greek courses.

*Effective Fall 2018*

### Advising

Students interested in the Department's majors in Greek, Latin, Classical Languages and Literatures, Classical Archaeology, Classical Civilization or Modern Greek major should check with the Department office for the name of the current advisor. Students interested in obtaining Teacher Certification in Latin should see Professor Deborah Ross.

The Department recommends that interested students see the department advisors as early as possible in order to plan their programs and avoid unnecessary scheduling conflicts.

Students wishing to pursue a minor in Classical Studies must develop a specific plan for its completion in consultation with the Department's designated advisor.

### Grade Policies

The department requires that a student earn a grade of at least C– in all language courses which are prerequisite for subsequent elections. A student should repeat any language course in which a D+ or lower grade is earned and which serves as a prerequisite to other courses which are to be elected. A grade of D+ signifies some achievement but denotes too weak a foundation for subsequent courses.

### Prerequisites

GREEK 101 and 102 or special placement examination.

### Requirements

**Minimum Credits: 27**

Requires a minimum of 9 courses (of at least 3 credits each) including:

1. Seven courses in GREEK at the 300-level or above (at least 4 of these must be at the 400-level or above, usually including GREEK 401 and 402).
2. One introductory course selected from CLARCH 221, CLCIV 101, HISTORY 200.
3. At least one upper-level (300- or 400-level) course in Greek civilization, archaeology, or history. Minimum of 3 credits.

## Constraints

Three credits of Independent Study (GREEK 499) may be used with written approval of the undergraduate advisor

## Distribution Policy

No course used to fulfill a major requirement may be used toward the [LSA Distribution Requirement](#). In addition, courses in the CLARCH, CLCIV, CLLING, GREEK, GREEKMOD, and LATIN subject areas may not be used toward the Distribution Requirement.

## Honors

### *Effective Date of Honors requirements for the major Fall 2006*

The department offers Honors in each of the six majors. Interested students who have a cumulative grade point average of at least 3.5 should contact their department advisor to discuss an Honors thesis no later than the winter term of their junior year at the latest.

It is the student's responsibility to find a suitable faculty advisor to oversee the thesis project. This project and its components are to be decided collectively by the student and the advisor at the end of the junior year. We encourage students to think creatively about the approach to their research and thesis project. Thesis advisors must sign off on a student's thesis project proposal.

Honors students may receive six credits during their senior year for research culminating in a thesis project by registering for one of the following courses: CLARCH 495, CLCIV 495, GREEK 495 or LATIN 495 depending on the major. At the end of the thesis project, the candidate must offer an oral defense of this work to a committee comprised of the thesis advisor and another faculty member, and present their research findings at the Classical Studies Honors Symposium.

Additional requirements for Honors candidates are specified with each major.

### *Effective Fall 2016*

In addition to the above requirements, students pursuing an Honors major must satisfy the following:

- 3.4 minimum overall GPA; 3.5 minimum major GPA
- Completion of an Honors thesis and oral defense in coordination with a Classics faculty member
- Completion of one additional Greek course at the 420-level or above (CLCIV 480 & GREEK 495 do not satisfy this requirement)
- CLCIV 480: Studying Antiquity, *section titled "Research Seminar"* (Fall term)

Students may also elect GREEK 495 for 1-2 credits in the Fall and 1-3 credits in the Winter but are not required to do so.

# Greek (Ancient) Language and Literature Minor

This minor is designed to provide a basic, but contextual and broad, familiarity with Greek language and literature and the civilization of ancient Greece. More specifically, it requires students to study, at the intermediate and advanced level, Greek and authors writing poetry and/or prose, but at the same time it acquaints the student with the broader historical, social, and cultural content in which these authors lived and worked.

*Effective Winter 2015*

## Exclusions:

*The minor in Greek (Ancient) Language and Literature is not open to students with a major in Greek (Ancient) Language and Literature or Classical Languages or any other minor in the Department of Classical Studies.*

## Advising

The Department recommends that interested students see the department advisors as early as possible in order to plan their programs and avoid unnecessary scheduling conflicts.

Students wishing to pursue a minor in Classical Studies must develop a specific plan for its completion in consultation with the Department's designated advisor. Appointments may be scheduled at 2160 Angell Hall.

## Grade Policies

The department requires that a student earn a grade of at least C– in all *language* courses which are prerequisite for subsequent elections. A student should repeat any *language* course in which a D+ or lower grade is earned and which serves as a prerequisite to other courses which are to be elected. A grade of D+ signifies some achievement but denotes too weak a foundation for subsequent courses.

## Prerequisites

GREEK 301, or equivalent as determined by departmental placement examination.

## Requirements

### Minimum Credits: 16

1. **Greek Language and Literature courses:** at least two upper-level courses, above GREEK 301.
2. **Greek Civilization courses:** at least one broad introductory course (CLCIV 101, CLARCH 221, or HISTORY 200).

3. **Upper-Level courses:** at least one upper-level (300- or 400-level) course in Greek civilization, archaeology, or history.

## **Greek (Modern) Language and Culture Major**

A major in Classical Studies equips its students with the knowledge, skills, intellectual agility, and different points of view to pursue a variety of careers, whether the student's next step is entry into the workforce or further education in professional or graduate school. Faculty advisers work with students to develop a program of study within their major and to articulate the connections between their education and career goals and aspirations.

### **Learning Goals for All Majors**

Every major in Classical Studies asks students to:

- explore the many facets of the ancient world—its history, societal and cultural practices, and intellectual endeavors (e.g., law, religion, political theory and practice, art and material objects, language and literature, philosophy, science)
- recognize and interpret the complexities of the ancient world, including such problematic aspects as slavery, gender inequality, and various types of bias
- understand different critical perspectives
- ask questions and engage in critical thinking, especially analysis and synthesis of information, ideas, and situations to solve complex problems
- work with a variety of primary sources, both textual (in the original language or translation) and material (aided by the resources of the Kelsey Museum and the papyrology collection)
- make inferences from the fragmentary and incomplete record of the past
- communicate complex ideas and persuasive arguments in writing and oral presentations
- conduct research using primary and secondary sources, including both traditional and digital media

The Classical Studies Department encourages its students to participate in the wide array of events and activities in which faculty and graduate students are involved, including UROP projects, student clubs, lectures, brown bag presentations, and reading groups. Students are also encouraged to study abroad.

Because many Classical Studies courses are small, majors have opportunities to work closely with their professors and professors get to know their students well.

### **Greek (Modern) Language and Culture**

In addition to the learning goals stated above, the Modern Greek major asks students to:

- attain advanced fluency in Modern Greek in the four skills of speaking, writing, reading comprehension, and listening comprehension
- study the language, literature, and culture of Greek-speaking people in the modern period at the crossroads of the Eastern Mediterranean and in diaspora communities
- explore the diverse fields of history, political science, anthropology, and classical civilization in their intersection with Modern Greek Studies
- examine transformations of Hellenic ideas, forms, and physical space in modern times

The program also encourages students to pursue an internship in Greece, Cyprus, and relevant offices in Washington DC and other cities in the US to pair their skills in Greek and English with real-life experience outside the classroom. In collaboration with the University of Michigan community, we facilitate access to internships, funding, employers and partnerships offering diverse, challenging opportunities.

The field of Modern Greek consists of the study of global Hellenism over the last five centuries, including its intersection with the classical tradition in other cultures. Students pursuing the major in Modern Greek Studies study modern Hellenism, with a special emphasis on Greece and the Greek communities of the U.S. They also familiarize themselves with Hellenism's ancient and medieval origins. The major requires detailed learning of the language and firm grounding in the knowledge of culture but also offers familiarity with broader issues of our times such as identity, tradition, transnationalism, globalism, and orientalism. Thus the major provides a broad-based liberal arts education and contributes to the development of critical thinking and related skills, both linguistic and interpretive. The major builds on the great strengths of the Department of Classical Studies and the Program in Comparative Literature, as well as on traditional West European, Balkan, and Mediterranean strengths across the College.

Modern Greek courses cover language, literature, and culture, offering a systematic introduction to the Greek world of the last ten centuries, and especially to its contemporary social reality and intellectual achievement. As part of a liberal arts education, they promote the contextual study, both local and global, of contemporary Greek culture, placing particular emphasis on literary studies, critical theory, cultural politics, ethnicity, and diaspora (especially Greek-American). The Modern Greek Studies program offers both a major and a minor.

*Effective Fall 2018*

#### Advising

Students interested in the Department's majors in Greek, Latin, Classical Languages and Literatures, Classical Archaeology, Classical Civilization or Modern Greek major should check with the Department office for the name of the current advisor. Students interested in obtaining Teacher Certification in Latin should see Professor Deborah Ross.

The Department recommends that interested students see the department advisors as early as possible in order to plan their programs and avoid unnecessary scheduling conflicts.

Students wishing to pursue a minor in Classical Studies must develop a specific plan for its completion in consultation with the Department's designated advisor.

### Grade Policies

The department requires that a student earn a grade of at least C– in all language courses which are prerequisite for subsequent elections. A student should repeat any language course in which a D+ or lower grade is earned and which serves as a prerequisite to other courses which are to be elected. A grade of D+ signifies some achievement but denotes too weak a foundation for subsequent courses.

### Prerequisites

GREEKMOD 101 and 102 (or MODGREEK 101 and 102).

### Requirements

#### **Minimum Credits: 32**

Minimum of ten courses, distributed as follows:

**1. *Modern Greek Language:***

Four (4) terms of Modern Greek language at the 200-level and above: GREEKMOD 201, 202, 301, and 302 (or MODGREEK 201, 202, 301, and 302); (205 and 305 are excluded).

**2. *Modern Greek Literature and Culture:***

Three courses in Modern Greek literature and culture at the 300-level and above.

**3. *Structure courses:*** Three courses, selected in consultation with, and approved by, the department advisor.

### Distribution Policy

No course used to fulfill a major requirement may be used toward the [LSA Distribution Requirement](#). In addition, courses in the CLARCH, CLCIV, CLLING, GREEK, GREEKMOD, and LATIN subject areas may not be used toward the Distribution Requirement.

### Honors

In addition to the above requirements, students who have demonstrated superior ability in the language and serious interest in a project of research, may be admitted to a program of advanced study at the beginning of the senior year, leading to the degree of Bachelor of Arts with Honors in Modern Greek Studies. Students pursuing an Honors major must satisfy the following:

- 3.4 minimum overall GPA; 3.5 minimum major GPA
- Completion of an Honors thesis and oral defense in coordination with a Classics faculty member
- CLCIV 480: Studying Antiquity, *section titled "Research Seminar"* (Fall term)

Students may also elect GREEKMOD 495 for 1-2 credits in the Fall and 1-3 credits in the Winter but are not required to do so.



# Greek (Modern) Language and Culture Minor

This minor is designed to provide a basic, but contextual and broad, familiarity with Modern Greek language, literature, and culture. More specifically, it requires students to study, at the intermediate and advanced level, Modern Greek and authors writing poetry and/or prose, but at the same time it acquaints the student with the broader historical, social, and cultural content in which these authors lived and worked. The minor is for students who have a strong interest in contemporary Hellenism and who wish to explore it, under close and careful supervision, in a meaningful fashion.

*Effective Winter 2016*

## Exclusions:

*The minor in Greek (Modern) Language and Culture is not open to students with a major in Greek (Modern) Language and Culture or any other minor in the Department of Classical Studies.*

## Advising

Students wishing to pursue a minor in Classical Studies must develop a specific plan for its completion in consultation with the Department's designated advisor . Appointments may be scheduled at 2160 Angell Hall.

## Grade Policies

The department requires that a student earn a grade of at least C– in all *language* courses which are prerequisite for subsequent elections. A student should repeat any *language* course in which a D+ or lower grade is earned and which serves as a prerequisite to other courses which are to be elected. A grade of D+ signifies some achievement but denotes too weak a foundation for subsequent courses.

## Prerequisites

GREEKMOD 201 (or MODGREEK 201), or equivalent as determined by departmental placement examination.

## Requirements

**Minimum Credits: 16**

1. **Modern Greek Language and Literature:** at least two courses in modern Greek language and literature, above GREEKMOD 201 (MODGREEK 201).

2. **Modern Greek culture:** at least one broad introductory course. (GREEKMOD 302 (MODGREEK 302) can be used for this requirement if not used for the language and literature requirement)
3. **Upper-Level courses:** at least two upper-level (300- or 400-level) courses in modern Greek diaspora and travel.

*Substitutions:* Any appropriate course taught in the area of Modern Greek Studies in departments other than Classical Studies must be approved by the program advisor and the Chair in Modern Greek.

## History Major

History is the study of the past and how we remember it. If it happened, historians deal with it—whether it happened yesterday or five thousand years ago. Far too many people imagine that history is merely the dry memorization of names and dates, but a major in history at the University of Michigan will quickly dispel that myth. If you are interested in people and how they interact with the social and natural world, then you should be interested in history. Our courses cover everything: music, politics, family life, technology, war, gender relations, science, medicine, religion, ideologies, sports, and much, much more. Contrary to yet another popular myth, history is one of the most practical, useful majors that one could select. Our students develop skills in critical thinking, writing, and thoughtful reading. Above all, we help students appreciate every aspect of life as part of a much broader and more complicated context, which not only enriches our students' lives but allows them to become sophisticated decision-makers. It is no surprise that employers, law schools, other professional schools, and graduate programs in a wide variety of fields look so favorably upon history graduates.

The history major allows students the flexibility to develop a program that meets their personal interests and needs. Distribution requirements ensure that all students will encounter a wide range of topics, and every student works one-on-one with a faculty mentor to fashion his or her own individualized focus. This combination of breadth, customization, and unparalleled mentoring ensures that the history major can meet the needs of virtually any student.

*Effective Fall 2014*

### Advising

Appointments with History advisors are scheduled online from the department's webpage: [www.lsa.umich.edu/history/undergraduates](http://www.lsa.umich.edu/history/undergraduates). Students should see an advisor as soon as they decide on their major or minor.

The History Department offers a three-tiered advising structure.

### **Tier 1: Faculty Advisors from the History Department's Undergraduate Committee**

- declaring a history major - obtaining general advice about the nature, purpose, and utility of a history degree
- recommending a faculty mentor
- approving study abroad and transfer credit
- declaring an academic minor in History

To make an appointment, go to [/lsa.umich.edu/history/undergraduates/advising.html](https://lsa.umich.edu/history/undergraduates/advising.html).

### **Tier 2: The Assistant Director of Undergraduate Studies**

- obtaining general advice about the requirements for the major
- checking progress towards the major or minor
- completing the graduation checklist and release

To make an appointment, go to [/lsa.umich.edu/history/undergraduates/advising.html](https://lsa.umich.edu/history/undergraduates/advising.html).

### **Tier 3: Individual Faculty Mentors**

- obtaining approval for a survey sequence and a major theme
- getting advice about course selection
- obtaining advice about career planning

Students generally meet with a Tier 2 advisor for help in selecting a mentor, but all subsequent advising will be done by that individual professor.

Faculty who go on leave will designate a substitute, and inform all their mentees of the temporary change.

Students must arrange appointments directly with their mentors, and are expected to do so at least once a term. It is the student's responsibility to take the initiative in setting up these meetings.

#### **Prerequisites**

None.

#### **Requirements**

**Minimum Credits: 30**

A major in History requires a total of ten history courses. Five of these courses must be taken in residence at the University of Michigan-Ann Arbor. At least five of the ten courses must be at the 300-level or above and none can be numbered below 200. Three- and four-credit courses both count as one course.

1. **Required course.** Every history concentrator must take HISTORY 202: Doing History, during the first semester after they declare. If scheduling problems make it absolutely impossible to take the class immediately, it can be delayed with the approval of a department advisor. This course will introduce students to historical research and writing by engaging directly with a wide range of primary sources and considering the various ways they can be interpreted.
2. **The Survey Sequence.** The foundation of the history major is a two-part survey sequence. The Department offers a range of pre-approved sequences in various geographical, chronological, and thematic areas, but students can also develop their own pairings in consultation with a faculty mentor and with the approval of the Department's Director of Undergraduate Studies. A frequently updated list of possible pairings will be available on the History Department website. For a sequence to be approved, the two classes must have a clear and well-conceptualized link, and they must fit within a broader theme.
3. **Regional Distribution**
  - Students have to take at least one course in four of the following areas: North America, Latin America, Europe, the Middle East/Central Asia, Africa, Asia, and Transregional/Global. Courses taken to satisfy the survey sequence requirement **can** be used to satisfy the regional distribution requirement.
  - Courses will count in the Transregional/Global category if they cut across significant geographical boundaries (i.e., continents or oceans) as well as major political boundaries. Included are courses dealing with one oceanic basin, but excluded are courses dealing with multiple sites within one continent.
4. **Pre-1800 Distribution.** Students must take at least one course that focuses on a period prior to the year 1800. To meet this requirement, at least 75% of the course material must deal with the pre-modern era. This course can also count as one of the regional courses. Courses taken to satisfy the survey sequence requirement **cannot** be used to satisfy the pre-1800 requirement.
5. **Junior-Senior Colloquium Requirement.** Take either HISTORY 496 or HISTORY 497. Honors students fulfill this requirement by taking HISTORY 499.

A list of pre-approved regional distribution courses and pre-1800 courses will be maintained on the History Department website.

These requirements can overlap. For example, a colloquium about ancient Greece satisfies the pre-1800, European, and colloquium requirements and also counts as one of the upper-level history courses.

Beyond these basic requirements, each student works with an individual faculty mentor to customize his or her program. Prior to declaring a History major, students meet with a general department advisor to discuss the program requirements, but upon declaring, each student selects a faculty mentor who will serve as his or her personal advisor. Department advisors will help students select a mentor based on each individual's interests and needs. The mentor helps the student pick an appropriate survey sequence and select additional courses that will give coherence to the degree program. What form that coherence will take is up to the student (with the mentor's guidance). Some opt for a geographical focus (the United States, Africa, Europe, *etc.*), while others might prefer a more thematic approach (women's history, international or transnational history, cultural history, *etc.*). Still others might want to emphasize global or chronological breadth within a more diversified set of classes.

## Constraints

- For the purposes of history major credit, no more than eight credits may be elected from HISTORY 395 (Independent Study).
- Two mini-courses can be combined in order to equal one course.

## Residency

Five of the ten History courses must be taken in residence at the University of Michigan-Ann Arbor.

## Distribution Policy

No course used to fulfill a major requirement may be used toward the [LSA Distribution Requirement](#). In addition, courses in the HISTORY subject area may not be used toward the Distribution Requirement.

## Honors

The Junior-Senior Honors Program in the Department of History is open to juniors majoring in history who have maintained at least a 3.4 grade point average overall and a 3.5 average in history courses. Applications are accepted annually in October. The usual applicant is a first-term junior for this three-term program. Admission decisions will be based on a student's academic performance, background in history, demonstrated ability to write, and recommendations by history faculty. High grade point average alone does not guarantee admission.

Accepted students will be notified in November and will begin their participation in the program the following January in HISTORY 498, the Junior Honors Colloquium.

Members of the Honors Program must fulfill all the usual requirements for majoring in History. The two Honors courses they are required to take, HISTORY 498 (4 credits) and HISTORY 499 (for a total of 6 credits over the two semesters), count toward the fulfillment of these requirements. Completion of HISTORY 499, the Senior Honors Colloquium, also satisfies the "colloquium" requirement for history major, described above. Students who complete HISTORY 498 but not HISTORY 499 must satisfy this requirement by taking either HISTORY 496/497.

## Teaching Certificate

The general requirements for a teaching certificate are described elsewhere in this Bulletin. Students must consult the School of Education Teacher Education office, 1228 School of Education, and check their website ([www.soe.umich.edu](http://www.soe.umich.edu)) for certification program information and general information meeting schedules.

The teaching major and minor for certification differ from the academic history major and minor. History courses required for a teaching certificate with a major in History must include HISTORY 260 and 261, one course in European history, HISTORY 396 or 397, and specific

world and non-Western history courses listed on the SOE website. History electives are chosen to reach the minimum 30 credits of History.

Teaching minor requirements are the same as the teaching major with a minimum of 20 credits of History.

## History Minor

A minor in history is a great way to explore historical questions and issues while pursuing a major in a different field. The History minor offers a straightforward, coherent, and yet very flexible program that provides a solid introduction to the discipline, and also enhance the interpretive and analytical skills historians depend on and employers value. These skills include learning to become a consciously critical reader, a concise and compelling writer, and a person who not only ‘knows stuff’ but who can tell others what the ‘stuff’ means and why it matters.

*Effective Winter 2016*

### Exclusions:

*A minor in History is not open to students with any major or any other minor in the Department of History, nor to those pursuing a minor in Modern European Studies.*

### Advising

Appointments with History advisors are scheduled online from the department's webpage: [www.lsa.umich.edu/history/undergraduates](http://www.lsa.umich.edu/history/undergraduates). Students should see an advisor as soon as they decide on their major or minor.

The History Department offers a three-tiered advising structure.

### **Tier 1: Faculty Advisors from the History Department's Undergraduate Committee**

- declaring a history major - obtaining general advice about the nature, purpose, and utility of a history degree
- recommending a faculty mentor
- approving study abroad and transfer credit
- declaring an academic minor in History

To make an appointment, go to [/lsa.umich.edu/history/undergraduates/advising.html](http://lsa.umich.edu/history/undergraduates/advising.html).

### **Tier 2: The Assistant Director of Undergraduate Studies**

- obtaining general advice about the requirements for the major
- checking progress towards the major or minor
- completing the graduation checklist and release

To make an appointment, go to [/lsa.umich.edu/history/undergraduates/advising.html](https://lsa.umich.edu/history/undergraduates/advising.html).

### **Tier 3: Individual Faculty Mentors**

- obtaining approval for a survey sequence and a major theme
- getting advice about course selection
- obtaining advice about career planning

Students generally meet with a Tier 2 advisor for help in selecting a mentor, but all subsequent advising will be done by that individual professor.

Faculty who go on leave will designate a substitute, and inform all their mentees of the temporary change.

Students must arrange appointments directly with their mentors, and are expected to do so at least once a term. It is the student's responsibility to take the initiative in setting up these meetings.

#### **Prerequisites**

None.

#### **Requirements**

**Minimum Credits: 15**

- Five courses (at least 15 credits), to be chosen in consultation with a faculty advisor, covering at least two of the following areas: North America, Latin America, Europe, the Middle East/Central Asia, Africa, Asia, and Transregional/Global.
- At least four of the five courses must be at the 200-level or above; at least two courses must be at the 300-level or higher.

#### **Constraints**

- First-Year Seminars do not count toward the minor.
- Two mini-courses will equal one regular course.
- **AP credit:** AP credits may not be used to satisfy requirements of the minor.

#### **Residency**

Four of the five courses must be taken in-residence at the University of Michigan, Ann Arbor, or must count as in-residence credit (i.e., relevant courses taken through UM-sponsored CGIS programs abroad).

# History of Art Major

History of Art examines the wide range of things that humanity has made and looked at and endowed with meaning - from the imposing facade of an imperial palace, to the colorful glory of stained glass or oil painting, to an artist's intimate sketches. The discipline encompasses the study of painting, sculpture, the graphic media, and architecture, as well as an extensive variety of visual forms produced for purposes that run far afield of the traditional territory of "art" itself (advertising, say, or ritual and ceremony, or popular entertainment).

Students become conversant with the world's cultures and develop skills in visual analysis in order to understand how images, objects and built environments communicate. They also learn to employ a broad selection of interpretive methodologies. Through careful work with original sources and a wide-ranging study of comparative cultures, our students learn to consider how art objects were understood in their own time and place, and how they continue to function in the contemporary world. In doing so, history of art students become acute observers and interpreters of the visual environment.

A major in History of Art provides an excellent general foundation for work in a range of careers which rely on visual literacy as well as training in the humanities. Graduates of our program have pursued careers not only in university teaching and research, museums, galleries, auction houses, but also in arts administration, art therapy, design, advertising, criticism, journalism, publishing, libraries, computer and digital technology, and historical preservation.

The History of Art Student Services Office, located in 50 Tappan Hall, maintains files of information on career options, internships, study abroad programs, graduate schools, Museum Studies programs, and fellowships.

*Effective Winter 2018*

## Advising

A major or minor in the History of Art is developed in consultation with a History of Art advisor. Appointments are scheduled through the departmental website:

<http://lsa.umich.edu/histart/undergraduates/advising-appointments.html>.

Majors and minors must consult with an advisor at least once a year.

**The History of Art Website.** For further information about the curriculum, student resources, faculty and staff, departmental events, and Helicon (the undergraduate art history association), please consult the History of Art website: [www.lsa.umich.edu/histart/](http://www.lsa.umich.edu/histart/)



## Prerequisites

None.

## Requirements

### Minimum Credits: 30

At least 24 credits in History of Art and 6 cognate credits.

The 24 History of Art credits must include:

- 6 credits at the 200 level.
- 12 credits at the 300 level or higher, including a 3-credit seminar
- 6 additional credits at the 200 level or higher.
- completion of the History of Art **Distribution Requirements** for Majors.

**Distribution Requirements.** There are two kinds of distribution requirements, one focusing on historical time periods and the other on different regions of the globe. The former familiarizes students with cultural practices associated with different historical moments, and the latter with a wide range of national and regional traditions. Majors are required to select 200-level or higher courses that correspond to at least **three of the four time periods** and **three of the five regions** listed below. Since each course counts towards one time period and one region, the distribution requirements can be satisfied with as few as three courses.

### Time Periods

1. Ancient
2. Medieval
3. Early Modern
4. Modern and Contemporary

### Regions

- A. The Middle East (includes Western and Central Asia and North Africa)
- B. Sub-Saharan Africa
- C. Asia (includes China, Japan, India, South and Southeast Asia, and the Pacific)
- D. Europe and the U. S.
- E. Latin America and the Caribbean

**Cognate Requirements.** The 6 cognate credits (two courses) must include:

- One studio course (minimum 3 credits) at the 100 level or higher. This course may be taken at the School of Art & Design, the Residential College, or the Taubman College of Architecture and Urban Planning, and must be approved by an advisor.
- An additional advisor-approved course (minimum 3 credits) to be selected from a discipline related to a student's particular interest in art history.

### Residency

15 of the required 30 elective credits must be taken in residence at Michigan or at off-campus sites directed by Michigan faculty. Courses directed to major requirements by exception can count toward the major residency requirement.

### Distribution Policy

No course used to fulfill a major requirement may be used toward the [LSA Distribution Requirement](#). In addition, courses in the HISTART subject area may not be used toward the Distribution Requirement.

### Honors

To qualify for the [History of Art Honors Plan](#), a student must have an overall GPA of at least 3.4 and a GPA of at least 3.5 in the major. Honors students in History of Art enroll in HISTART 498 and 499 during the fall and winter terms of the senior year, and are required to write a senior Honors thesis.

## History of Art Minor

The History of Art minor offers students an introduction to the discipline's approach to humanistic study of the things that cultures around the world have made, looked at, and endowed with meaning. It will sharpen students' skills in visual and historical analysis and interpretation.

*Effective Winter 2018*

### Exclusions:

*A minor in History of Art is not open to students with a major in History of Art.*

### Advising

A major or minor in the History of Art is developed in consultation with a History of Art advisor. Appointments are scheduled through the departmental website:

<http://lsa.umich.edu/histart/undergraduates/advising-appointments.html>

Majors and minors must consult with an advisor at least once a year.

**The History of Art Website.** For further information about the curriculum, student resources, faculty and staff, departmental events, and Helicon (the undergraduate art history association), please consult the History of Art website: [www.lsa.umich.edu/histart/](http://www.lsa.umich.edu/histart/)

### Prerequisites

None.

## Requirements

### Minimum Credits: 15

A minimum of 15 credits (or five courses) in the History of Art. The selected courses must include:

1. 6 credits at the 200 level.
2. 6 credits at the 300 level or higher, including a 3-credit seminar.
3. 3 additional credits at the 200 level or higher.
4. completion of the History of Art Distribution Requirements for minors.

**Distribution Requirements:** There are two kinds of distribution requirements, one focusing on historical time periods and the other on different regions of the globe. The former familiarizes students with cultural practices associated with different historical moments, and the latter with a wide range of national and regional traditions. Minors in the History of Art are required to select 200-level or higher courses that correspond to at least **two of** the four time periods and **two of** the five regions listed below. Since each course counts towards one time period and one region, the distribution requirements can be satisfied with as few as two courses.

### Time Periods

- Ancient
- Medieval
- Early Modern
- Modern and Contemporary

### Regions

- The Middle East (includes Western and Central Asia and North Africa)
- Sub-Saharan Africa
- Asia (includes China, Japan, India, South and Southeast Asia, and the Pacific)
- Europe and the U. S.
- Latin America and the Caribbean

# History of Law and Policy Minor

The Minor in History of Law and Policy provides a supplemental program of historically grounded study that will benefit pre-professional students who plan to attend law school or pursue graduate work or immediate careers in policy-related fields. The minor also does not draw any sharp distinction between its law and policy sides but rather emphasizes the dynamic intersections between these categories, and emphasizes the real-world consequences of the law in society and culture and embeds formal constitutional doctrine in historical context. The electives explore the intersections between law and society, the state and citizenship, the relationship

between social movements and rights, matters of regulation and governance, and the categories of politics and culture, to name but a few of the recurring themes.

*Effective Fall 2018*

**Exclusions:**

*The minor in History of Law and Policy is not open to students electing the minor in Law, Justice, and Social Change; or the minor in Crime and Justice; nor to students electing the major in Public Policy at the Gerald R. Ford School of Public Policy.*

Advising

Appointments with History advisors are scheduled online from the department's webpage: [www.lsa.umich.edu/history/undergraduate](http://www.lsa.umich.edu/history/undergraduate). Students should see an advisor as soon as they decide on their major or minor.

The History Department offers a three-tiered advising structure.

**Tier 1: Faculty Advisors from the History Department's Undergraduate Committee**

- declaring a history major - obtaining general advice about the nature, purpose, and utility of a history degree
- recommending a faculty mentor
- approving study abroad and transfer credit
- declaring an academic minor in History

To make an appointment, go to <http://lsa.umich.edu/history/undergraduates/advising.html>.

**Tier 2: The Assistant Director of Undergraduate Studies**

- obtaining general advice about the requirements for the major
- checking progress towards the major or minor
- completing the graduation checklist and release

To make an appointment, go to <http://lsa.umich.edu/history/undergraduates/advising.html>.

**Tier 3: Individual Faculty Mentors**

- obtaining approval for a survey sequence and a major theme
- getting advice about course selection
- obtaining advice about career planning

Students generally meet with a Tier 2 advisor for help in selecting a mentor, but all subsequent advising will be done by that individual professor.

Faculty who go on leave will designate a substitute, and inform all their mentees of the temporary change.

Students must arrange appointments directly with their mentors, and are expected to do so at least once a term. It is the student's responsibility to take the initiative in setting up these meetings.

### Prerequisites

None.

### Requirements

#### **Minimum Credits: 15**

A minimum of five courses and 15 credits is required. At least three of the five courses must be at the 300-level or higher.

#### **Core Course**

Select *at least one* of:

- HISTORY 217, Topics in the History of Human Rights
- HISTORY 235: Law and Social Justice
- HISTORY 315: American Constitutional History
- HISTORY 335 / AMCULT 385 / LATINOAM 385: Immigration Law. Critical Approaches to Contemporary Issues
- HISTORY 366: Crime and Drugs in Modern America (F17)

#### **Electives**

A minimum of four courses (totaling at least 12 credits) selected in consultation with a history faculty advisor, selected from the list below. Core Courses not used to count toward the Core Course requirement may be used as electives.

*The Regional Distribution requirement is satisfied by successfully completing courses in at least two world regions.* A chronological, geographical, or topical focus is developed in consultation with a faculty advisor.

#### **Other HISTORY Courses in History of Law and Policy:**

- HISTORY 223 / ENVIRON 223: Trashed! A History of Garbage in the Modern World
- HISTORY 224 / ENVIRON 224 / PUBPOL 224: Global Nuclear Proliferation
- HISTORY 230: Humanities Topics in History, *section titled "Tracking Human Rights"*
- HISTORY 232: Interdisciplinary Topics in History, *section titled "History of Human Rights in Latin America"*
- HISTORY 237 / ENVIRON 237: Global Environmental History

- HISTORY 256 / JUDAIC 265: Introduction to Jewish Law. Sources, Legal History and Legal Theory
- HISTORY 257 / JUDAIC 257: Ancient Law
- HISTORY 266: Twentieth-Century American Wars as Social and Personal Experience
- HISTORY 269 / JUDAIC 260 / RELIGION 260: Introduction to the Talmud and the Rabbis
- HISTORY 272 / AAS 262: The Modern Civil Rights Movement
- HISTORY 312 / POLSCI 362: History of European Integration
- HISTORY 322 / GERMAN 322: The Origins of Nazism
- HISTORY 324: Muslims in Contemporary Europe
- HISTORY 329: Social Science Topics in History, *section titled "Crime, Punishment, and the Politics of Prison"*
- HISTORY 334: Pax Americana: The History of U.S. Empire (W19)
- HISTORY 345 / RCSSCI 357: History and Theory of Punishment
- HISTORY 346 / AMCULT 348: History of American Radicalism
- HISTORY 349 / LACS 349: Revolutionary Movements in Modern Latin America
- HISTORY 356 / AMCULT 331 / WGS 356 (WGS 356): Health in America. Patterns, Experiences, and Inequalities
- HISTORY 360: September 11
- HISTORY 363: The U.S. and the World Since 1945: Politics, Culture, and War in the American Century (F16)
- HISTORY 364: History of American Suburbia
- HISTORY 367: American Indian History (*only if elected WN14 or later*)
- HISTORY 368 / AMCULT 342 / WGS 360 (WGS 360): History of the Family in the U. S.
- HISTORY / WGS 370 (WGS 370) / AMCULT 375: Queer Histories of the United States, 1850 to the Present (*only if elected FA 19 or later*)
- HISTORY 374 / AMCULT 374: The Politics and Culture of the "Sixties"
- HISTORY 375 / WGS 375 (WGS 375): History of Witchcraft. The 1692 Salem Trials in Historical and Cross-Cultural Perspective
- HISTORY 376: Epidemics. Plagues and Cultures from the Black Death to the Present
- HISTORY 389: Armenians in Turkey
- HISTORY 399: Topics in History, *section titled "The Politics of Civil Liberties and Civil Rights"*
- HISTORY 407: Advanced Study in Comparative and Transnational History, *section titled "Gender, Sexuality, and International Human Rights Law"*
- HISTORY 411 / POLSCI 319: The Politics of Civil Liberties and Civil Rights
- HISTORY 415 / ASIAN 415: Chinese Legal History. Law and Society in Late Imperial and Modern China
- HISTORY 443 / ISLAM 443 / MIDEAST 487: Modern Middle East History
- HISTORY 445: Topics in History, *section titled "What is Capitalism?"*
- HISTORY 466: Building American Empire: War, Politics, and Social Reform in the United States, 1901-1950
- HISTORY 477: Law, History, and the Dynamics of Social Change (*only if elected FA 15 or later*)
- HISTORY 491: Topics in History: HistoryLabs 2, *section titled "Police Violence, Crime, Social Justice in MI" (only if elected FA 19 or later)*
- HISTORY 497: History Colloquium, *sections titled "K-12 Education History and Policymaking" or "Crime, Punishment, and the Politics of Prison"*

### **Electives Cross-listed with HISTORY**

- AAS 262 / HISTORY 272: The Modern Civil Rights Movement

- AMCULT 331 / HISTORY 356 / WGS 356 (WGS 356): Health in America. Patterns, Experiences, and Inequalities
- AMCULT 342 / HISTORY 368 / WGS 360 (WGS 360): History of the Family in the U. S.
- AMCULT 348 / HISTORY 346: History of American Radicalism
- AMCULT 374 / HISTORY 374: The Politics and Culture of the “Sixties”
- AMCULT 375 / HISTORY / WGS 370 (WGS 370): Queer Histories of the United States, 1850 to the Present (*only if elected FA 19 or later*)
- AMCULT 385 / HISTORY 335 / LATINOAM 385: Immigration Law: Critical Approaches to Contemporary Issues
- ASIAN 415 / HISTORY 415: Chinese Legal History. Law and Society in Late Imperial and Modern China
- ENVIRON 221 / HISTORY 237: Global Environmental History
- ENVIRON 223 / HISTORY 223: Trashed! A History of Garbage in the Modern World
- ENVIRON 224 / HISTORY 224 / PUBPOL 224: Global Nuclear Proliferation
- GERMAN 322 / HISTORY 322: The Origins of Nazism
- ISLAM 443 / MIDEAST 487 / HISTORY 443: Modern Middle East History
- JUDAIC 257 / HISTORY 257: Ancient Law
- JUDAIC 260 / HISTORY 269 / RELIGION 260: Introduction to the Talmud and the Rabbis
- JUDAIC 265 / HISTORY 256: Introduction to Jewish Law. Sources, Legal History and Legal Theory
- LACS 349 / HISTORY 349: Revolutionary Movements in Modern Latin America
- LATINOAM 385 / HISTORY 335 / AMCULT 385: Immigration Law. Critical Approaches to Contemporary Issues
- MIDEAST 487 / ISLAM 443 / HISTORY 443: Modern Middle East History
- POLSCI 319 / HISTORY 411: The Politics of Civil Liberties and Civil Rights
- POLSCI 362 / HISTORY 312: History of European Integration
- PUBPOL 224 / ENVIRON 224 / HISTORY 224: Global Nuclear Proliferation
- RCSSCI 357 / HISTORY 345: History and Theory of Punishment
- RELIGION 260 / HISTORY 269 / JUDAIC 260: Introduction to the Talmud and the Rabbis
- WGS 356 (WGS 356) / HISTORY 356 / AMCULT 331: Health in America. Patterns, Experiences, and Inequalities
- WGS 360 (WGS 360) / HISTORY 368 / AMCULT 342: History of the Family in the U. S.
- WGS 370 (WGS 370) / HISTORY 370 / AMCULT 375: Queer Histories of the United States, 1850 to the Present (*only if elected FA 19 or later*)
- WGS 375 (WGS 375) / HISTORY 375: History of Witchcraft. The 1692 Salem Trials in Historical and Cross-Cultural Perspective

### Other Electives:

- INTLSTD 401: International Studies Advanced Seminar, *section titled “Gender, Sexuality, and International Human Rights Law”*

### 100-level Electives

A maximum of one 100-level course may be applied toward the requirements for the minor.

- HISTORY 102: A History of the Present
- HISTORY 103: Introduction to History in the Humanities (*appropriate sections*)

- HISTORY 104: Introduction to History in the Social Sciences (*appropriate sections*)

### Constraints

**AP credit:** *AP credits may not be used to satisfy requirements of the minor.*

### Residency

Four of the five courses must be taken in-residence at the University of Michigan-Ann Arbor, or must count as in-residence credit (i.e., relevant courses taken through UM-sponsored CGIS programs abroad).

## History of Medicine and Health Minor

Why does the History Department offer a minor in the History of Medicine and Health? Because more than a recitation of names and dates, history provides insights into the issues of contemporary importance, be they the global response to Ebola or the politics of health care. Taught by the department's internationally renowned faculty in the history of medicine and health, courses in the History of Medicine and Health minor will be of interest to a wide range of students.

For students planning to attend medical school, graduate school in public health, or to pursue a broad range of related career paths in fields such as global health, nursing, medical anthropology, pharmacy, psychology, social work, and neuroscience, the minor will provide a valuable supplemental program of study. Courses will help students develop the empathy to envision past perspectives and experiences, and the ability to understand that current medical facts have changed and will continue to change.

*Effective Winter 2016*

### Exclusions:

*A minor in History of Medicine and Health is not open to students with a major or any other minor in the Department of History, or students taking a Minor in [Science, Technology, and Society](#).*

### Advising

Appointments with History advisors are scheduled online from the department's webpage: <http://lsa.umich.edu/history/undergraduates/advising.html>. Students should see an advisor as soon as they decide on their major or minor.

The History Department offers a three-tiered advising structure.



### **Tier 1: Faculty Advisors from the History Department's Undergraduate Committee**

- declaring a history major - obtaining general advice about the nature, purpose, and utility of a history degree
- recommending a faculty mentor
- approving study abroad and transfer credit
- declaring an academic minor in History

To make an appointment, go to <http://lsa.umich.edu/history/undergraduates/advising.html>.

### **Tier 2: The Assistant Director of Undergraduate Studies**

- obtaining general advice about the requirements for the major
- checking progress towards the major or minor
- completing the graduation checklist and release

To make an appointment, go to <http://lsa.umich.edu/history/undergraduates/advising.html>.

### **Tier 3: Individual Faculty Mentors**

- obtaining approval for a survey sequence and a major theme
- getting advice about course selection
- obtaining advice about career planning

Students generally meet with a Tier 2 advisor for help in selecting a mentor, but all subsequent advising will be done by that individual professor.

Faculty who go on leave will designate a substitute, and inform all their mentees of the temporary change.

Students must arrange appointments directly with their mentors, and are expected to do so at least once a term. It is the student's responsibility to take the initiative in setting up these meetings.

#### **Prerequisites**

None.

#### **Requirements**

##### **Minimum Credits: 15**

A minimum of 5 courses and 15 credits, distributed as follows

1. Take one of two 4-credit survey courses:

- HISTORY 234: History of Medicine in the Western World from the 18th Century to the Present  
or
- HISTORY 284: Sickness and Health in Society: 1492 to the Present

Students may take both of these courses for minor credit but only one is required.

2. **Additional Courses.** Four additional courses (at least 12 credits), to be chosen in consultation with a faculty advisor. At least two of the four additional courses must be at the 300-level or higher.

- Three of these courses must be from the approved list of courses that count for the Medicine and Health minor.
- One of these courses must be a History distribution course that is not on the approved list.

### **Approved Course List:**

- HISTORY 214 / AMCULT 241: Health, Biology, and Society: What is Cancer? (F18)
- HISTORY 230: Humanities Topics in History, *section titled "History of Psychology"*
- HISTORY 231: Social Science Topics in History, *section titled "Histories of Human Experimentation"*
- HISTORY 232: Interdisciplinary Topics in History, *section titled "Mental Health in Global History"*
- HISTORY 242: Madness, Medicine, and Magic in the Middle East
- HISTORY 265: Minds and Brains in America (*only if taken FA18 or later*)
- HISTORY 285 / RCSSCI 275: Science, Technology, Medicine, and Society
- HISTORY 291: A World History of Happiness: Care of the Self from the Greeks to the Sufis (*only if taken WN 20 or later*)
- HISTORY 292: Ancient Medicine in Greece and Rome.
- HISTORY 305 / PSYCH 321: American Addictions (*only if taken FA18 or later*)
- HISTORY 329: Social Science Topics in History, *section titled "Pollution and Disease in Early Modern Europe"*
- HISTORY 339 / ASIAN 365 / CLCIV 339: Doctors in the Ancient World
- HISTORY 233 (or 342 prior to Winter 2016): Sexually Transmitted Diseases from Syphilis to AIDS
- HISTORY 327: History of Sexuality (Winter 2019)
- HISTORY 355 / AAS 355 / ANTHRCUL 355: Health and Illness in African Worlds
- HISTORY 356/AMCULT 331: Health in America: Patterns, Experiences, and Inequalities
- HISTORY 366: Crime and Drugs in Modern America (F17)
- HISTORY 376: Epidemics: Plagues and Cultures from the Black Death to the Present
- HISTORY 391: Topics in European History, *section titled "Medieval Catastrophes"*
- HISTORY 398: The Black Death (F16)
- HISTORY 407: Advanced Study in Comparative and Transnational History, *section titled "Transcultural and International Histories of Medicine, Disease, and the Body" (only if taken WN 20 or later)*

- HISTORY 496: History Colloquium, *section titled "Medicine and Health in U.S. Culture since 1875"*
- HISTORY 497: History Colloquium, *section titled "Medicine and Health in U.S. Culture since 1875"*
- AAS / HISTORY / ANTHRCUL 355: Health and Illness in African Worlds
- AMCULT 241 / HISTORY 214: Health, Biology, and Society: What is Cancer? (F18)
- ANTHRCUL / HISTORY / AAS 355: Health and Illness in African Worlds
- ASIAN 365 / HISTORY / CLCIV 339: Doctors in the Ancient World
- CLCIV / HISTORY 339 / ASIAN 365: Doctors in the Ancient World
- HONORS 230: Honors Core in Social Science, *section titled "Histories of Human Experimentation"*
- RCSSCI 275 / HISTORY 285: Science, Technology, Medicine, and Society

### Constraints

**AP credit:** *AP credits may not be used to satisfy requirements of the minor.*

### Residency

Four of the five courses must be taken in-residence at the University of Michigan-Ann Arbor, or must count as in-residence credit (i.e., relevant courses taken through UM-sponsored CGIS programs abroad).

## History of Philosophy

The History of Philosophy Minor has been discontinued as of Winter 2020.

*Effective Fall 2019*

### Exclusions:

*A minor in Philosophy is not open to students with a major in Philosophy.*

### Advising

**PLEASE NOTE:** The History of Philosophy Minor has been discontinued as of Winter 2020.

Students wishing to pursue a minor in Philosophy must develop a specific plan for its completion in consultation with the department's designated advisor. Appointments are scheduled through the on-line scheduling system available on the department's web page:

<http://lsa.umich.edu/philosophy/undergraduates/advisor-appointments.html>

## Grade Policies

No course will count toward the minor unless the student receives a grade of C- or better. This includes all courses including prerequisites, required courses, and electives.

## Prerequisites

Any 100- or 200-level course other than PHIL 180, 201, 296 (logic courses) 288, 289.

## Requirements

**Minimum Credits: 15**

### **COMMON REQUIREMENTS FOR ALL PHILOSOPHY ACADEMIC MINORS:**

1. **At least one course at the 400-level**, other than formal methods (PHIL 413, 414)
2. **A minimum of 15 credits of Philosophy**, at least 9 of which (including the required 400-level course) must be taken in residence.
3. No course will count toward the minor unless the student receives a grade of C- or better.

### **SPECIFIC REQUIREMENTS FOR HISTORY OF PHILOSOPHY (Effective Fall 2012):**

- i. Either PHIL 345, 361, 366, 367 or 383
- ii. PHIL 288 (W18), 289 (W18), 388, or 389
- iii. One additional course from: PHIL 288 (W18), 289 (W18), 323 (W18), 386 (W18), 388, 389, 391 (F18), 392 (F18), 393 (F18), 405, 406, 458, 460, 461, 462, 464
- iv. One additional course from "iii" expanded to include: PHIL 371, 385, 433, 463, 466, 467, 474, 492

## Residency

At least nine credits, including the required 400-level course, must be taken in residence.

# Honors Mathematics Submajor

Outstanding students may elect an Honors major in Mathematics. The Honors Program is designed not only for students who expect to become mathematicians but also for students whose ultimate professional goal lies elsewhere (e.g. in the humanities, law, ...).

*Effective Winter 2021*

## Advising

Appointments are scheduled online at: [lsa.umich.edu/math/undergraduates](https://lsa.umich.edu/math/undergraduates).. Students are strongly urged to consult with a department advisor each term before selecting courses for the following term.

## Grade Policies

All prerequisite courses must be satisfied with a grade of C– or above. Students with lower grades in prerequisite courses must receive special permission of the instructor to enroll in subsequent courses.

For purposes of calculating grade point average, the term "field of the major" means the following:

1. All MATH courses.
2. All courses used to meet requirements for the major.
3. All required cognate courses (if any).
4. All mandatory prerequisites.
5. EECS 183
6. ECON 101 and ECON 102 (actuarial mathematics submajor only).

## Prerequisites

**Prerequisites for all Mathematics Majors:** Completion of one of the sequences ending with MATH 215-217, 285-217, or 295-296. A working knowledge of a high-level computer language such as C++ or a computer algebra system (such as Maple or Mathematica), at a level equivalent to completion of a course of three or more credits, and eight credits of PHYSICS, preferably PHYSICS 140/141 and 240/241, are recommended for all programs and required for some. (A grade of C- or better is strongly suggested for MATH 217.)

**Additional prerequisites for the Honors Mathematics Submajor:** Completion of one of the sequences ending with MATH 215-217, 285-217, 295-296, or 217-297. (A grade of C- or better is strongly suggested for MATH 217.)

Students intending an Honors major are strongly advised to take one of the Honors introductory sequences MATH 156-286, 175-286, 185-286, 295-396, or 217-297 or some combination of these five. The sequence MATH 295-396 is very theoretical. Eight credits of PHYSICS and familiarity with a high-level computer language are strongly recommended.

## Requirements

The Honors major program must include at least nine courses: (A) four basic courses, (B) four elective courses, and (C) one cognate course as described below.

- A. The basic courses consist of one from each of groups 1, 2, 3, and 4 or groups 1, 2, 5, 6 below, completed with a grade of at least C-:
  1. Linear Algebra: MATH 420, 494, or 571
  2. Analysis: MATH 451
  3. Modern Algebra: MATH 493
  4. Geometry/Topology: MATH 431, 433, 490, or 590
  5. Probability: MATH 525
  6. Differential Equations: MATH 404, 454, 556, 557, or 558

Students who complete MATH 295&296 OR MATH 217&297, with a grade of at least a C- are exempt from MATH 451.

Students who complete MATH 295&395 OR MATH 297&395, with a grade of at least a C- are exempt from MATH 420.

- B. The four elective courses must be chosen in consultation with an Honors advisor to provide a cohesive program which explores an area of mathematics in some depth. There is a good deal of freedom allowed here, but a random selection of courses will not satisfy this requirement. The courses should be chosen from the approved list or have a course number 600 or above. MATH 289 is a repeatable 1-credit course and can be used to satisfy the elective requirement only if taken for a total of 3 credits. A Mathematics Honors advisor may approve another mathematics course or a course from another department with advanced mathematical content as one of these elective courses. The Mathematics Honors advisor may ask that the student arrange supplemental work in a given class conform to expectations for an Honors elective. A student electing to satisfy requirement A by choosing courses from groups 1, 2, 5, and 6 must complete a course in Complex Analysis (MATH 555 or 596) as one of his/her electives.
- C. One cognate course from outside the Mathematics department, but containing significant mathematical content, chosen with the approval of the Honors advisor.

Students who, in the judgment of the Departmental Honors Committee, have completed an Honors major with distinction are granted a citation upon graduating. Interested students should discuss their program and the specific requirements for obtaining the citation with a Mathematics Honors advisor (appointments scheduled at: [lsa.umich.edu/math/undergraduates](https://lsa.umich.edu/math/undergraduates)) no later than the second term of their sophomore year.

## Residency

**Minimum number of courses taken in residence for transfer students majoring in Mathematics** (applies to all sub-plans): Students should take a minimum of 18 credits at the University of Michigan, Ann Arbor campus. Six of these credits must come from the basic courses and nine from the core courses and/or cognate courses. The 18 credits may include pre-requisites taken in Math.

## Distribution Policy

No course used to fulfill a major requirement may be used toward the [LSA Distribution Requirement](#). In addition, courses in the MATH subject area may not be used toward the Distribution Requirement.

# Informatics Major

## What is Informatics?

Informatics is the study of human and computer information processing systems from a socio-technical perspective. Michigan's unique interdisciplinary approach to this growing field of research and teaching emphasizes a solid grounding in contemporary computer programming, mathematics, and statistics, combined with study of the ethical and social science aspects of complex information systems. Experts in the field help design new information technology tools informed by scientific, business, and cultural contexts.

Informatics is where the technical accomplishments of computer science, mathematics, and statistics become embedded in the ways we interact, imagine, and produce in richer and more thoughtful ways. Students will obtain software development skills and learn a formal framework for making inferences from experimental and observational data, focusing on the manner and purpose in which people interact with information and information systems.

The major in Informatics is appropriate for students with varied interests and a range of background knowledge in information systems engineering, information analysis, and/or the use of information processing in biological, societal and emerging application areas. Students who complete the major are equipped to participate fully in important emerging areas such as bioinformatics, information analysis, large-scale information management, and human-centered information systems design. In addition, depending on which track a student selects, he or she develops the intellectual skills

- to analyze enormous quantities of information (Information Analysis Track);
- to apply information technology to large-scale, cutting-edge problems in the life sciences (Life Science Informatics Track).

Students concentrating in Informatics have many opportunities available to them after graduation. The major provides excellent preparation for jobs in the IT industry as product managers, human factors engineers, usability specialists, information analysts in sciences and science related industries, and designers working with large software development teams. Recruiters visiting the university frequently are seeking students with the ideals and skill sets that are provided by this program. Combined with work in specific knowledge domains, from nursing to economics, graduates of Michigan's Informatics major are vital in leading organizations to harness emerging technologies. The deep understanding of the connections between information technology, data analysis, and organizations and society is also excellent background for students seeking to enter law school, business school, medical school, or schools of public policy. And, depending on the track they complete, students are well prepared for graduate study in many fields, including statistics, computer science, information, law, medicine, public health, and natural and social sciences.

### **Summary of Course Requirements and Prerequisites**

The major in Informatics requires 40 credit hours for completion, including four core courses, 3-4 courses in one of two flexible tracks, plus electives selected from a list of recommended courses.

Four prerequisite courses serve as an introduction to core academic aspects of the curriculum and are required of all concentrators. The core serves as a tour of critical perspectives and investigative methodologies, an introduction to tools and techniques, and an entry point for further study. The four core courses provide grounding in discrete mathematics, computer programs and models, research methods in applied statistics, and the ethical issues posed by new and emerging technologies. Each of the four core courses helps establish a foundation for the advanced study of informatics issues pursued through the specific informatics tracks. Core courses may be taken in any order and are required for completion of the major. Students may enroll in track courses before they have completed the entire core curriculum.

In pursuing the major in Informatics, students have the flexibility to specialize in one of two tracks: Information Analysis or Life Science Informatics. Each of the tracks requires three to four courses, some of which will have associated prerequisite courses enforced at registration.

The tracks consist of a set of carefully chosen courses that together convey the necessary intellectual perspectives and foundational skills of the track.

In addition to the major's core and track requirements, students select major electives from a list of recommended courses. The breadth of electives will allow students to add intellectual depth to their selected track studies or to broaden their perspective on other aspects of the informatics field. The Faculty Steering Committee for the major will entertain appeals from students to substitute elective courses other than those in the list of recommended electives.

### **Life Science Informatics Track**

Using artificial information systems, scientists have made great progress in identifying core components of organisms and ecosystems and are beginning to better understand how these components behave and interact with each other. In fact, biology has become an information science, as computational techniques have become an important means to develop and evaluate biological hypotheses. Informatics is used from basic biological research-studying how patterns of gene expression differ across various cell types-to the practice of medicine, where informatics is used to compare treatments, to identify social correlates of health, and to evaluate possible changes in health policy. The Life Science Informatics track prepares students for careers and advanced study in a number of information-related fields in the life sciences, as well as medical school and other areas of graduate study.

*Effective Winter 2014*

#### Advising

The Academic Program Manager and members of the Faculty Steering Committee that designed the major share responsibility for major advising. Students who are interested in the Informatics major should consult with an Academic Advisor in the Newnan LSA Academic Advising Center during their freshman year and are strongly encouraged to meet with a department advisor early in their academic career. To make an appointment with a department advisor, please contact [informatics@umich.edu](mailto:informatics@umich.edu).

#### Grade Policies

### **Field of Major and GPA calculation**

For purposes of calculating grade point average, the term "field of the major" means the following:

1. All STATS courses.
2. All courses used to meet requirements for the major.
3. All mandatory major prerequisites.

#### Prerequisites

**It is not necessary to complete all prerequisite courses prior to declaring an Informatics major. Minimum grade for all prerequisite courses is a C.**

#### **Prerequisites to Core Courses**



1. SI 110 / SOC 110 with a C or better;
2. MATH 115 with a C or better;
3. EECS 182 / SI 182 or EECS 183 with a C or better;
4. STATS 250 or 280 with a C or better.

### Prerequisite to Declaration

MATH 115, STATS 250 or 280, and EECS 182 or 183.

### Requirements

**Minimum Credits:** 40

A minimum of 12 courses and a minimum of 40 credits.

1. **Core:** EECS 203, EECS 280, STATS 403
2. **Subplans:** Completion of one of the following tracks:
  - a. **Life Science Informatics track:**
    1. BIOINF 527
    2. One of the following Life Sciences courses:
      - BIOLOGY 305
      - MCDB 310
    3. Two of the following Quantitative/Computational courses:
      - EECS 376, 382, 485
      - STATS 401, 449, 470
      - BIOSTAT 449
    4. Electives\*: 12-14 credits; 4 credits must be elected at the 300-level or higher.
  - b. **Data Mining & Information Analysis track: (Note: inactive as of Spring 2017)**
    1. MATH 217
    2. STATS 406
    3. STATS 415
    4. One of the following Quantitative courses:
      - MATH 425, 471, 561, 562, 571
      - STATS 425, 500
      - IOE 310, 510, 511, 512
    5. Electives\*: 8 credits must be elected at the 300-level or higher
3. **Electives:** Additional Informatics electives to bring total major credits to 40 credits (44 for Data Mining track). The number of electives required for each track varies, depending on the number of required core courses in the track. Informatics majors be allowed to select their electives from one of the following lists of courses, depending on their chosen track. Students who wish to use an elective that is not on this list should consult their track advisor before taking the course.

### Informatics Pre-Approved Electives

Students may chose electives for their declared track from the following pre-approved lists of electives without consultation of the track advisor.

Note: Only one elective course in a track indicated with "\*" can be taken for elective credit.

### Life Science Informatics Track

- BIOINF 463 / MATH 463/BIOPHYS 463: Math Modeling in Biology
- BIOINF 545 / STATS 545 / BIOSTAT 646: Molecular Genetic and Epigenetic Data
- BIOINF 547 / MATH 547 / STATS 547: Probabilistic Modeling in Bioinformatics
- BIOINF 551 / BIOLCHEM 551 / CHEM 551 / BIOMEDE 551 / PATH 551: Proteome Informatics
- BIOLCHEM 551 / CHEM 551 / BIOINF 551 / BIOMEDE 551 / PATH 551: Proteome Informatics
- BIOMEDE 551 / BIOLCHEM 551 / CHEM 551 / BIOINF 551 / PATH 551: Proteome Informatics
- BIOPHYS 463 / MATH 463 / BIOINF 463: Math Modeling in Biology
- BIOSTAT 449 / STATS 449: Topics in Biostatistics
- BIOSTAT 646 / BIOINF 545 / STATS 545: Molecular Genetic and Epigenetic Data
- CHEM 551 / BIOLCHEM 551 / BIOINF 551 / BIOMEDE 551 / PATH 551: Proteome Informatics
- CMPLXSYS 510 / MATH 550: Introduction to Adaptive Systems
- EEB 485: Population and Community Ecology\*
- EECS 281: Data Structures and Algorithms
- EECS 376: Foundations of Computer Science
- EECS 382: Internet-scale Computing
- EECS 476: Theory of Internet Applications
- EECS 477: Introduction to Algorithms
- EECS 481: Software Engineering
- EECS 484: Database Management Systems
- EECS 485: Web Database and Information Systems
- EECS 487: Interactive Computer Graphics
- EECS 489: Computer Networks
- EECS 492: Introduction to Artificial Intelligence
- EECS 493: User Interface Development
- HONORS 352: Honors Introduction to Research in the Natural Sciences (*section titled "Cyberscience"*)
- MATH 416: Theory Algorithms
- MATH 425 / STATS 425: Introduction to Probability
- MATH 433: Introduction to Differential Geometry
- MATH 451: Advanced Calculus I
- MATH 462: Mathematical Models
- MATH 463 / BIOINF 463 / BIOPHYS 463: Math Modeling in Biology
- MATH 471: Introduction to Numerical Methods
- MATH 525 / STATS 525: Probability Theory
- MATH 526: Discrete State Stochastic Processes
- MATH 547 / BIOINF 547 / STATS 547: Probabilistic Modeling in Bioinformatics
- MATH 548 / STATS 548: Computations in Probabilistic Modeling in Bioinformatics
- MATH 550 / CMPLXSYS 510: Introduction to Adaptive Systems
- MCDB 408: Genomic Biology
- MCDB 411: Protein Structure and Function
- PATH 551 / BIOLCHEM 551 / CHEM 551 / BIOINF 551 / BIOMEDE 551: Proteome Informatics
- SI 301: Models of Social Information Processing\*
- SI 422: Evaluation of Systems and Services\*
- SI 572: Database Design
- SI 631: Practical I Engagement Workshop: Content Management Systems\*
- SI 689: Computer Supported Cooperative Work\*
- STATS 401: Applied Statistical Methods II
- STATS 406: Introduction to Statistical Computing
- STATS 408: Statistical Principles for Problem Solving: A Systems Approach
- STATS 415: Data Mining
- STATS 425 / MATH 425: Introduction to Probability

- STATS 426: Introduction to Theoretical Statistics
- STATS 430: Applied Probability
- STATS 449 / BIOSTAT 449: Topics in Biostatistics
- STATS 470: Introduction to the Design of Experiments
- STATS 480: Survey Sampling Techniques
- STATS 500: Applied Statistics I
- STATS 525 / MATH 525: Probability Theory
- STATS 526 / MATH 526: Discrete State Stochastic Processes
- STATS 545 / BIOINF 545 / BIOSTAT 646: Molecular Genetic and Epigenetic Data
- STATS 547 / MATH 547 / BIOINF 547: Probabilistic Modeling in Bioinformatics
- STATS 548 / MATH 548: Computations in Probabilistic Modeling in Bioinformatics

### **Data Mining & Information Analysis Track (*Note: Inactive as of Spring 2017*)**

- BIOINF 463 / MATH 463 / BIOPHYS 463: Math Modeling in Biology
- BIOINF 527: Introduction to Bioinformatics & Computational Biology\*
- BIOINF 545 / STATS 545 / BIOSTAT 646: Molecular Genetic and Epigenetic Data\*
- BIOINF 547 / MATH 547 / STATS 547: Probabilistic Modeling in Bioinformatics
- BIOINF 551 / BIOLCHEM 551 / CHEM 551 / BIOMEDE 551 / PATH 551: Proteome Informatics\*
- BIOLCHEM 551 / CHEM 551 / BIOINF 551 / BIOMEDE 551 / PATH 551: Proteome Informatics\*
- BIOMEDE 551 / BIOLCHEM 551 / CHEM 551 / BIOINF 551 / PATH 551: Proteome Informatics\*
- BIOPHYS 463 / MATH 463 / BIOINF 463: Math Modeling in Biology
- BIOSTAT 449 / STATS 449: Topics in Biostatistics
- BIOSTAT 646 / BIOINF 545 / STATS 545: Molecular Genetic and Epigenetic Data\*
- CHEM 551 / BIOLCHEM 551 / BIOINF 551 / BIOMEDE 551 / PATH 551: Proteome Informatics\*
- CMPLXSYS 510 / MATH 550: Introduction to Adaptive Systems\*
- EECS 281: Data Structures and Algorithms
- EECS 376: Foundations of Computer Science
- EECS 382: Internet-scale Computing
- EECS 476: Theory of Internet Applications
- EECS 477: Introduction to Algorithms
- EECS 481: Software Engineering
- EECS 484: Database Management Systems
- EECS 485: Web Database and Information Systems
- EECS 487: Interactive Computer Graphics
- EECS 489: Computer Networks
- EECS 492: Introduction to Artificial Intelligence
- EECS 493: User Interface Development
- HONORS 352: Honors Introduction to Research in the Natural Sciences (section titled "Cyberscience")
- IOE 510 / MATH 561 / OMS 518: Linear Programming I\*
- IOE 511 / MATH 562: Continuous Optimization Methods\*
- IOE 512: Dynamic Programming\*
- MATH 416: Theory Algorithms
- MATH 425 / STATS 425: Introduction to Probability
- MATH 433: Introduction to Differential Geometry
- MATH 451: Advanced Calculus I
- MATH 462: Mathematical Models
- MATH 463 / BIOINF 463 / BIOPHYS 463: Math Modeling in Biology
- MATH 471: Introduction to Numerical Methods
- MATH 525 / STATS 525: Probability Theory
- MATH 526: Discrete State Stochastic Processes

- MATH 547 / BIOINF 547 / STATS 547: Probabilistic Modeling in Bioinformatics
- MATH 548 / STATS 548: Computations in Probabilistic Modeling in Bioinformatics
- MATH 550 / CMPLXSYS 510: Introduction to Adaptive Systems\*
- MATH 561 / IOE 510 / OMS 518: Linear Programming I
- MATH 562 / IOE 511: Continuous Optimization Methods
- MATH 571: Numerical Methods for Scientific Computing I
- MCDB 408: Genomic Biology
- OMS 518 / IOE 510 / MATH 561: Linear Programming I\*
- PATH 551 / BIOLCHEM 551 / CHEM 551 / BIOINF 551 / BIOMEDE 551: Proteome Informatics\*
- SI 301: Models of Social Information Processing\*
- SI 422: Evaluation of Systems and Services\*
- SI 508: Networks: Theory and Application
- SI 572: Database Design\*
- SI 583: Recommender Systems\*
- SI 631: Practical I Engagement Workshop: Content Management Systems\*
- SI 679: Aggregation and Prediction Markets\*
- SI 683: Reputation Systems\*
- SI 689: Computer Supported Cooperative Work\*
- STATS 401: Applied Statistical Methods II
- STATS 408: Statistical Principles for Problem Solving: A Systems Approach
- STATS 425 / MATH 425: Introduction to Probability
- STATS 426: Introduction to Theoretical Statistics
- STATS 430: Applied Probability
- STATS 449 / BIOSTAT 449: Topics in Biostatistics
- STATS 470: Introduction to the Design of Experiments
- STATS 480: Survey Sampling Techniques
- STATS 500: Applied Statistics I
- STATS 525 / MATH 525: Probability Theory
- STATS 526 / MATH 526: Discrete State Stochastic Processes
- STATS 545 / BIOINF 545 / BIOSTAT 646: Molecular Genetic and Epigenetic Data\*
- STATS 547 / MATH 547 / BIOINF 547: Probabilistic Modeling in Bioinformatics
- STATS 548 / MATH 548: Computations in Probabilistic Modeling in Bioinformatics

## Constraints

Informatics majors may not use any STATS courses toward the Area Distribution requirement.

## Distribution Policy

No course used to fulfill a major requirement may be used toward the [LSA Distribution Requirement](#). In addition, courses in the STATS subject area may not be used toward the Distribution Requirement.

## Honors

Students interested in doing original research in informatics are encouraged to consider the Informatics Honors Plan. The Honors major is open to all Informatics majors who have achieved both a major GPA and an overall GPA of 3.4 or better. At least one year prior to graduation, interested students should identify a member of the U-M faculty with informatics expertise to serve as their faculty advisor. Together with that person, the student prepares a 2-3 paragraph summary of the proposed thesis project, which is submitted together with the Honors Plan Application to the Informatics Program Coordinator for review by department advisors. The student completes the thesis work in the senior year, while enrolling in 3-4 credits of independent

study (such as EECS 499, MATH 399, SI 491, STATS 489, HONORS 390, or HONORS 490). At least six weeks before the last day of classes in the term in which the student will complete the independent study and thesis, an electronic copy of the final Honors thesis is submitted to the Informatics program coordinator. The faculty advisor then solicits comments on the completed thesis from an independent reader, and the student presents the work in a public forum.

## Interdisciplinary Astronomy Minor

The minor in Interdisciplinary Astronomy is offered to students wishing to develop a broad overview of astronomy and understanding of science.

*Effective Fall 2016*

### Exclusions:

*The minors in Astronomy are not open to students with a major in Department of Astronomy.*

### Advising

Advising appointments are scheduled [online](#).

### Prerequisites

None.

### Requirements

**Minimum Credits: 15**

1. ***Stellar and Planetary Astrophysics:*** ASTRO 101 or 115
2. ***Galactic and Extragalactic Astrophysics:*** ASTRO 102, 104, 105, or 142
3. ***Astronomy Electives:*** Six credits from ASTRO 200-level courses
4. ***Cognate:*** Three credits from a 300 or 400-level interdisciplinary course selected with approval of a department advisor.

Students are encouraged to take introductory Physics courses in their earlier course of study.

## Interdisciplinary Astronomy Major

The major in Interdisciplinary Astronomy is offered to students wishing to develop a substantive expertise in astronomy, a practical understanding of science, and a basic ability to communicate science to the public. This major offers the opportunity to include contextual understanding of astronomy with respect to history, philosophy of science, and geoscience.

*Effective Winter 2018*

**Exclusions:**

*Not open to those with a major in Astronomy and Astrophysics.*

**Advising**

Information about scheduling advising appointments is available from the Department office.

**Prerequisites**

1. MATH 115, 116, and 215
2. PHYSICS 140/141 [or PHYSICS 160/161 or 135/136]
3. PHYSICS 240/241 [or PHYSICS 260/261 or 235/236]
4. PHYSICS 340 [or PHYSICS 360]

**Requirements****Minimum Credits: 31**

1. **Astronomy Core:** ASTRO 201, 361
2. **Astronomy Electives.** At least six credits from: ASTRO 401, 402, 403, 404, 405, 406, or 461.
3. **ULWR:** ASTRO 429 or ULWR of cognate plan
4. **Cognates.** A minimum of 15 credits of cognate courses as part of an interdisciplinary plan designed with the approval of the department advisor.

**Distribution Policy**

No course used to fulfill a major requirement may be used toward the [LSA Distribution Requirement](#). In addition, courses in the ASTRO subject area may not be used toward the Distribution Requirement.

# Interdisciplinary Chemical Sciences (ICS) Major

The Interdisciplinary Chemical Sciences (ICS) major allows students the flexibility to supplement a core study of chemistry with courses in complementary fields. The intended audience for the major includes pre-health professional students, students interested in the relationship between science and societal concerns such as the environment or public policy, students interested in fields such as the philosophy of science or history of science where a sound background in a scientific field will provide a deeper level of engagement, and students interested in broadly interdisciplinary sciences not well represented in any individual department. This major can be effective preparation for graduate study in the sciences, graduate studies in an interdisciplinary area that might benefit from a strong science background, for medical, law, and business schools, or for direct entry into the job market.

*Effective Fall 2015*

**Exclusions:**

*May not be elected by those pursuing a major in Chemical Science (or Chemistry), Biochemistry, or Biomolecular Science; or any of the Chemistry minors.*

### Advising

Students develop a plan for the major in consultation with a program advisor. Advisor approval of the plan for the major will be required when a student declares an ICS major. Those interested in a major in Interdisciplinary Chemical Sciences are urged to consult a program advisor during the freshman and/or sophomore years. Prospective majors are advised that further study in chemistry requires adequate performance in early chemistry courses (preferably B- or better) as well as in the mathematics and physics prerequisites. Students interested in an Honors degree should see the Chemistry Honors advisor. Appointments are scheduled online at [www.umich.edu/~michchem/undergrad/index.html](http://www.umich.edu/~michchem/undergrad/index.html)

### Grade Policies

The department strongly recommends that a student earn a grade of at least C– in all CHEM courses and mathematics, physics, and biology courses that are prerequisite for subsequent elections. A major program grade point average of at least 2.0 is required; this includes chemistry courses, mathematics, physics, and biology prerequisites, and advanced electives that are part of a major plan. Prerequisites must be taken for a grade. Students must request any change in a chemistry course grade within the first fifteen University Business days of the first full term following the term in which the disputed grade was issued.

### Prerequisites

- PHYSICS 135/136 or 140/141 or equivalent
- MATH 115 (or 120) and 116 (or 121), or an equivalent sequence

### Requirements

#### Minimum Credits: 27

A minimum of 27 credits in Chemistry and 15 credits in cognates approved by the department advisor, as follows:

1. **Core Courses in Chemistry:**
  - CHEM 210/211;
  - CHEM 241/242 or CHEM 245/246/247;
  - CHEM 260;
  - CHEM 302 or 303.
2. **Electives.** 12 credits in CHEM, including at least three courses at the 300-level or above. At least one of these must be a 400-level lecture course.
3. **Theme Focus/Cognates:** 15 credits of course work at the 200-level or above, with at least two courses (6 credits) at the 300-level or above. The plan must be designed with prior approval of a chemistry department advisor.

The Interdisciplinary Chemical Sciences major allows students substantial flexibility to define the thematic focus of their study in cognate courses. The flexibility inherent in the ICS major comes with a responsibility: each student must work closely with an ICS department advisor to

select the proper upper level chemistry classes and define a cognate course plan when declaring the ICS major. Possible cognate plans are posted on the department website. Example subplans include a focus on:

- Health and Life Sciences
- Philosophy
- Chemical Physics
- ICS at the interface between science and public policy

#### Distribution Policy

No course used to fulfill a major requirement may be used toward the [LSA Distribution Requirement](#). In addition, courses in the CHEM subject area may not be used toward the Distribution Requirement.

#### Honors

Maintenance of a satisfactory GPA (3.4) in courses for the major, including prerequisites, and satisfactory completion of an Honors thesis (CHEM 499) based on the research done in CHEM 399 are required for Honors. All students, whatever their program, who are interested in an Honors degree should see the Chemistry Honors advisor (Room 1500 Chemistry) for approval for participation in the Junior-Senior Honors Program in Chemistry.

#### Teaching Certificate

Those seeking a B.S. or B.S. Chem. Degree with a teaching certificate in Chemistry must fulfill departmental as well as School of Education requirements. Students who plan to earn a teaching certificate with a teaching major or minor in Chemistry should contact the School of Education Teacher Education Office.

## Interdisciplinary Physics Major

The University of Michigan has one of the country's premier programs for the training of undergraduate and graduate students in physics. The Physics Department has abundant facilities for instruction in physics and offers a wide variety of experimental and theoretical research programs open to undergraduate and graduate students.

Undergraduates concentrating in physics have several degree choices:

- [Physics \(B.S.\)](#)
- Interdisciplinary Physics (A.B. or B.S.)
- Honors Physics Program
- [Physics Minor](#)

A total of 60 credits of mathematics and natural science must be elected to receive the Bachelor of Science degree.

Interested undergraduates may also want to look into work in medical physics (a promising path for pre-med students) in the [Applied Physics program](#), or in the [Engineering Physics program](#).

The analytical and quantitative thinking skills you will develop as you work toward any of these degrees will be of great value in many different careers. Most physics majors at U-M follow one



(or more) of three paths after graduation:

- graduate work in physics or another field
- employment in industry, software development, or associated field
- professional school in medicine, business, law, or associated area.

The goal of physics is to understand the behavior of matter and energy on every level, from the origins of the universe in the Big Bang to the interior of atoms in your computer screen. In seeking a pure understanding of how the world works, physicists have revolutionized our lives.

Completing an undergraduate degree in physics will give you a rich understanding of how the world works. It will also prepare you either for continued study in graduate or professional school, or for careers in industry, education, medicine, and finance.

Modern science is increasingly interdisciplinary. The Interdisciplinary Physics major allows students the flexibility to supplement their core study of physics with courses in complementary fields. This major can be effective preparation for graduate study in the sciences, for medical, law, and business schools, or for direct entry into the job market.

Because students pursuing the Interdisciplinary Physics degree have a wide variety of career goals, advising from a Physics department advisor is especially important.

It is intended that the flexibility allowed by this program should be used in a well thought out and effective way.

*Effective Fall 2015*

### Advising

Students with any questions about courses or majors in Physics should speak with Physics department advisors.

Advising appointments can be scheduled in the Physics Student Services Office, 1440 Randall Lab [(734) 764-5539] or via the online advising calendar [www.lsa.umich.edu/physics/academics/undergraduateprogram/advising](http://www.lsa.umich.edu/physics/academics/undergraduateprogram/advising) .

### Grade Policies

PHYSICS 390/391 and the two additional 400 level Physics courses must be completed with a minimum grade of a C- in each course and a cumulative average of C or higher.

## Prerequisites

- PHYSICS 140/141 and 240/241 (or PHYSICS 125/136 and 126/236, or PHYSICS 135/136 and 235/236, or PHYSICS 160/161 and 260/261); and
- PHYSICS 340 and 351.

## Requirements

### **Minimum Credits: 26**

At least 26 credits, including at least 11 in PHYSICS courses numbered 390/391 and above.

The major must include:

1. PHYSICS 390/391.
2. Two additional Physics courses at the 400 level\*.

\*PHYSICS 390/391 and these 400 level Physics course must be completed with a minimum grade of a C- in each course and a cumulative average of C or higher.

3. Fifteen credits of cognate courses as part of an interdisciplinary plan designed with the approval of a department advisor.

The courses selected should form a coherent program of study.

Examples of possible programs of study include:

- Statistics,
- Astrophysics,
- Philosophy,
- Cosmology,
- Economics and Finance,
- Quantum Computing,
- Biology,
- Chemical Physics,
- Nanotechnology,
- Medical Physics,
- Environmental Physics,
- Global Change,
- Geophysics,
- Mathematical Physics,
- Science Writing,
- Science Policy,
- Physics of Technology,
- Applied Physics,
- Computational Physics,
- Physics Education, or
- Industrial Physics.

Possible course selections in each of these areas can be viewed at:

<http://www.lsa.umich.edu/physics/academics/undergraduateprogram/majorminorprograms>

### Residency

The Physics Department requires no less than 12 credits toward the major program be completed in-residence.

### Distribution Policy

No course used to fulfill a major requirement may be used toward the [LSA Distribution Requirement](#). In addition, courses in the PHYSICS subject area may not be used toward the Distribution Requirement.

### Honors

Students who have a cumulative grade point average of at least 3.4 are encouraged to elect an Honors plan in Interdisciplinary Physics. In addition to the regular departmental requirements for the major, candidates for Honors must elect an additional three credits of PHYSICS from courses numbered 401 and above which are not otherwise required and elect an additional 3 credit course as part of the cognate program. They must also complete a senior Honors thesis based on research (PHYSICS 498/499) done under the supervision of a faculty member. Some students in this degree line are pursuing interdisciplinary or dual degrees. Students wishing to complete an Honors senior thesis with a faculty member outside the Physics Department must meet with a department advisor for prior approval. (*Note: PHYSICS 415 will not count toward a PHYSICS Honors Major*).

### Teaching Certificate

LSA students may earn an A.B. or B.S. in Interdisciplinary Physics with a focus on teacher certification through the College of LSA and School of Education. Students who wish to earn a secondary teaching certificate in physics should schedule a physics advising appointment before applying to the SOE certification program through the Office of Undergraduate Admissions website. (Note: Students are encouraged to apply their sophomore year. The application deadline is October 15.)

## Intergroup Relations Education Minor

The Program on Intergroup Relations (IGR) is a social justice education program on the University of Michigan's Ann Arbor campus. As a joint venture of the College of Literature, Science, and Arts and the Division of Student Affairs, IGR works proactively to promote understanding of intergroup relations inside and outside of the classroom. Multidisciplinary courses offered by IGR are distinguished by their experiential focus, teaching philosophy, and incorporation of dialogical models of communication.

*Effective Fall 2020*

## Advising

IGR has a tiered advising system where students initially meet with peer advisors who provide guidance and advising. If questions persist or cannot be answered by the peer advising team, the program directors will meet with students as needed.

The IGR program assistant will help with administrative tasks such as formally declaring students and verifying when students complete the minor.

## Prerequisites

None.

## Requirements

**Minimum Credits: 19**

**I. Foundation Core Courses.** Elect both:

- A. ALA 122/ PSYCH 122/ SOC 122: Intergroup Dialogues
- B. ALA 220 / SOC 218 / PSYCH 213: Foundations of Intergroup Relations  
or  
PSYCH 218: Sophomore Seminar in Psychology as a Social Science, *section titled "Foundations of Intergroup Relations"*

The two courses provide the foundational theory and pedagogy of the minor. Intergroup dialogues give students the beginning tools to work across difference. They learn introductory social science concepts about inequality and experience conflict by working across difference. The Foundations of Intergroup Relations course gives students a solid overview of historical and contemporary structures of inequality, and examines the theory behind how social identity groups form, and how bias develops (prejudice, stereotyping, and discrimination). These two courses also explore how people develop an understanding of their own social identity group membership, how groups are impacted by privilege and power dynamics, and how to develop advocacy for groups to which one does not belong.

**II. Praxis Core Courses** emphasize praxis, the engagement of theory with practice and reflection. Choose one of the following tracks:

- A. **The Facilitative Leadership Track** (7 credits) prepares students to lead others in addressing the demographic and democratic challenges posed by inequality. The practice focus occurs in the classroom, where students lead others in intergroup dialogue.
  - ALA 320 / SOC 320 / PSYCH 310: Processes of Intergroup Dialogues Facilitation
  - ALA 321 / SOC 321 / PSYCH 311: Practicum in Facilitating Intergroup Dialogues
  - ALA 270 ALA Topics: *Section titled, "Intergroup Dialogue Facilitation"*
- B. **The Campus Communities and Research Track** (8 credits) allows students to explore praxis in broader community and research contexts and prepares them to understand inequality and develop coalitions for social justice work.

- **Statistics.** STATS 250 or SOC 210 or STATS 280.  
*Students may request to substitute another research methods class other than STATS 250 or SOC 210.*
  - **Campus Community Course** (ALA 421 or ALA 324) prepares students to recognize when social identities play a role in inequalities both on and off campus, to intervene in constructive ways when this happens, and to learn to act as peer educators in community settings, including residence halls and other campus-based settings.
  - **IGR Research Practicum** (ALA 329) allows students to practice intergroup skills in a more traditional academic setting: the research laboratory, as they are deepening their intergroup learning through the research process.
- III. **Elective Course:** ALA 228 Conflict and Coexistence; ALA 248: Understanding Conflict through Int'l Dialogue; ALA 322 Advanced Practicum; ALA 324 Facilitation for Effective Leadership; ALA 471 Leading Community Building; ALA 421 Creating Inclusive Communities or other cognate. Students take at least one 3- or 4-credit course in another academic unit that complements the goals of the minor. Students may also propose additional courses for consideration. The criteria used for selection include: The course must address social identities and intergroup relations in some way, and the course should discuss issues of inequality, power, privilege, and oppression or should focus on leadership and social change. (See below list of approved electives from other departments.)
- IV. **IGR Senior Capstone:** ALA 429 / SOC 471 / PSYCH 411: IGR Senior Capstone: Social Justice in the Real World – an interdisciplinary experience to connect their learning throughout the minor. Students consider the broad national and global challenges facing their generation and examine them using real-world settings.

### Intergroup Relations Education Approved Electives From Other Departments

- AAS 202: Introduction to Afro-Caribbean Studies
- AAS 248: Crime, Race, and the Law
- AAS 262 / HISTORY 272: Modern Civil Rights Movement
- AAS / WGS 328 (WGS 328): Women, Agency & Sexual Safety (F17)
- AAS / WGS 381 (WGS 381) / ENGLISH 380: Fictions and Feminisms (F17)
- AAS / WGS 443 (WGS 443): Pedagogy of Empowerment (F17)
- AAS 451: Law, Race, and the Historical Process, II
- ALA 228 / SOC 375 / PSYCH 312: Intergroup Conflict & Coexistence: Religion, Ethnicity, & Culture
- AMCULT / ARABAM 215 / MIDEAST 275: Introduction to Arab-American Studies
- AMCULT / NATIVAM 217: Introduction to Native American Studies
- AMCULT / WGS 240 (WGS 240): Introduction to Women's and Gender Studies
- AMCULT / FTVM / COMM / DIGITAL 334: Race and Video Games (F17)
- AMCULT / ASIANPAM 353 / HISTORY 454: Asians in American Film and Television
- AMCULT / WGS 411 (WGS 411): Rednecks, Queers, and Country Music
- ANTHRCUL 302 / WGS 302 / HISTART 302: Sex and Gender in Japan
- ANTHRCUL / LING 370: Language and Discrimination (F17)
- ARABAM / AMCULT 215 / MIDEAST 275: Introduction to Arab-American Studies
- ASIAN 334: Prejudice: India & US (F17)
- ASIAN 352: Gender, Sexuality, and Power in Premodern China (F17)
- ASIANPAM / AMCULT 353 / HISTORY 454: Asians in American Film and Television
- COMM / FTVM / AMCULT / DIGITAL 334: Race and Video Games (F17)

- COMM 428: Gender, Media, and the Law
- DIGITAL / COMM / FTVM / AMCULT 334: Race and Video Games (F17)
- EDUC 463: Web-Based Mentorship: Arab-Israel Conflict Simulation
- ENGLISH / WGS 315 (WGS 315): Women & Literature (F17)
- ENGLISH 316: Disability Studies (F17)
- ENGLISH 380 / AAS / WGS 381 (WGS 381): Fictions and Feminisms (F17)
- ENVIRON / ORGSTUDY 203: Activism
- FTVM / AMCULT / COMM / DIGITAL 334: Race and Video Games (F17)
- HISTART / ANTHRCUL / WGS 302 (WGS 302): Sex and Gender in Japan
- HISTORY 272 / AAS 262: Modern Civil Rights Movement
- HISTORY / LACS 349: Revolutionary Movements in Modern Latin America
- HISTORY 454 / AMCULT / ASIANPAM 353: Asians in American Film and Television
- INTLSTD 401: International Studies Advanced Seminar, *section titled "Women and Islam: The Politics of Representation"*
- LACS / HISTORY 349: Revolutionary Movements in Modern Latin America
- LING / ANTHRCUL 370: Language and Discrimination (F17)
- MIDEAST 275 / AMCULT / ARABAM 215: Introduction to Arab-American Studies
- ORGSTUDY / ENVIRON 203: Activism
- PSYCH 280: Introduction to Social Psychology
- PSYCH / WGS 291 (WGS 291): Introduction to the Psychology of Women and Gender
- PSYCH 312 / ALA 228 / SOC 375: Intergroup Conflict & Coexistence: Religion, Ethnicity, & Culture
- PSYCH 353: Social Development
- RCSSCI 360: Social Science Junior Seminar, *section titled "Transgender Politics and Community Action"*
- SM 421 / WGS 421: Gender and Sport
- SOC 345 / WGS 348 (WGS 348): Sociology of Sexuality
- SOC 346: Sociology of the Body
- SOC 354: Law & Society (F17)
- SOC 368: Criminology
- SOC 375 / ALA 228 / PSYCH 312: Intergroup Conflict & Coexistence: Religion, Ethnicity, & Culture
- SOC / WGS 447: Sociology of Gender
- SOC 458: Sociology of Education
- WGS (WGS) / AMCULT 240: Introduction to Women's and Gender Studies
- WGS 245 (WGS 245): Introduction to LGBT and Queer Studies
- WGS (WGS) / PSYCH 291: Introduction to the Psychology of Women and Gender
- WGS (WGS) / ANTHRCUL / HISTART 302: Sex and Gender in Japan
- WGS (WGS) / ENGLISH 315: Women and Literature (F17)
- WGS (WGS) / AAS 328: Women, Agency & Sexual Safety (F17)
- WGS 330 (WGS 330): Feminist Thought
- WGS 331 (WGS 331): Feminist Theoretical Perspectives in Gender & Health (F17)
- WGS 348 (WGS 348) / SOC 345: Sociology of Sexuality
- WGS (WGS) / AAS 381 / ENGLISH 380: Fictions and Feminisms (F17)
- WGS (WGS) / AMCULT 411: Rednecks, Queers, and Country Music
- WGS (WGS) / SM 421: Gender and Sport
- WGS (WGS) / AAS 443: Pedagogy of Empowerment (F17)
- WGS / SOC 447: Sociology of Gender

# International Studies Major

[The Program in International and Comparative Studies \(PICS\)](#) seeks to be a focal point for the interdisciplinary study of issues that transcend borders. We encourage students and faculty to broaden their horizons while they deepen their knowledge of particular cultures and political, economic, and social contexts. We administer one of the fastest growing and largest undergraduate programs on campus in the form of both a **major** and minor as well as [fellowship support](#) for students.

Knowledge and insight pertaining to global affairs and different societies and cultures are more important than ever in today's interconnected world. A well-developed international perspective contributes to personal intellectual growth, is an increasingly important component of America's civic culture, and is required for success in an expanding number of professions.

## Subplans

- [International Security, Norms & Cooperation](#)
- [Political Economy & Development](#)
- [Comparative Culture & Identity](#)
- [Global Environment & Health](#)

The major in International Studies offers students the opportunity to take a set of courses across departments to bring multiple methods and concepts together to address global problems. The major is rigorous and offers a balanced approach between disciplinary depth and cross-disciplinary breadth.

It is an opportunity for students to create a curriculum that combines exposure to disciplinary depth and integrative coursework emphasizing successful interdisciplinary research. Our goal is to give students skills in moving among different units of analysis and different disciplinary approaches in order to understand, analyze, and ultimately help solve contemporary problems. International Studies students will be exposed to a rigorous curriculum emphasizing the use of multiple methods of analysis of such topics as terrorism, global health trends, human rights and refugees, cultural homogenization and hybridization, environmental and energy crises, transnational religious movements, and the spread of technology. The major will draw on methods developed in specific disciplines such as economics, sociology, psychology, comparative literature, political science, anthropology, and history, and some methods emerging from cross-disciplinary and inter-disciplinary fields.

*Effective Fall 2020*

## Exclusions:

International Studies majors must declare a sub-plan. The sub-plan will be notated on the student's official transcript.

## Advising

The International Studies Advisor will assist students in developing a program of study. Advising for the Honors plan is provided by the PICS Director and the PICS Honors Thesis advisor. For more information, see: [www.i.umich.edu/pics/undergraduates/advising](http://www.i.umich.edu/pics/undergraduates/advising).

## Grade Policies

Students must earn a C- or better in all required PICS courses. Language requirement courses are not included in the minimum 34 credits required for the major nor in the major GPA.

## Prerequisites

The following requirements must be met before declaration:

- INTLSTD 101: Introduction to International Studies (Grade of C or better).
- Students declaring Political Economy & Development sub-plan must complete ECON 101 with a grade of C or better.
- Students must have started or completed 4th-term language proficiency.

## Requirements

**Minimum Credits: 34**

### **PICS Language Requirement for the Major.**

Sixth-term proficiency in a language other than English must be obtained prior to graduation; therefore, *students should begin the language sequence early*.

We believe that language study is a vital part of any liberal arts education and that students who major in international studies should be well prepared to work in environments overseas, or in companies or organizations that interact regularly with people from other countries. The PICS language requirement will not only be of benefit to the students in broadening their skills and their vision of the world but will also be an important signal to employers or graduate admissions committees about how our students are well-rounded and focused on the world and not just the United States.

Please see [PICS website](#) for details of and further information about the sixth-term language requirement.

See Sub-Plans for course requirements:

- [International Security, Norms & Cooperation \(ISNC\)](#)
- [Political Economy & Development \(PED\)](#)
- [Comparative Culture & Identity \(CCI\)](#)
- [Global Environment & Health \(GEH\)](#)



## Honors

Students interested in the Honors subplan typically elect the Honors section of INTLSTD 101: *Introduction to International Studies*, and must complete INTLSTD 101 with a grade of B+ or better. Students who have declared a major in International Studies must have an overall GPA of 3.4, must complete all International Studies requirements for the major with a 3.4 or higher average in those courses, and complete a senior Honors thesis.

*Students must earn C- or better in all required PICS courses.*

During their **senior year**, students writing a thesis will enroll in INTLSTD 489 during Fall term and INTLSTD 499 during Winter term. The thesis will have a minimum length of 50 pages. Students are responsible for locating their own PICS faculty thesis advisor. Advisor and topic must be approved by PICS director.

An instructor will oversee the Honors subplan. This will include a class meeting with all Honors thesis students as a collective, at least twice per semester of their senior year, and once at the end of their junior year, to review requirements, answer questions, and discuss research practices and principles.

Each student will have an oral defense of the thesis in a meeting with the Honors thesis advisor, the Coordinator of Experiential, Independent, and Honors Education, plus one outside reader from the faculty.

Student grades on the thesis and Honors level will be determined by the PICS instructor in consultation with the Honors thesis advisor.

Advising for the Honors Plan is provided by the Honors advisor and the PICS Honors Plan advisor.

## International Studies Minor

The [Program in International and Comparative Studies \(PICS\)](#) seeks to be a focal point for the interdisciplinary study of issues that transcend borders. We encourage students and faculty to broaden their horizons while they deepen their knowledge of particular cultures and political, economic, and social contexts. We administer one of the fastest growing and largest undergraduate programs on campus in the form of both a [major](#) and **minor** as well as [fellowship support](#) for students.

Knowledge and insight pertaining to global affairs and different societies and cultures are more important than ever in today's interconnected world. A well-developed international perspective contributes to personal intellectual growth, is an increasingly important component of America's civic culture, and is required for success in an expanding number of professions.

The International Studies Minor is intended to be a rigorous program of study. It will be of interest to students prepared to make a serious investment in adding an international dimension to the instructional program associated with a disciplinary major.

The Minor in International Studies offers students an opportunity to add to their disciplinary major a program of study that includes the following:

1. attention to another country or world region;
2. interdisciplinary coursework devoted to a particular theme or topic of international relevance;
3. progress toward proficiency in a foreign language;
4. support for an education abroad experience; and
5. an innovative interdisciplinary seminar

*Effective Winer 2021*

**Exclusions:**

*Not open to student with a major in International Studies.*

Advising

The International Studies Advisor will assist students in developing a program of study. Advising for the Honors plan is provided by the PICS Director and the PICS Honors Thesis advisor. For more information, see: <http://www.ii.umich.edu/pics/undergraduates/advising.html>

Grade Policies

Students must earn a C- or better in all required minor courses. Language requirement courses are not included in the minimum 18 credits required for the minor nor in the minor GPA.

Prerequisites

Students must have started or completed 4<sup>th</sup>-term language proficiency.

Requirements

**Minimum Credits: 18**

Students are required to complete a minimum of 18 credits of course work, exclusive of language study. These courses must include the following:

1. **A "geographic" emphasis** composed of three courses devoted to a single world region (e.g., Africa, South Asia) or country (e.g., China, India). At least two of the three geographic courses must be 300-level or above.
2. **A "thematic" emphasis** composed of three courses devoted to a given theme or topic (e.g., international conflict and security, human rights, music and ethnomusicology). At least two of the three thematic courses must be 300-level or above.

**Geographic and thematic course selections must be approved by the International Studies Advisor.** Each three-course set must possess intellectual coherence, and there must also be a clear and logical connection between the focus of the selected geographic and thematic

courses. The International Studies advisor will consult the Director of PICS and members of the PICS Advisory Committee for guidance in assessing a proposed program of study.

3. **INTLSTD 401: International Studies Advanced Topics Seminar** will be offered for students in the minor. This course should be taken after junior year and considered a capstone course for the minor.
4. The International Studies Advanced Topics Interdisciplinary Seminar is a variable content course designed to bring an interdisciplinary perspective to the study of a topic of international significance. Some seminars will be team-taught and some will be taught by faculty with International Institute Sponsored Appointments. Seminars may occasionally be taught by visiting international scholars. At least one International Studies Seminar will be offered every year.

**PICS Language Requirement for the Minor.** Sixth-term proficiency in a language other than English must be obtained prior to graduation; therefore, students should begin the language sequence early.

We believe that language study is a vital part of any liberal arts education and that students who major in international studies should be well prepared to work in environments overseas, or in companies or organizations that interact regularly with people from other countries. The PICS language requirement will not only be of benefit to the students in broadening their skills and their vision of the world but will also be an important signal to employers or graduate admissions committees about how our students are well-rounded and focused on the world and not just the United States.

Please see PICS website for details of and further information about the sixth-term language requirement.

**Education Abroad.** An education abroad experience is strongly encouraged. The International Studies advisor, in cooperation with the [Center for Global and Intercultural Study \(CGIS\)](#), will assist students in identifying education abroad opportunities consistent with their needs and interests.

Limited funding will be made available to students in the International Studies Minor to encourage and facilitate participation in education abroad programs. Applications for these funds should demonstrate a connection between the overseas program and the student's area(s) of emphasis.

Although strongly encouraged, an education abroad experience is not required for the International Studies Academic Minor since some students may be unable to meet this requirement because of financial, family, or other considerations.

### Constraints

One course can be "double-counted" and thus count for both the geographic and the thematic major requirement. It is expected that most students will choose to double-count one course; those not choosing to do so will be required to complete 21 credits of coursework for the International Studies Minor.

The five or six geographic and thematic courses taken by a student must be from at least two academic disciplines. No more than one of these courses in the minor may be shared with requirements of the student's major program.

# Islamic Studies Minor

The Islamic Studies Program (ISP) offers an interdisciplinary academic minor to students who wish

- a. to better understand the history and culture of the Islamic religion and Muslim societies and
- b. to gain insight into the political, economic, and social transitions taking place in this field.

This is the only academic program at U-M whose focus is solely on Islam. The focus of this academic minor is not restricted to a single world region and does not have any prerequisites.

*Effective Winter 2016*

## Advising

Undergraduate advisors at the International Institute are available to meet with undeclared students who would like to learn more about the program, and also with current majors and minors who would like to discuss course selection, degree requirements, major/minor releases, and other matters of concern. Appointments can be made through our online appointment calendar [here](#). Information on all of our undergraduate programs and Walk-In Advising hours can also be found on our website. The International Institute's Undergraduate Advising Office is currently located at 1080 South University Avenue, Suite 2660.

## Prerequisites

None.

## Requirements

### **Minimum Credits: 16**

At least 16 credits, selected in consultation with and approved by the ISP undergraduate academic advisor, from the following.

1. MIDEAST 216: Introduction to Islam
2. Four additional courses on Islam or on Muslim societies
  - At least two courses which must be 300-level or above
  - At least two 3-credit courses covering two of the following regions:
    - Central Asia
    - East and Southeast Asia
    - Europe and the Americas
    - South Asia
    - Middle East and North Africa
    - Sub-Saharan Africa

## **General Islamic Studies: without specific regional focus**

- HISTORY 243 / MENAS 243: Islamic World History
- HISTORY 428 / MIDEAST 413: The Rise of Islam
- HISTORY 429 / MIDEAST 432 / RELIGION 496 / WGS 471 (WGS 471): Gender & Sexuality in Pre-Modern Islam
- HISTORY 487 / MIDEAST 422 / RELIGION 467: Shi'ism: The History of Messianism and the Pursuit of Justice in Islamdom
- HISTART 285 / MIDEAST 285: Islamic Visual Culture
- MENAS 243 / HISTORY 243: Islamic World History
- MUSICOL 343: Music and Islam
- MIDEAST 216 / RELIGION 204: Introduction to Islam
- MIDEAST 285 / HISTART 285: Islamic Visual Culture
- MIDEAST 321: Jihad in History
- MIDEAST 322 / RELIGION 363: The Qur'an and Its Interpretations
- MIDEAST 323: The Prophet Muhammad in Islam
- MIDEAST 413 / HISTORY 428: The Rise of Islam
- MIDEAST 421 / RELIGION 465: Islamic Mysticism
- MIDEAST 422 RELIGION 467: Shi'ism: The History of Messianism and the Pursuit of Justice in Islamdom
- MIDEAST 423: Islamic Law
- MIDEAST 424: Islamic Intellectual History
- MIDEAST 432 / HISTORY 429 / RELIGION 496 / WGS 471 (WGS 471): Gender & Sexuality in Pre-Modern Islam
- MIDEAST 520: Readings in Classical Islamic Texts
- REEES / SOC 490 / WGS 492: Women & Islam
- RELIGION 204 / MIDEAST 216: Introduction to Islam
- RELIGION 363 / MIDEAST 322: The Qur'an and Its Interpretations
- RELIGION 465 / MIDEAST 421: Islamic Mysticism
- RELIGION 467 / MIDEAST 422 / HISTORY 487: Shi'ism: The History of Messianism and the Pursuit of Justice in Islamdom
- RELIGION 496 / MIDEAST 432 / HISTORY 429 / WGS 471 (WGS 471): Gender & Sexuality in Pre-Modern Islam
- SOC 490 / REEES 490 / WGS 492: Women & Islam
- WGS 471 (WGS 471) / MIDEAST 432 / HISTORY 429 / RELIGION 496: Gender & Sexuality in Pre-Modern Islam
- WGS 492 / SOC / REEES 490: Women & Islam

## **Middle East & North Africa**

- AMCULT 368 / ARABAM 363 / MIDEAST 378 / WGS 368: Women and War in theMiddle East
- ARABAM 363 / MIDEAST 378 / AMCULT 368 / WGS 368: Women and War in theMiddle East
- ANTHRCUL 409: Peoples and Cultures of the Near East & North Africa
- GTBOOKS 296 / MIDEAST 219: Great Books of the Middle East
- HISTORY 290 / MIDEAST 287 / JUDAIC 290: Jews and Muslims
- HISTORY 306 / MIDEAST 319: History of the Ottoman Empire: The "Classical Age", (ca. 1300-1600)
- HISTORY 335: The Ottoman Enterprise
- HISTORY 442 / MIDEAST 417: The First Millennium of the Islamic Near East
- HISTORY 443 / MIDEAST 487: Modern Middle Eastern History
- JUDAIC 290 / MIDEAST 287 / HISTORY 290: Jews and Muslims

- MIDEAST 287 / HISTORY / JUDAIC 290: Jews and Muslims
- MIDEAST 219 / GTBOOKS 296: Great Books of the Middle East
- MIDEAST 315: Introduction to Arab Culture: Race, Ethnicity and Gender Issues
- MIDEAST 317: Turkey: Language, Culture, Society between East and West
- MIDEAST 319 / HISTORY 306: History of the Ottoman Empire: The “Classical Age”, (ca. 1300-1600)
- MIDEAST 320 / HISTORY 307: History of the Ottoman Empire: The “Post-Classical Age”, (ca. 1600-1922)
- MIDEAST 325: Introduction to Arabic Literature in Translation
- MIDEAST 378 / AMCULT / WGS 368 / ARABAM 363: Women and War in the Middle East
- MIDEAST 416: Ottoman Turkish Culture
- MIDEAST 417 / HISTORY 442: The First Millennium of the Islamic Near East
- MIDEAST 487 / HISTORY 443: Modern Middle Eastern History
- WGS 368 / MIDEAST 378 / ARABAM 363 / AMCULT 368: Women and War in the Middle East

## **Sub-Saharan Africa**

Topics courses as approved by the ISP advisor

## **South Asia**

- HISTORY 325 / MIDEAST 375 / ASIAN 324 / RELIGION 325 / MEMS 325: The History of Islam in South Asia

## **East and Southeast Asia**

- ASIAN 464 / HISTORY 470 / RELIGION 464: From Mystic Saints to Holy Warriors: Islam in Southeast Asia

## **Central Asia**

- HISTORY / MIDEAST / ASIAN / MENAS / REEES 340: From Genghis Khan to the Taliban: Modern Central Asia
- RUSSIAN 358: Central Asia through Russian Eyes: Cultural Appropriation of an Exotic Land

## **Europe & the Americas**

- AMCULT / ARABAM 215 / MIDEAST 275: Introduction to Arab-American Studies
- AMCULT / ARABAM / WGS 235 (WGS 235): From Harems to Terrorists: Representing the Middle East in Hollywood Cinema
- ARABAM / AMCULT 236: Muslims in America
- HISTORY 324: Muslims and Contemporary Europe

## **Constraints**

Language courses may not be counted toward the minor.

## Residency

At least twelve of the sixteen required credits for the minor must be elected at the University of Michigan or at an overseas program associated with U-M.

# Italian Major

Major in Italian allows students considerable flexibility in developing a program of study leading to competence in the Italian language and basic familiarity with Italian literature and culture.

*Effective Winter 2021*

## Advising

The Department offers majors in French, Italian, Romance Languages & Literatures, and Spanish. It offers minors in French, Italian, Portuguese, and Spanish.

Appointments are scheduled [online](#) or at the department office, 4108 Modern Languages Building, (734) 764-5344.

## Prerequisites

ITALIAN 230, 232, 233, or 410, or the equivalent.

## Requirements

### Minimum Credits: 30

- A minimum of 30 credits in Italian courses numbered ITALIAN 235 and above.
- 12 credits must be conducted in the target language of Italian. Of these, at least one course must be at the 200-level beyond 233, at least one at the 300-level, and at least one at the 400-level.
- Three credits may be accepted from courses in a cognate field, selected in consultation with and approved by the department advisor.
- ITALIAN 410 (Italian for Spanish Speakers) does not count toward the Italian requirements for the major.

## Residency

A minimum of 15 of the required 30 credits must be taken either in residence or through a study abroad program affiliated with the University of Michigan. At least one course at either the 300- or 400-level, taught in Italian, must be taken in RLL at the Ann Arbor campus.

Italian majors are encouraged to consider study abroad programs with an emphasis on Italian immersion. For information on receiving credit for study abroad in other programs, consult the department advisor.

## Distribution Policy

No course used to fulfill a major requirement may be used toward the [LSA Distribution Requirement](#). In addition, courses in the CATALAN, FRENCH, ITALIAN, PORTUG, ROMLANG, ROMLING, and SPANISH

subject areas may not be used toward the Distribution Requirement.

## Honors

Qualified students may be admitted to a program of advanced study during their junior year (or at the beginning of the senior year following foreign study), leading to the degree of Bachelor of Arts with Honors in Italian. Admission to senior-level Honors work in Italian is by application only (forms are available on the department website at [www.lsa.umich.edu/rll](http://www.lsa.umich.edu/rll)). A grade point average of at least 3.5 in all courses, as well as in all Italian courses, is required for admission and for graduation with Honors in Italian. The Honors Committee expects applicants to demonstrate superior ability for their level in both oral and written Italian, and to present evidence of serious interest in research.

Italian Honors majors are required to complete 33 credits of coursework and successfully defend a thesis:

### **Course Requirements:**

All regular Italian major requirements must be completed (30 credits) with 3 additional credits at the 300 level or above. 6 of the required 33 credits will consist of ITALIAN 491 and 492, Senior Honors Courses, normally taken in the fall and winter terms, respectively, of a student's senior year.

### **Thesis Requirement:**

Composition of a thesis, in Italian, incorporating the results of individual research, demonstrating a substantial piece of work; and

A presentation and discussion of the thesis and of an agreed upon set of related readings with the student's faculty advisor and one other faculty reader.

Working under the direction of a faculty member who serves as thesis director, the student will research the thesis, complete a bibliography and prospectus, and begin drafting the writing process while enrolled in ITALIAN 491. In the following academic term the student will enroll in ITALIAN 492 and complete the thesis and its presentation and discussion.

## **Italian Minor**

The objectives of the minor in Italian are to develop some facility in the use of Italian, to recognize major monuments of Italian literature, and to gain insight in to the history and present of Italian culture.

This minor offers students an opportunity to complement the knowledge gained in their principal field while focusing on linguistic competence and a grounding in one of the world's most historically influential, currently vibrant literatures and cultures.

*Effective Winter 2021*



### Exclusions:

*The minor in Italian is not open to students with an Italian major or any other minor in Romance Languages and Literatures.*

### Advising

The Department offers majors in French, Italian, Romance Languages & Literatures, and Spanish. It offers minors in French, Italian, Portuguese, and Spanish.

Appointments are scheduled [online](#) or at the department office, 4108 Modern Languages Building, (734) 764-5344.

### Prerequisites

ITALIAN 230, 232, 233, or 410, or the equivalent

### Requirements

#### Minimum Credits: 18

- 18 credits of courses in ITALIAN numbered ITALIAN 235 or higher, of which nine credits must be conducted in the Italian language.
- The 18 credits must include at least one course each at the 200-level beyond ITALIAN 233, the 300-level, and the 400-level.
- Three credits may be accepted from courses in a cognate field, selected in consultation with and approved by the department's advisor.

### Constraints

ITALIAN 410 (Italian for Spanish Speakers) does not count toward the Italian minor requirements.

### Residency

At least 9 of the 18 credits for the Academic Minor must be taken in residence or in a study abroad program affiliated with the University of Michigan. At least one course at either the 300- or 400-level, taught in Italian, must be taken in RLL at the Ann Arbor campus.

## Judaic Studies Major

A major in Judaic Studies enhances vital skills in research and writing, critical and creative thinking, cultural awareness, public speaking, and persuasive communicating. Judaic Studies majors pursue careers in Jewish communal services, social work, education, development, political advocacy, religious leadership, law, medicine, business, and other professional fields.

*Effective Fall 2020*

## Exclusions:

*Students can pursue both a Judaic Studies and a Middle East Studies major as long as the student does not elect to pursue both a Middle East Studies Hebrew submajor and a Judaic Studies Hebrew sub plan. Students pursuing a Middle East Studies Hebrew submajor or Judaic Studies Hebrew subplan cannot use the Hebrew credits used to fulfill the Hebrew submajor/subplan to also fulfill requirements for the Judaic Studies or Middle East Studies major.*

## Advising

A student who is interested in a major in Judaic Studies should meet with the major advisor as early as possible to plan a coherent course of study. Please email js-student-services@umich.edu or call 734-615-6097 to schedule an appointment.

## Prerequisites

None

## Requirements

**Minimum Credits: 28**

- **Core.** At least one of the following
  - JUDAIC 205: What is Judaism
  - JUDAIC 210 Sources of Jewish History
  - JUDAIC 281: Jews in the Modern World
- **Electives:** All courses must be at the 200-level or above with a Judaic listing or be approved by a major advisor.
- **Upper Level Credit Requirement** At least 15 credits must be at 300 or 400 level; at least one of these courses must be at the 400 level.

**Hebrew Sub Plan:** Optional sub plan for Judaic Studies majors

- Prerequisite of first year proficiency in Hebrew achieved through coursework (Hebrew 102) or placement examination.
- Judaic Studies Hebrew Sub Plan Language Requirement (6 credit minimum taken in residence): one 200 level course can count toward the language requirement (but does not count toward the 28 credit major). At least one Hebrew language course must be taken at the 300-level or above

## Language:

- 200 level language courses in less commonly taught languages (such as Yiddish, Ladino, or Biblical Hebrew) can count toward the 28 credit major (up to 8 credits)

## Constraints

- Advanced Hebrew and Yiddish language courses (300-level and 400-level) may count toward the major.
- Students may not use more than one Independent study course as an elective unless approved

by the Judaic Studies advisor.

### Residency

Fifteen of the 28 credits must be elected in residence unless special permission is given by the major advisor.

### Honors

The Center offers an Honors plan to qualified Judaic Studies students. Application for an Honors plan is usually made at the beginning of the third year. Participation requires a 3.5 grade point average. Graduation with Honors is recommended for students who complete all College and Judaic Studies graduation requirements, maintain a 3.5 GPA, and write a substantial Honors thesis which is judged worthy of Honors designation by the thesis advisor and at least one other faculty reader. An Honors plan is not limited to students who have been in the College Honors Program in the first and second years. For more information about Honors, email [Ask.Honors@umich.edu](mailto:Ask.Honors@umich.edu) or call 734.764.6274.

## Judaic Studies Minor

The minor in Judaic Studies provides a basic familiarity with Judaic Studies. It introduces students to Jewish cultures and societies. Judaic Studies courses explore the diverse experiences of the Jewish people, their traditions, their histories, their interactions with other cultures, and their impact on world civilizations. The fifteen credits required for a minor in Judaic Studies are tailored to complement and enrich the programs of students who come from a widespread range of disciplines. A degree in Judaic Studies enhances vital skills in research and writing, critical and creative thinking, cultural awareness, public speaking, and persuasive communicating. Judaic Studies minors pursue careers in Jewish communal services, social work, education, development, political advocacy, religious leadership, law, medicine, business, and other professional fields.

*Effective Fall 2020*

### Exclusions:

*A minor in Judaic Studies is not open to students with a major in Judaic Studies or a minor in Yiddish Studies.*

### Advising

A student who is interested in a minor in Judaic Studies should meet with the minor advisor as early as possible to plan a coherent course of study. Please email [JudaicStudies@umich.edu](mailto:JudaicStudies@umich.edu) or call 734-615-6097 to schedule an appointment.

### Prerequisites

None.

## Requirements

### Minimum Credits: 15

At least two courses must be taken at the 300 or 400 level (6 credits).

- A. **Core Courses:** At least one of the following three core courses:
- JUDAIC 205: What is Judaism?
  - JUDAIC 210: Sources of Jewish History
  - JUDAIC 281: Jews in Modern World
- B. **Electives.** The remainder of the 15 credits selected from the list below.

## Judaic Studies

Any course in JUDAIC or YIDDISH at the 200-level or above, or crosslisted with JUDAIC or crosslisted with YIDDISH, except for elementary language courses (JUDAIC 201, 202, 531, 532 or GERMAN 227, 228 or YIDDISH 201, 202, 531, 532)

## Courses in other departments

- AMCULT 342 / HISTORY 368 / WGS 360: History of the Family in the U.S.
- CLARCH 327 / CLCIV 327 / MIDEAST 355 / RELIGION 326: Jews in the Roman Mediterranean: Archaeology, Religion, and Culture
- CLCIV 327 / CLARCH 327 / MIDEAST 355 / RELIGION 326: Jews in the Roman Mediterranean: Archaeology, Religion, and Culture
- ENGLISH 313: Topics in Literary Studies, section titled "Literature of the Holocaust"
- ENGLISH 317: Literature and Culture, *sections titled "Yiddish Classics", "Yiddish Classics and Modernity", or "Literature of the Holocaust"*
- GERMAN 322 / HISTORY 322: The Origins of Nazism
- HEBREW 301: Advanced Hebrew I
- HEBREW 302: Advanced Hebrew II
- HISTORY 322 / GERMAN 322: The Origins of Nazism
- HISTORY 368 / AMCULT 342 / WGS 360: History of the Family in the U.S.
- MIDEAST 200 : Introduction to the Middle East
- MIDEAST 201: Madness, Medicine, and Magic in the Middle East
- MIDEAST 235 / RELIGION 121: Introduction to the Tanakh/Old Testament
- MIDEAST 238 / RELIGION 280: The Historical Jesus in Christianity, Judaism, and Islam
- MIDEAST 242 / RELIGION 270: Introduction to Rabbinic Literature
- MIDEAST 326: The Arab-Israeli Conflict in Middle Eastern Literature
- MIDEAST 335 / RELIGION 359: History and Religion of Ancient Judaism
- MIDEAST 339 / RELIGION 358: Israel Before the Exile (587 BCE): Its History & Religion
- MIDEAST 355 / CLARCH 327 / CLCIV 327 / RELIGION 326: Jews in the Roman Mediterranean: Archaeology, Religion, and Culture
- POLSCI 351: Israeli Society and Politics
- POLSCI 353: The Arab-Israeli Conflict
- RELIGION 121 / MIDEAST 235: Introduction to the Tanakh/Old Testament
- RELIGION 270 / MIDEAST 242: Introduction to Rabbinic Literature
- RELIGION 280 / MIDEAST 238: The Historical Jesus in Christianity, Judaism, and Islam
- RELIGION 326 / MIDEAST 355 / CLARCH 327 / CLCIV 327: Jews in the Roman Mediterranean: Archaeology, Religion, and Culture
- RELIGION 358 / MIDEAST 339: Israel Before the Exile (587 BCE): Its History & Religion
- RELIGION 359 / MIDEAST 335: History and Religion of Ancient Judaism

- WGS 360 / HISTORY 368 / AMCULT 342: History of the Family in the U.S.

### Constraints

- Only advanced Hebrew and Yiddish language courses (300-level and 400-level) may count toward the minor.
- Students may not use more than one Independent study course as an elective.

### Residency

At least three of the courses counting toward the minor must be taken at the UM-Ann Arbor campus.

## Latin American and Caribbean Studies Major

The Interdepartmental Program of study in a major in Latin American and Caribbean Studies is designed to provide students with a rigorous, multi-disciplinary approach to the study of Latin America and the Caribbean. A broad base of knowledge is established by the requirement of a core of upper-level work in languages, the social sciences, and the humanities. Analytical depth is demonstrated through the completion of a senior thesis under appropriate faculty supervision.

*Effective Fall 2016*

### Advising

Undergraduate advisors at the International Institute are available to meet with undeclared students who would like to learn more about the program, and also with current majors and minors who would like to discuss course selection, degree requirements, major/minor releases, and other matters of concern. Appointments can be made through our online appointment calendar [here](#). Information on all of our undergraduate programs and Walk-In Advising hours can also be found on our website. The International Institute's Undergraduate Advising Office is currently located at 1080 South University Avenue, Suite 2660.

### Prerequisites

None.

### Requirements

**Minimum Credits: 30**

**LACS Language Requirement for the Major.** Proficiency in Spanish [SPANISH 277 or RCLANG 294 or equivalent] or Portuguese [PORTUG 232 or equivalent] should be achieved as early as possible in the program. Students are encouraged to go beyond this, either with further work in the language chosen, or by achieving competency in the other major language.

Language requirement courses are not included in the minimum 30 credits required for the major

nor in the major GPA.

At least 20 credits must be at the 300-400 level.

**Required Courses.** Students must include at least one course from each of the following areas of study:

- *Anthropology:*  
ANTHRCUL 319: Latin American Society and Culture, ANTHRCUL 414: Introduction to Caribbean Societies and Cultures, I, or an upper-level Anthropology course on Latin America, approved by an advisor.
- *History:*  
HISTORY 347: Latin America: The Colonial Period or HISTORY 348: Latin America: The National Period, or an upper-level HISTORY course on Latin America, approved by an advisor.
- *Literature:*  
SPANISH 381: Survey of Latin American Literature, I, SPANISH 382: Survey of Latin American Literature, II, or an upper-level course in Latin American literature, approved by an advisor.
- *Politics and Economy:*  
SPANISH 438: Economy and Politics in Latin America/Spain, or an upper-level course in Latin American politics and/or economy, approved by an advisor.

**Note:** courses in this area are usually found in the departments of Political Science, Sociology, and Spanish.

**Elective Courses.** The remainder of the 30 credits may be drawn from courses, from any department, that deal with Latin America and the Caribbean; including up to 4 credits of Quechua or Nahuatl language. Study Abroad coursework may be used toward the major with approval from an advisor.

#### Distribution Policy

No course used to fulfill a major requirement may be used toward the [LSA Distribution Requirement](#). In addition, courses in the LACS subject area may not be used toward the Distribution Requirement.

#### Honors

Application for an Honors major is usually made at the beginning of the third year. Participation requires a 3.5 GPA in all LACS coursework and a 3.4 overall GPA. Graduation with Honors is recommended for students who complete all College and LACS graduation requirements, maintain a 3.5 major GPA, 3.4 overall GPA, and write a substantial LACS Senior Thesis that is judged worthy of Honors designation by the thesis advisor and at least one other faculty reader. An Honors major is not limited to students who have been in the College Honors Program in the first and second years. LACS Honors candidates will enroll in LACS 399 during their thesis writing semester. More details about the Senior Thesis and about applying for LACS Honors may be obtained from the department advisor.

# Latin American and Caribbean Studies

## Minor

The LACS minor is designed to provide students with a multidisciplinary approach to the study of Latin America and the Caribbean. It aims to enhance the student's disciplinary training, received through major in a traditional discipline, by exposing the student to the topics and issues that are raised in the multidisciplinary area studies approach to countries of the Americas.

*Effective Fall 2016*

### **Exclusions:**

*A minor in Latin American and Caribbean Studies is not open to students with a major in Latin American and Caribbean Studies.*

### Advising

Undergraduate advisors at the International Institute are available to meet with undeclared students who would like to learn more about the program, and also with current majors and minors who would like to discuss course selection, degree requirements, major/minor releases, and other matters of concern. Appointments can be made through our online appointment calendar [here](#). Information on all of our undergraduate programs and Walk-In Advising hours can also be found on our website. The International Institute's Undergraduate Advising Office is currently located at 1080 South University Avenue, Suite 2660.

Students wishing to pursue a minor in Latin American and Caribbean Studies must develop a specific plan for its completion in consultation with an advisor; including the declaration of one of three tracks: Health, Medicine and Science, Human Rights, or Latin American and Caribbean Societies.

### Prerequisites

SPANISH 232 or RCLANG 294, or PORTUG 232, or equivalent.

### Requirements

#### **Minimum Credits: 15**

At least 15 credit of advisor approved courses at the 300-level and above, to be chosen from one of the following tracks:

#### **1. Health, Medicine, and Science**

- Two courses (6 credits) directly related to the fields of Health, Medicine and Science that touch on issues in the Latin American and Caribbean region.
- Three courses (or at least 9 credits) drawn from courses, from any department, that cover Latin America and the Caribbean.

#### **2. Human Rights**

- Two courses (6 credits) directly related to the field of Human Rights that touch on issues in the Latin American and Caribbean region.

- Three courses (or at least 9 credits) drawn from courses, from any department, that cover Latin America and the Caribbean.

### **3. Latin American and Caribbean Societies**

- Two courses (6 credits) that touch on cultural and societal issues in the Latin American and Caribbean region.
- Three courses (or at least 9 credits) drawn from courses, from that cover Latin America and the Caribbean.

**Interdisciplinary Requirement.** Courses must be drawn from at least three different departments, with not more than six credits in any one department.

### **Residency**

Study Abroad coursework may be used toward the minor with approval from an advisor.

## **Latin Language and Literature Major**

A major in Classical Studies equips its students with the knowledge, skills, intellectual agility, and different points of view to pursue a variety of careers, whether the student's next step is entry into the workforce or further education in professional or graduate school. Faculty advisers work with students to develop a program of study within their major and to articulate the connections between their education and career goals and aspirations.

### **Learning Goals for All Majors**

Every major in Classical Studies asks students to:

- explore the many facets of the ancient world—its history, societal and cultural practices, and intellectual endeavors (e.g., law, religion, political theory and practice, art and material objects, language and literature, philosophy, science)
- recognize and interpret the complexities of the ancient world, including such problematic aspects as slavery, gender inequality, and various types of bias
- understand different critical perspectives
- ask questions and engage in critical thinking, especially analysis and synthesis of information, ideas, and situations to solve complex problems
- work with a variety of primary sources, both textual (in the original language or translation) and material (aided by the resources of the Kelsey Museum and the papyrology collection)
- make inferences from the fragmentary and incomplete record of the past
- communicate complex ideas and persuasive arguments in writing and oral presentations
- conduct research using primary and secondary sources, including both traditional and digital media

The Classical Studies Department encourages its students to participate in the wide array of events and activities in which faculty and graduate students are involved, including UROP



projects, student clubs, lectures, brown bag presentations, and reading groups. Students are also encouraged to study abroad.

Because many Classical Studies courses are small, majors have opportunities to work closely with their professors and professors get to know their students well.

### **Greek, Latin, or Classical Languages and Literatures (Greek and Latin)**

In addition to the learning goals mentioned above, each of the three language tracks asks students to:

- attain a sophisticated understanding of the ancient language(s) and a deepened understanding of how language constructs meaning
- attain a deep familiarity with foundational literary works and genres through close reading and critical analysis of the content and structure of texts in the original language(s)
- understand the ancient language(s) as the source for the terminology of medicine, law, and the sciences
- understand the wide-ranging influence of classical literature from antiquity to the modern era on cultural and creative enterprise
- draw on the rhetorical and narrative strategies of classical literature to strengthen and refine skills in writing clearly and persuasively

Our department provides free "drop-in" tutoring available to all students in the Elementary Latin and Greek courses.

*Effective Winter 2021*

#### [Advising](#)

Students interested in the Department's major programs in Greek, Latin, Classical Languages and Literatures, Classical Archaeology, Classical Civilization, or Modern Greek should check with the Department office for the name of the current advisor. Students interested in obtaining a Teacher Certification in Latin should see Dr. Shonda Tohm.

The Department recommends that interested students see the department advisors as early as possible in order to plan their programs and avoid unnecessary scheduling conflicts.

#### [Grade Policies](#)

The department requires that a student earn a grade of at least C– in all *language* courses which are prerequisite for subsequent elections. A student should repeat any *language* course in which a D+ or lower grade is earned and which serves as a prerequisite to other courses which are to be

elected. A grade of D+ signifies some achievement but denotes too weak a foundation for subsequent courses.

### Prerequisites

One of: LATIN 231 (Honors section) or 232 or 233, or LATIN 194; or special placement examination.

### Requirements

**Minimum Credits: 27**

Requires a minimum of 9 courses (of at least 3 credits each) including:

1. Seven courses in LATIN at the 300-level or above; of which at least four must be at the 400-level or above. At least two of the courses at the 400-level must be higher than the entry level advanced courses (i.e., LATIN 401, 402, 409, and 410).
2. one introductory course selected from CLARCH 222, CLCIV 202 and 302, or HISTORY 201.
3. At least one upper-level (300- or 400-level) course in Roman civilization, archaeology, or history. Minimum of 3 credits. (300-level must be above 303)

### Constraints

Three credits of Independent Study (LATIN 499) may be used with written approval of the undergraduate advisor.

### Honors

#### *Effective Date of Honors requirements for the major Fall 2016*

The department offers Honors in each of the six majors. Interested students who have a cumulative grade point average of at least 3.5 should contact their department advisor to discuss an Honors thesis no later than the winter term of their junior year at the latest.

It is the student's responsibility to find a suitable faculty advisor to oversee the thesis project. This project and its components are to be decided collectively by the student and the advisor at the end of the junior year. We encourage students to think creatively about the approach to their research and thesis project. Thesis advisors must sign off on a student's thesis project proposal.

Honors students may receive six credits during their senior year for research culminating in a thesis project by registering for one of the following courses: CLARCH 495, CLCIV 495, GREEK 495 or LATIN 495 depending on the major. At the end of the thesis project, the candidate must offer an oral defense of this work to a committee comprised of the thesis advisor and another faculty member, and present their research findings at the Classical Studies Honors Symposium.

In addition to the above requirements, students pursuing an Honors major must satisfy the following:

- 3.4 minimum overall GPA; 3.5 minimum major GPA
- Completion of an Honors thesis and oral defense in coordination with a Classics faculty member

- Completion of one additional Latin course at the 420-level or above (CLCIV 480 & LATIN 495 do not satisfy this requirement)
- CLCIV 480: Studying Antiquity, *section titled "Research Seminar"* (Fall term)

Students may also elect LATIN 495 for 1-2 credits in the Fall and 1-3 credits in the Winter but are not required to do so.

### Teaching Certificate

*Effective Fall 2012*

Students interested in a secondary school teaching certificate with a teaching major or minor in Latin must have Dr. Shonda Tohm approve their program of study.

*Teaching Major in Latin.*

Thirty credits which must include:

1. Fifteen credits in LATIN beyond 232, of which 12 must be at the 400-level or above; neither LATIN 499 nor 599 may be counted toward the teaching major without permission of the teaching certificate advisor;
2. One course in Latin composition;
3. One course in Classical Archaeology;
4. One course in Roman history;
5. One course in Linguistics.

*Teaching Minor in Latin.*

Twenty credits which must include:

1. Twelve credits in LATIN beyond LATIN 232, of which 9 must be at the 400-level or above. Neither LATIN 499 nor 599 may be counted toward the teaching minor without permission of the teaching certificate advisor;
2. One course in Roman history;
3. One course in Linguistics.

Dr. Shonda Tohm has the authority to modify departmental requirements for a teaching major or minor in special cases and in keeping with the general requirements for the teaching certificate.

## Latin Language and Literature Minor

This minor is designed to provide a basic, but contextual and broad, familiarity with Latin language and literature and the civilization of ancient Rome. More specifically, it requires students to study, at the intermediate and advanced level, Latin and authors writing poetry and/or prose, but at the same time, it acquaints the student with the broader historical, social, and cultural content in which these authors lived and worked.

*Effective Winter 2021*

### Exclusions:

*The Latin Language and Literature minor is not open to students with a major in Classical Languages or any other minor in the Department of Classical Studies.*

### Advising

The Department recommends that interested students see the department advisors as early as possible in order to plan their programs and avoid unnecessary scheduling conflicts.

Students wishing to pursue a minor in Classical Studies must develop a specific plan for its completion in consultation with the Department's designated advisor. Appointments may be scheduled at 2160 Angell Hall.

### Grade Policies

The department requires that a student earn a grade of at least C– in all *language* courses which are prerequisite for subsequent elections. A student should repeat any *language* course in which a D+ or lower grade is earned and which serves as a prerequisite to other courses which are to be elected. A grade of D+ signifies some achievement but denotes too weak a foundation for subsequent courses.

### Prerequisites

LATIN 231 (Honors section), LATIN 232, LATIN 233, LATIN 194, or equivalent as determined by departmental placement examination.

### Requirements

#### Minimum Credits: 16

1. **Latin Language and Literature courses:** at least two upper-level courses.
2. **Roman Civilization courses:** at least one broad introductory course (CLCIV 202 or 302, CLARCH 222, or HISTORY 201).
3. **Upper-Level courses:** at least one upper-level (300- or 400-level) course in Roman civilization, archaeology, or history.
4. Another course from numbers 1, 2, or 3 above

## Latina & Latino Studies Major

A component of the Department in American Culture, Latina/o Studies is designed to give students an opportunity to develop cultural competence on the diverse groups that comprise the U.S. Latina/o populations, that is, Mexican-Americans or Chicano/as, Puerto Ricans, Cuban-Americans, Central Americans, and other peoples of Spanish, Indigenous, and African descent. Currently the largest minority group in this country, Latinas/os have not only made contributions to U.S. society with their work, values, cultural traditions and linguistic heritage, they have also participated in the making of this country's history. The Latina/o Studies Program offers a variety of courses, some focusing on particular national groups, others based on a particular discipline, and many others organized around specific comparative topics or issues.

Examples of courses in Latina/o Studies include: "History of U.S. Latinos," "Latinas in the United States," "American Immigration," "The Politics of Language and Cultural Identity," "Schooling and Community," "Latino Performance Arts," "Latinos in the Media", "Empowering Latino Families and Communities," "Migrant Bodies," "Hybrid Texts," "Puerto Rican Literatures: The Island and the Mainland," "Cuba and Its Diaspora," and others.

*Effective Winter 2019*

### Advising

Students can set up advising appointments for any of the program's major or minor plans by visiting <https://lsa.umich.edu/ac/undergraduates/advising.html>.

### Prerequisites

None.

### Requirements

#### **Minimum Credits: 30**

An interdisciplinary degree, the Latina/o Studies major consists of 30 credits. The objective of this major program is to engage students in a diversity of disciplinary approaches to the study of U.S. Latinas/os as well as to introduce them to the central intellectual questions and topics that have emerged in this field of inquiry. Given the interdisciplinary nature of Latino Studies, students interested in pursuing graduate study in a particular discipline should double concentrate in the respective department in order to have the needed background to enter graduate school. The major consists of:

1. **Latino Studies Major Second Language Proficiency Requirement:** Given the importance of second language proficiency to the study of Latina/o populations in the United States, the Latina/o Studies Program requires all majors to satisfy their 4th term proficiency in Spanish, or another relevant language approved by the program advisor.
2. **AMCULT 213:** Introduction to Latina/o Studies
3. Students will be required to take **six** additional Latina/o Studies courses. **Two** of the six courses must be at the 300 level or above.
4. **AMCULT 498:** Capstone. Students will take AMCULT 498 (or an equivalent approved by the LS advisor). They will use this course to complete a major independent project on a topic relevant to Latina/o Studies.
5. **Tracks.** When declaring the major, students will identify one of five primary tracks (comparative ethnic studies, gender and sexuality, migration and transnationalism, community engagement and social action, and arts and media). The LS director will consult with students, helping them to select courses to complete the track (and to confirm the completion at the time of the senior release). The expectation will be that at least 4 courses, but no more than 6, will combine to provide coherence for the selected track. Students may propose alternative tracks with the approval of the LS Director.

### Distribution Policy

No course used to fulfill a major requirement may be used toward the [LSA Distribution Requirement](#). In addition, courses in the AMCULT, ARABAM, ASIANPAM, LATINOAM, and NATIVEAM subject areas may not be used toward the Distribution Requirement.

## Honors

The American Culture Honors Program provides an opportunity for majors in American Culture and Latina/o Studies to complete a comprehensive, original independent project under the guidance of a faculty member as the culmination of their undergraduate studies. We recommend that students choose topics on which they have already done some academic study. The Honors thesis may take a variety of forms, for example, a research project, a critical or interpretive project, or a creative or performance piece. Creative and community-based projects should include a substantive introductory essay that sets forth the premises, aims, and cultural/intellectual contexts of the student's undertaking. Honors requirements consist of regular American Culture or Latina/o Studies requirements plus the Honors requirements.

American Culture and Latina/o Studies majors with an overall grade-point average of 3.5 or higher may apply for an Honors major. The Program spans three terms. Students usually apply in the fall term of their junior year. Though the program occasionally accepts a few late applicants in the Winter or Spring/Summer terms, students' chances of success are greatest if they apply in the fall of the Junior Year and if they have begun thinking about a possible focus.

The application process has three stages:

1. In the first semester of his or her junior year, the student must consult with the American Culture department advisor to gain permission to enroll in AMCULT 398, the Junior Honors Writing Workshop (three credits).
2. In the second semester of the junior year, the student must successfully complete AMCULT 398, which involves preparing a thesis prospectus and bibliography and identifying a supervising faculty advisor and a second reader.
3. At the end of the second semester of the junior year, the student will submit the prospectus and a letter of agreement from the faculty advisor. The student will then meet with the director of the Program in American Culture to discuss the prospectus and be accepted into the Honors major.

The application consists of a cover sheet, transcript, and prospectus.

In both semesters of the senior year, the student will enroll in AMCULT 493 (3 credits per semester) to research and write the thesis.

In addition, effective in Fall 2010, as part of AMCULT 493, students in the Honors program will participate in three Friday colloquia. The colloquia are also open to Latina/o Studies majors pursuing Honors. The colloquia will focus on peer response to work in progress, as well as on topics of particular usefulness to a given cohort of students. The series will be facilitated by the Director of Undergraduate Studies and is intended to provide seniors with ongoing mentoring.

Early selection of an appropriate thesis advisor is crucial to the success of the Honors thesis. Only tenure track faculty members in the Program in American Culture and the Ethnic Studies Programs may serve as Honors thesis advisors. Exceptions to this policy may be made in consultation with the Director of Undergraduate Studies. Faculty are listed on the Program's web site.

The second reader is a faculty member chosen jointly by the student and the thesis advisor by the end of the fall semester of the senior year. The second reader need not be affiliated with the Program, but her or his area of expertise should be relevant to the thesis topic. The student

should consult with the second reader throughout the writing process, and the second reader should comment on thesis drafts as well as contribute to the final evaluation of the thesis.

### **Submission of Thesis**

Students should submit one copy to their primary faculty advisor, one copy to the second reader, and one copy to the Undergraduate Program Assistant in the Program Office. The copy submitted to the office should include a cover sheet (providing the student's name, email, and telephone number; thesis title; and the names of the primary advisor and second reader). The primary advisor and the second reader determine the designation of Honors (Honors, High Honors, Highest Honors).

Graduating seniors should also complete an Honors Plan Release with the AC academic advisor, an application for graduation online, and a distribution worksheet with an Honors advisor.

## **Latina & Latino Studies Minor**

### **American Studies Minors**

American Culture offers a general minor in addition to minors from our Latina/o Studies, [Native American Studies](#), [Arab and Muslim American Studies](#), and [Asian/Pacific Islander American Studies](#) units. The American Culture minor gives skills, information, and techniques from a wide variety of perspectives and disciplines. Students engage comparative ethnic studies, history, literature, film/media studies, religion, music, art, digital technologies, women's studies, folklore, sexuality studies, and ethnography. Our curriculum allows students a better understanding of the nation's diversity and the U.S.'s role in a global context. We explore what it has meant — and continues to mean — to claim to be an "American." The department also offers a minor in [Digital Studies](#).

### **Latina/o Studies Minor**

The minor in Latina/o Studies is intended for students who wish to develop a coherent understanding of the contributions of the Latina/o presence in American culture, history, and society. The minor supplements majors in traditional humanities and social science disciplines by providing content knowledge of Latina/o communities. The minor will also benefit students pursuing degrees in the professional world in areas such as public health, social work, business, and pre-law thus better preparing them for work in their chosen field.

*Effective Fall 2018*

### **Exclusions:**

*A minor in Latina/o American Studies is not open to students with a Latina/o Studies major or any minor in the Department of American Culture.*

## Advising

Students can set up advising appointments for any of the program's major or minor plans by visiting [www.lsa.umich.edu/ac/undergraduate/advising](http://www.lsa.umich.edu/ac/undergraduate/advising).

## Prerequisites

None.

## Requirements

**Minimum Credits: 15**

**Latina/o Studies Core:** LATINOAM 213 / AMCULT 213 Introduction to Latina/o Studies.  
(must be taken for a letter grade).

Students will select 4 courses (12 credit hours) from regularly taught Latina/o Studies Courses:

- LATINOAM / AMCULT 103: First Year Seminar in Latina/o Studies
- LATINOAM / AMCULT 204: Themes in Latina/o Studies
- RCLANG 204: Spanish Language Internship Project
- SOC 225 Project Community\*
- LATINOAM / AMCULT 226: The Latin Tinge
- LATINOAM / AMCULT / WGS 243 (WGS 243): Latinas in the U.S.
- LATINOAM / AMCULT 301: Topics in Latina/o Studies
- RCCORE 301: Community-Based Internship - Semester in Detroit\*
- LATINOAM / AMCULT 304: American Immigration
- RCLANG 304: PALMA: Spanish in the Community
- LATINOAM / AMCULT 310: Latina/o Studies and the Social Sciences
- LATINOAM / AMCULT 311: Latina/o Studies in the Humanities
- LATINOAM / AMCULT 313: Cuba and its Diaspora
- LATINOAM / AMCULT 315/HISTORY 377: History of Latinos in the U.S.
- AMCULT 321 / PSYCH 325: Practicum in the Multicultural Community\*
- LATINOAM / AMCULT 327/ENGLISH 387: Latina/o Literature of the U.S.
- LATINOAM / AMCULT 361: Principles and Practices of Teaching ESL in Migrant Communities
- LATINOAM / AMCULT 380: Studies in Transnational Media
- LATINOAM / AMCULT / FTVM 381: Latina/os and the Media
- LATINOAM/ AMCULT 385: Immigration Law: Critical Approaches to Contemporary Issues
- AMCULT 388 or 425: Field Study\*
- LATINOAM / AMCULT 389: Reading Course in Latina/o Studies
- EDUC 390 / RCSSCI 390: Community-Engaged Learning in ESL Teaching Contexts\*
- LATINOAM 404: Latina/os in the US: Social Problems and Social Issues
- LATINOAM / AMCULT 405: Topics in Latina/o Studies
- LATINOAM / AMCULT 420: Latin American and Latina/o Film Studies
- LATINOAM / SPANISH 440: Literature & Culture of the Borderlands
- SPANISH 428: Internship in Spanish
- POLSCI 489: Politics of Latinidad

\*Exceptions & substitutions may be approved in consultation with an advisor.



# Law, Justice, and Social Change Minor

Sociology has long served students interested in sociology; some of these students have deep interests in law, justice, and social change and advocacy. This minor offers those students a coherent curriculum that emphasizes the ways in which legal and other social institutions reproduce and exacerbate social inequalities, and the capacity of social groups to challenge such institutions in ways that produce fundamental social change. Students may select from a wide range of courses in which they will explore knowledge in criminology, law, social movements, and human rights.

This minor is intended for those students who have interests in law and/or social change, and for non-majors who are eager for the perspective that sociology brings to their understanding of law and justice. It offers students:

- An understanding of theoretical perspectives on justice and on the connections between law and society.
- Frameworks for thinking about legal compliance, deviance, and resistance.
- Perspectives for thinking about the relationship between “law on the books” and “law in actions”.
- Tools for thinking about the relationship between law and social change.
- What it means to “use” law in contexts outside the courtroom – including in families, neighborhoods, workplaces, social movements, mass media, prisons, and health care settings.
- Understandings of the law in international contexts and in regard to human rights issues.
- The foundation of theory, methods, and substantive knowledge necessary to develop informed perspectives on criminality, crime policy, and the social consequences of legal punishment.

*Effective Winter 2017*

## **Exclusions:**

*A minor in Law, Justice, and Social Change is not open to those electing a minor in Crime and Justice (Residential College). Students electing the Law, Justice, and Social Change minor may not declare a minor in History of Law and Policy.*

## Advising

A department advisor is available to students for one-on-one appointments to discuss the choice of sociology as a major (or minor), assist in course selection, and advise on co-curricular opportunities and career preparation. Students can schedule an advising appointment by calling the department at (734) 764-6324 or using the online appointment scheduler at <http://lsa.umich.edu/soc/undergraduates/advising.html>. Students can also email [socadvisor@umich.edu](mailto:socadvisor@umich.edu) with questions.

Students wishing to pursue a minor in Law, Justice, and Social change must develop a specific plan for its completion in consultation with the department advisors. Appointments are scheduled online at: <http://lsa.umich.edu/soc/undergraduates/advising.html>

## Grade Policies

Students must earn at least a C– in the prerequisites for the minor and in all courses they plan to include in the minor. Courses elected as pass/fail may not be included in the minor.

## Prerequisites

One of SOC 100, 102, 195, 300, or 302.

## Requirements

### **Minimum Credits: 15**

A minimum of nine credits must be elected in the minor at the 300-level or above (not including prerequisites).

A minimum of 15 credits from any combination of the courses listed below.

- SOC 204: International Migration and the Politics of Membership in a Globalizing World
- SOC 208: Terrorism, Torture, & Violence
- SOC / WGS 270 (WGS 270): Gender and the Law
- SOC 295: Topics in Sociology, *section titled "Non-Profits" (F18)*
- SOC 304: American Immigration
- SOC 335 / AAS 347 / RCSSCI 343: Urban Inequality in America
- SOC 350: Human Rights in the United Nations
- SOC 368: Criminology
- SOC 354: Law and Society
- SOC 422: Latin America (F19)
- SOC 450: Human Rights in a Globalizing World: How Human Rights Evolved and Changed the World
- SOC 461: Social Movements
- SOC 465 / PSYCH 488 / WGS 465 (WGS 465): Sociological Analysis of Deviance
- SOC 468: Crime & Justice: Inside-Out Prison Exchange
- SOC 476: Sociology of Bioethics
- SOC 488: Organizing Internship
- SOC 489: Community Organizing and Social Change
- SOC 495: Topics in Sociology, *section titled "Env Justice:Capitalism, Resistance,&Just Sustainab" (SU18)*
- SOC 225 (or 389)\*: Practicum in Sociology (Project Community at a criminal justice site)

Students may also include the following courses with appropriate topics as approved by the department advisor:

- SOC 295: Topics in Sociology
- SOC 394: Undergraduate Research
- SOC 395: Independent Study
- SOC 396: Undergraduate Internship
- SOC 495: Topics in Sociology

## Constraints

A maximum of 6 credits in the minor may come from experiential learning or independent study style courses. These include (but are not limited to) SOC 225, 394, 395, 396, and 488.

## Other Department Policies

The department of Sociology will allow one course with significant sociological content related to Law, Justice, and Social Change from other LSA departments or from transfer institutions to be included in the plan for the minor.

Students interested in petitioning to include a non-SOC or transfer course in their minor should complete the course petition process which includes submitting a petition form and the course syllabus.

# Law, Justice, and Social Change submajor

Students have the option of adding a subplan in “Law, Justice, and Social Change” to their Sociology major. Courses in the Law, Justice, and Social Change submajor emphasize the ways in which legal and other social institutions reproduce and exacerbate social inequalities, and the capacity of social groups to challenge such institutions in ways that produce fundamental social change. A wide range of courses will explore how we understand the concepts of justice and apply it and will develop knowledge in criminology, law, social movements, human rights.

## Sociology (Major)

*Effective Fall 2019*

### Exclusions:

Students may elect a subplan in Sociology and Social Work, Law, Justice, and Social Change, or the Sociology of Health and Medicine, but may only elect one subplan.

Students pursuing a major in Sociology with a LJSC subplan may not elect a minor in Crime & Justice.

Students who elect a Sociology major with a subplan in Social Work and Social Change may not elect the following programs:

Community Action and Social Change Minor (School of Social Work)  
Social Theory and Practice Major (Residential College)

## Advising

A department advisor is available to students for one-on-one appointments to discuss the choice of sociology as a major (or minor), assist in course selection, and advise on co-curricular opportunities and career preparation. Students can schedule an advising appointment by calling the department at (734) 764-6324 or using the online appointment scheduler at [www.lsa.umich.edu/soc](http://www.lsa.umich.edu/soc). Students can also email [socadvisor@umich.edu](mailto:socadvisor@umich.edu) with questions.

Students wishing to pursue a minor in Law, Justice, and Social change must develop a specific plan for its completion in consultation with the department advisors. Appointments are scheduled online at: [www.lsa.umich.edu/soc/undergraduate/advisingandprogrampolicies](http://www.lsa.umich.edu/soc/undergraduate/advisingandprogrampolicies).

Students wishing to pursue a subplan in Sociology and Social Work must develop a specific plan for its completion in consultation with the department advisors. Appointments are scheduled online at [www.lsa.umich.edu/soc/undergraduate/advisingandprogrampolicies](http://www.lsa.umich.edu/soc/undergraduate/advisingandprogrampolicies).

In addition, the Social Work staff will be available to advise students interested in the optional preferred admissions process into the accelerated MSW program and related coursework. Students should contact the Office of Student Services at (734) 936-0961 to schedule a phone or in-person appointment.

### Grade Policies

Students must earn at least a C– in the prerequisites for the major and in all courses they plan to include in the plan for the major. Courses elected as pass/fail may not be included in the plan for the major.

### Prerequisites

- Students planning to major in sociology must elect and complete with a C- or better one of the following introductory courses before declaring the major: SOC 100, 102, 195, 300, 302.
- Freshmen and Sophomores electing an introductory course should elect SOC 100, SOC 102, or SOC 195.
- SOC 195 is restricted to first and second-year students who are in the LSA Honors Program and/or have a GPA of 3.2 or higher.
- Juniors and seniors electing an introductory course should elect SOC 300 or SOC 302.
- The prerequisite course cannot be included in the 33 credits required for completion of the plan for the major.

### Requirements

#### **Minimum Credits: 33**

After electing one of the introductory prerequisite courses, majors are required to complete at least 33 credits of SOC coursework at the 200 level or above, including:

1. *Statistics*: SOC 210, STATS 250, or STATS 280 (or their equivalent)
2. *Research Methods*: SOC 310. Must be taken on UM—Ann Arbor campus
3. *Sociological Theory*: SOC 305. Must be taken on UM—Ann Arbor campus

The remaining credits must come from SOC courses at the 200 level and above.

A minimum of fourteen elective credits must be elected at the 300-level or above. Students who wish to focus their elective coursework on a particular area of sociology are encouraged to consult with the department advisor.

## Course Planning

The research methods and statistics courses facilitate the understanding of sociological themes and concepts explored in upper-division courses. Students are strongly encouraged to complete the statistics course in the sophomore year, the research methods course before the end of the junior year, and complete all three of the required courses before the final academic term of the senior year. Students intending to write an honors thesis in sociology must take statistics before the first term of the junior year and the methods course no later than the second term of the junior year.

### Optional Sub-Majors:

[Law, Justice, and Social Change](#)

[Sociology of Health and Medicine](#)

[Sociology and Social Work](#)

## Constraints

- **Credit Limits and Exclusions.** A combined total of eight INDEPENDENT or EXPERIENTIAL credits may be included in the plan for the major. This includes but is not limited to SOC 225 (and 389), 321, 324, 394, 395, 396, and 488. There is an additional limit on SOC 225 (or 389) credits; only four credits of SOC 225 (or 389) may be included in the plan for the major.
- The department will allow up to two courses with significant sociological content from other LSA departments or transfer institutions to be included in the plan for the major. Students interested in petitioning to include a non-SOC transfer course in their major should complete the petition process which includes submitting a petition form and the course syllabus.

## Residency

The department expects that at least 18 of the 33 credits required for a sociology major be completed with Department of Sociology faculty on the UM–Ann Arbor campus. The research methods and sociological theory courses must be taken in residence on the UM–Ann Arbor campus.

## Honors

*Effective Fall 2019*

The Program begins with SOC 497 (3 credits) in the second term of the junior year and continues through the senior year with SOC 498 (3 credits) and 499 (3 credits). During SOC 498 and 499, students work with the supervision of their faculty mentors, while continuing to meet individually with the faculty Honors coordinator. SOC 497 is offered in the Winter Term only. These three courses may be used toward the general electives in the major but may not be used as sub-major electives.

## *Honors Application Prerequisites and Course Planning*

Applicants to the [Honors Program in Sociology](#) have at least a 3.5 GPA within their sociology courses and at least a 3.4 cumulative GPA in their LS&A courses. In addition, they already will have demonstrated originality in their own course work, shown a serious interest in scholarly research, and given evidence of their ability to work independently on a thesis. Students should plan on completing SOC 210 or STATS 250 (or 350) prior to enrolling in SOC 497 and should take SOC 310 or 312 prior to or concurrently with it. The Honors Program in Sociology is a three-semester sequence of course and thesis work. Students typically apply as first-semester juniors and begin with the first course, SOC 497, the following semester.

To graduate with Honors, students must meet all requirements for the major; complete SOC 497, 498, and 499; write an acceptable Honors thesis; and maintain a 3.4 overall GPA. Upon completion of this course work and dependent upon the evaluation of the thesis, the academic record and diploma will designate the degree awarded "with Honors," "with High Honors," or "with Highest Honors."

Interested students should call (734) 764-6324 or visit the website to make an appointment with the department's department advisor.

## [Law, Justice, and Social Change \(Sub-Major\)](#)

*Effective Fall 2014*

### [Requirements](#)

A minimum of eight credits must be elected in the subplan at the 300-level or above (not including prerequisite).

To have a notation of the submajor appear on your transcript, you must successfully complete a minimum of 12 credits from the following list:

- SOC 204, 208, 270, 335, 350, 354, 368, 450, 461, 465, 468, 476, 489
- appropriate topics in SOC 295, 495
- approved undergraduate research in SOC 394
- approved independent studies in SOC 395
- approved internships in SOC 396
- SOC 225 (or 389)\*: Practicum in Sociology (Project Community at a criminal justice site), sections titled "Criminal Justice: Prison - Creative Writing", "Criminal Justice: Jail (Men's and Women's) - Creative Writing", "Criminal Justice: Jail (Men's and Women's) - Art Workshop", and "Criminal Justice: American Friends Service Committee"

### [Constraints](#)

A maximum of 6 credits for the subplan may come from Experiential Learning or Independent Study style courses.

### Distribution Policy

No course used to fulfill a major requirement may be used toward the [LSA Distribution Requirement](#). In addition, courses in the SOC subject area may not be used toward the Distribution Requirement.

## Lesbian Gay Bisexual Transgender Queer (LGBTQ) and Sexuality Studies Minor

This minor is designed to introduce students to the field of lesbian, gay, bisexual, transgender, queer, and sexuality studies. Required and elective courses provide students with the opportunity to explore how various practices, institutions and beliefs intersect with sexualities and sexed bodies, in a range of cultures, geographies, and histories. Students will have the opportunity to rely upon courses, representing an interdisciplinary array of scholarship, in pursuing the study of sexuality and sexual identities.

*Effective Winter 2021*

### Advising

Students wishing to pursue a minor in Women's and Gender Studies must develop a specific plan for its completion in consultation with the department's designated advisor.

[Advising](#) appointments are made online. To make an advising appointment, please see the bottom left-hand corner of the Women's and Gender Studies website main page: [www.lsa.umich.edu/women](http://www.lsa.umich.edu/women).

### Prerequisites

None.

### Requirements

**Minimum Credits: 15**

Five courses totaling at least 15 credits, to be chosen from the following categories as stated:

1. **Foundational Course:** WGS 245 (WGS 245) Introduction to Lesbian, Gay, Bisexual and Transgender+ Studies, WGS 265 Introduction to Transgender Studies, *or* WGS 295 (WGS 295) Sexuality in Western Culture.
2. **Electives:** Four electives (12 credits) that focus on LGBT issues. At least two courses must be at the 300 level or above, with at least one at the 400 level.
  - WGS / ENGLISH 214: Intro to LGBTQ+ Literature
  - WGS (WGS) 224 / JUDAIC 224 / HISTORY 222: Sex and Sexuality in Jewish History and Culture (WN19)
  - WGS (WGS) / AMCULT 239: Gender, Sexuality, and Health in America
  - WGS 245 (WGS 245): Introduction to Lesbian, Gay, Bisexual and Transgender and Queer Studies (*when not taken as the foundational course*)

- WGS 258 (WGS 258): Special Topics in Interdisciplinary Women's and Gender Studies, *section titled "Introduction to Transgender Studies" (only if elected WN20 or later)*
- WGS 265 Introduction to Transgender Studies (*when not taken as the foundational course*)
- WGS (WGS) / AMCULT 295: Sexuality in Western Culture (*when not taken as the foundational course*)
- WGS 305 (WGS 305) / ALA 306: Interdisciplinary & Intersectional LGBTQ Health
- WGS (WGS) / POLSCI 308: Law and the Politics of Sexuality
- WGS 312 (WGS 312): Queering US Immigration History
- WGS (WGS) / HISTORY 327: History of Sexuality
- WGS 341 (WGS 341): Special Topics in LGBTQ Studies
- WGS 343 (WGS 343): Topics in Gender, Race & Ethnicity in the U.S., *section titled "Queering US Immigration History" (W18)*
- WGS 348 (WGS 348) / SOC 345: Sociology of Sexuality
- WGS (WGS) / ASIAN 352: Gender, Sexuality, and Power in Premodern China
- WGS (WGS) / AMCULT 366 / HISTORY 353: Sex and Sexuality in U.S. Popular Culture
- WGS (WGS) / HISTORY 370 / AMCULT 375: Queer Histories of the United States, 1850 to the present
- WGS 380 (WGS 380) / RCCORE 334: Special Topics, *section titled "Out of the Past: 20th Century LGBT History" (F18)*
- WGS / AAS 390: Homophobia in the Black World
- WGS (WGS) / PSYCH 394: Sex, Sexuality and Public Policy
- WGS 407 (WGS 407): Intersexualities
- WGS (WGS) / AMCULT 411: Rednecks, Queers, and Country Music: Identity and Social Status in Popular Culture
- WGS (WGS) / RCSSCI / ANTHRCUL 428: Sex Panics in the U.S. and UK
- WGS (WGS) / COMM 429: Sexual Identities and the Media
- WGS 431 (WGS 431): Advanced Topics in LGBTQ Studies
- WGS (WGS) / ANTHRCUL 446: Sex in the City: Urban Geography and Sexual Locations
- WGS 449 (WGS 449) / SOC 445: Diagnosis, Sex & Society
- WGS 450 (WGS 450): Popular Music, Gender, and Sexuality (*only through WN20*)
- WGS 452 (WGS 452) / PSYCH 414: Sexuality and Science
- WGS (WGS) / SOC 465 / PSYCH 488: Sociological Analysis of Deviance
- WGS 470 (WGS 470) / HISTORY 471: Gender and Sexuality in India
- WGS 471 (WGS 471) / HISTORY 429 / MIDEAST 432 / RELIGION 496: Gender and Sexuality in Pre-Modern Islam
- WGS (WGS) / PSYCH 494: Adolescent Sexuality

Other courses with over half their content devoted to LGBTQ issues may be approved for the minor by the Women's and Gender Studies Undergraduate Committee, and these will be listed on a special section of the [Women's and Gender Studies web page](#).

## Linguistics Major



Linguistics investigates all aspects of spoken and written human language. It is especially concerned with the general principles of language structure, its use and acquisition, with the structure and history of particular languages and groups of languages, with the role of language in human experience, and with the techniques employed in analyzing and describing language. The concentration in Linguistics is intended to provide an understanding of human language and its systematic study, as well as provide the opportunity to explore the importance of language in all areas of human life.

The general field of linguistics includes several subfields. Phonetics and phonology are especially concerned with the sounds of speech. Phonetics emphasizes the physical characteristics of speech sounds, and phonology deals with the way in which speech sounds are organized in languages. Syntax examines the way in which smaller units of language, such as words, are organized into the complex structure of phrases and sentences. Semantics seeks to understand how the forms of language are used to express meaning. Historical and comparative linguistics is concerned with the ways in which languages change through time, with the variations in language from place to place, and with the possible relationship among languages. Historical linguistics also includes the study of the history of specific languages and language groups, and the reconstruction of pre-historic languages.

In addition to these subfields of linguistics, several other sub-disciplines relate linguistics to other fields of study. Psycholinguistics treats language in its psychological aspects and is especially concerned with the ways in which cultural patterns and values relate to language structure, use, and change. Sociolinguistics deals with the interrelationship of language and society and with the covariation of language and social form. Computational linguistics is concerned with the utilization of computational techniques in the analysis of language.

Some areas in which the findings of linguistics have found application include: translation, the design and documentation of computer software, language and national policy, speech pathology and speech therapy, the development of writing systems for previously unwritten languages, the teaching of first language skills such as reading and writing, and the teaching of second languages.

*Effective Winter 2018*

#### Advising

Advising appointments can be made [here](#) or by contacting [linguistics@umich.edu](mailto:linguistics@umich.edu)

#### Prerequisites

None; LING 111, 209, 210 or 212 are recommended.

## Requirements

### Minimum Credits: 30

The Linguistics major requires a total of 30 credits at the 300 level or higher, subject to the constraints below.

**Required Core Courses (12 credits).** All majors are required to take the following four courses in the Linguistics Department. The coursework in LING 313, 315, and 316 should be completed as soon as possible, to ensure that all students gain a solid understanding of Linguistics before electing further courses, especially 497.

1. *LING 313: Sound Patterns.* This course explores two fundamental aspects of the sounds of the world's languages: speech sounds as physical entities (phonetics) and speech sounds as linguistic units (phonology).
2. *LING 315: Introduction to Syntax.* This course examines the rule systems whereby words are organized into phrases and phrases into sentences in natural languages.
3. *LING 316: Aspects of Meaning.* This course introduces students to the study of meaning in language.
4. *LING 497: Capstone Seminar.* This seminar brings previous coursework, particularly the other required courses, to bear on a specific topic that may vary by term. LING 313, 315, and 316 are prerequisites for 497, but may be taken concurrently.

In extraordinary circumstances, with permission of the Director of Undergraduate Studies, an advanced course in the area of phonetics/phonology, semantics, or syntax could satisfy the LING 313, 315, or 316 requirement.

**Electives (18 credits).** Beyond the four core courses, majors are encouraged to fill out their program of 30 total credits, in consultation with a Linguistics advisor, using courses from the categories below.

1. *Regular Linguistics Classroom Courses (at least 6 additional credits).* Majors must complete at least 18 total credits of traditional classroom courses offered by the Department of Linguistics. (The core courses account for 12 of these 18 credits.) Note that cross-listed courses count towards this category whether or not students enroll under the LING number, but meet-together courses only count when registered under the LING number.
2. Any remaining credits (up to 12) may be met using the following flexible categories:
  - a. *Independent Study Courses (at most 6 credits).* At most 6 credits of independent study or independent reading courses may count towards the major. For more details, see our [guidelines on independent studies](#).
  - b. *Experiential Practice Courses (at most 6 credits).* At most 6 credits of experiential practice courses may count towards the major. (Note that this is calculated separately from the limit on independent studies; a student might theoretically take 6 credits of each.)
  - c. *Cognate and Transfer Courses.* Subject to the limits above, approved cognate courses offered by another program or department and/or approved transfer credits from another institution may count towards the major. Each term, the Linguistics Department posts a list of cognates on its website that are pre-evaluated for the major. Students

may also request that courses not on this list (including transfer credit) count towards the major. These requests must be individually evaluated by the Linguistics Director of Undergraduate Studies, who will generally follow [the guidelines linked here](#).

### Other Department Policies

**Double Major.** Because the study of language is quite often interdisciplinary, a major in Linguistics can be designed to integrate very well with other academic fields. As a result, it is very common for Linguistics majors to also major in a second field. An LSA double major requires satisfying all of the requirements for the major of both programs. However, neither LSA nor the Department of Linguistics imposes any limit on "double-counting" courses between majors, allowing students to double-major with substantially fewer than 60 total major credits. (Check with an advisor in the second major, though, to confirm their policy on jointly counted courses.)

### Residency

#### Study Abroad / Transfer Credit

Current students interested in pursuing a study-abroad program or taking any courses at another institution must first meet with the Linguistics Director of Undergraduate Studies to have their courses pre-evaluated for Linguistics major credit. Upon completion of these courses, students must meet again with the Director of Undergraduate Studies to provide material from the course (such as the syllabus, lecture notes, and graded homework, papers, and exams).

Although new transfer students cannot seek pre-evaluation for transfer courses, they should bring as much of this material as possible to the Director of Undergraduate Studies when seeking Linguistics major credit.

### Distribution Policy

No course used to fulfill a major requirement may be used toward the [LSA Distribution Requirement](#). In addition, courses in the LING subject area may not be used toward the Distribution Requirement.

### Honors

The Honors major in Linguistics requires completion of the requirements for the major and, in addition, a senior Honors project leading to an Honors thesis. The thesis must be written under the supervision of a faculty member of the Department of Linguistics and with permission of a department advisor. Students may elect LING 495 and 496 when writing the Honors thesis (but are not required to do so). Finally, LSA requires students in an Honors major to maintain a GPA of 3.4 or higher overall (not just in Linguistics).

# Linguistics Minor

Many students in departments across campus develop an interest in language as they pursue their studies, and wish to learn more about the ways in which human language informs and defines human experience. Other career aspirations, however, make it difficult for them to have a full concentration in Linguistics. The academic minor in Linguistics is offered to these undergraduates who wish to enrich their education with extended study in the nature of human language. Such inquiry is regularly sought as a support to the study of a specific language and its literature, as an adjunct to other aspects of developmental and cognitive psychology, or as a tools for concentrators in other cognate disciplines.

*Effective Winter 2019*

## Exclusions:

*A minor in Linguistics is not open to students with a major in the Department of Linguistics.*

## Advising

Students wishing to pursue an academic minor in Linguistics must develop a specific plan for its completion in consultation with a faculty member of the Undergraduate Committee of the Linguistics Department.

Advising appointments can be made [online](#) or by contacting [linguistics@umich.edu](mailto:linguistics@umich.edu)

## Prerequisites

None. LING 111, 209, 210, or 212 is recommended.

## Requirements

**Minimum Credits: 15**

15 credits, all in Linguistics, distributed as follows:

1. **Core:** Two courses chosen from LING 313, 315, and 316, taken in-residence.
2. **Electives:** At least three additional credits in Linguistics must be taken on the Ann Arbor campus at the 300 level or above.
3. **Other:** Up to 6 credits in Linguistics of independent study, experiential practice, and out-of-residence study-abroad or transfer courses, subject to the constraints below.

## Constraints

- At most 3 credits of independent study and at most 3 credits of experiential practice are allowed (calculated separately).
- All out-of-residence courses must be approved by the Director of Undergraduate Studies.

## Residency

At least 9 credits must be taken in-residence, and all courses taken in-residence must be in Linguistics or in courses cross-listed with Linguistics. All out-of-residence courses must be approved by the Director of Undergraduate Studies.

## Definitions

- ***In Linguistics***: Courses with a LING number or cross-listed with a LING number.
- ***Ann Arbor Campus***: Courses elected at off-campus sites but directed by Ann Arbor faculty. This includes Camp Davis, Biological Station, and Michigan-in-Washington, but NOT STDABRD.
- ***In residence***: Courses elected on the Ann Arbor campus or at off-campus sites directed by Ann Arbor faculty. This includes STDABRD, Camp Davis, Biological Station, and Michigan-in-Washington.

# Mathematical Sciences Submajor

The Mathematical Sciences Program is designed to provide broad training in basic mathematics together with some specialization in an area of application of mathematics.

*Effective Winter 2021*

## Advising

Appointments are scheduled online at: [lsa.umich.edu/math/undergraduates](https://lsa.umich.edu/math/undergraduates). Students are strongly urged to consult with a department advisor each term before selecting courses for the following term.

## Grade Policies

All prerequisite courses must be satisfied with a grade of C– or above. Students with lower grades in prerequisite courses must receive special permission of the instructor to enroll in subsequent courses.

For purposes of calculating grade point average, the term "field of the major" means the following:

1. All MATH courses.
2. All courses used to meet requirements for the major.
3. All required cognate courses (if any).
4. All mandatory prerequisites.
5. EECS 183

## Prerequisites

### Prerequisites for all Mathematics Majors

Completion of one of the sequences ending with MATH 215-217, 285-217, or 295-296. A working

knowledge of a high-level computer language such as C++ or a computer algebra system (such as Maple or Mathematica), at a level equivalent to completion of a course of three or more credits, and eight credits of PHYSICS, preferably PHYSICS 140/141 and 240/241, are recommended for all programs and required for some. (A grade of C- or better is strongly suggested for MATH 217.)

### **Additional prerequisites for the Mathematical Sciences Submajor**

Completion of one of the sequences ending with MATH 215&217, 285&217, or 295&296. In addition, students must acquire a working knowledge of a high-level computer language (e.g., Fortran, C, or C++) at a level equivalent to the completion of EECS 183. Students pursuing the Mathematical Biology option are also required to take the Introductory Biology lectures (BIOLOGY 171 and either 172 or 174; or BIOLOGY 192; or BIOLOGY 195). For those not pursuing either a Physics major or minor, PHYSICS 140/141 and 240/241 are required for the Numerical and Mathematical Physics options and strongly recommended for the other options. Some of the options have additional requirements as noted below.

### **Requirements**

Each student must select one of the eight Program Options as a special area.

#### **A. Basic Courses**

The basic courses consist of one from each of the following four groups **completed with a grade of at least C-**:

- Differential Equations: MATH 286 or 316
- Discrete Math/Modern Algebra: MATH 312, 412, 465, or 493
- Analysis: MATH 351, 354, 450, 451, or 454
- Probability: MATH 425 or 525

#### **B. Program Options**

At least three courses from ONE of the Program Options listed below (the list of possible electives for each option is given on the [departmental website](#)):

- Discrete and Algorithmic Methods
- Numerical and Applied Analysis
- Operations Research and Modeling
- Probabilistic Methods
- Mathematical Economics
- Control Systems
- Mathematical Physics
- Mathematical Biology

#### **C. Advanced Courses**

Two additional advanced mathematics (or related) courses selected from either

1. courses taught outside the department which emphasize the application of significant mathematical tools (at least at the level of MATH 215) in another discipline at the 300 level or above, or
2. mathematics courses numbered 400 or above

In all cases, approval of an advisor is required. This is a very flexible requirement to accommodate special interests and may be satisfied by a broad range of courses in other departments.

## Other Department Policies

- At least two of the courses used toward the Program Options and Advanced Courses must be MATH courses.
- At least one of the courses used toward the Program Options and Advanced Courses must be taken outside the department and be at the 300 level or above.

## Residency

Minimum number **of courses taken in residence for transfer students majoring in Mathematics** (applies to all sub-plans): Students should take a minimum of 18 credits at the University of Michigan, Ann Arbor campus. Six of these credits must come from the basic courses and nine from the core courses and/or cognate courses. The 18 credits may include pre-requisites taken in Math.

## Distribution Policy

No course used to fulfill a major requirement may be used toward the [LSA Distribution Requirement](#). In addition, courses in the MATH subject area may not be used toward the Distribution Requirement.

# Mathematics Major

Mathematics is the language and tool of the sciences, a cultural phenomenon with a rich historical tradition, and a model of abstract reasoning. Historically, mathematical methods and thinking have been extraordinarily successful in physics and engineering. Today, they are used successfully in many new areas, from computer science to biology and finance. A Mathematics major provides a broad education in various areas of mathematics in a program flexible enough to accommodate a wide range of interests.

The study of mathematics is an excellent preparation for many careers; the patterns of careful logical reasoning and analytical problem solving essential to mathematics are also applicable in contexts where quantity and measurement play only minor roles. Thus students of mathematics may go on to excel in medicine, law, politics, or business as well as any of a vast range of scientific careers. Special programs are offered for those interested in teaching mathematics, in actuarial mathematics, the mathematics of insurance, or financial mathematics. The other programs split between those which emphasize mathematics as an independent discipline and those which favor the application of mathematical tools to problems in other fields. There is considerable overlap here, and any of these programs may serve as preparation for either further study in a variety of academic disciplines, including mathematics itself, or intellectually challenging careers in a wide variety of corporate and governmental settings.

*Effective Winter 2021*

## Advising

Appointments are scheduled online at: [lsa.umich.edu/math/undergraduates](https://lsa.umich.edu/math/undergraduates). Students are strongly urged to consult with a department advisor each term before selecting courses for the following term.

## Grade Policies

All prerequisite courses must be satisfied with a grade of C– or above. Students with lower grades in prerequisite courses must receive special permission of the instructor to enroll in subsequent courses.

## Major GPA Calculation

For purposes of calculating grade point average, the term "field of the major" means the following:

1. All MATH courses.
2. All courses used to meet requirements for the major.
3. All required cognate courses (if any).
4. All mandatory prerequisites.
5. EECS 183
6. ECON 101 and ECON 102 (actuarial mathematics submajor only).

## Prerequisites

Most programs require completion of one of the sequences ending with MATH 215-217, 256-217, 285-217, or 395-396. A working knowledge of a high-level computer language such as C++ or a computer algebra system (such as Maple or Mathematica), at a level equivalent to completion of a course of three or more credits, and eight credits of PHYSICS, preferably PHYSICS 140/141 and 240/241, are recommended for all programs and required for some. (A grade of C- or better is strongly suggested for MATH 217.)

## Requirements

A student considering a major in Mathematics should consult a mathematics department advisor in the Undergraduate Mathematics Office as early as possible and certainly by the first term of the sophomore year. The department offers many different submajors with varying requirements; failure to meet some of these at the intended time may delay completion of the program and graduation. A plan for the major must be designed with and approved by a department advisor.

- [Pure Mathematics](#)
- [Mathematical Sciences](#)
- [Actuarial Mathematics](#)
- [Mathematics of Finance and Risk Management](#)
- [Honors Mathematics](#)
- [Secondary Mathematics Teaching Certificate](#)

## Residency

**Minimum number of courses taken in residence for transfer students majoring in Mathematics** (applies to all sub-plans) Students should take a minimum of 18 credits at the University of Michigan, Ann Arbor campus. Six of these credits must come from the basic courses and nine from the core courses and/or cognate courses. The 18 credits may include pre-requisites taken in Math.



### Distribution Policy

No course used to fulfill a major requirement may be used toward the [LSA Distribution Requirement](#). In addition, courses in the MATH subject area may not be used toward the Distribution Requirement.

## Mathematics Minor

The minor in Mathematics is designed to enable a student with a significant interest in Mathematics to deepen his/her knowledge while pursuing a major in another field. While the major will often be in a field that makes significant use of mathematics, such as a science or a quantitative social science, it may be in any area of study.

*Effective Winter 2021*

### Exclusions:

*An academic minor in Mathematics is not open to students with any major in Mathematics. However, a student who graduated with an academic minor in Mathematics may return to complete a major in Mathematics. Per LSA rules, at least 9 credits must be taken in residence. The student must earn an overall GPA of at least 2.0 for the minor. All in-residence credit **MUST** be taken in the Mathematics Department. In all cases, more advanced courses may be substituted with the approval of a math advisor. In particular, students who have satisfied the prerequisite with the Honors Sequence Math 295-296 or 217-297 will need to consult an advisor for the proper selection of courses. Other modifications can also be made with the approval of a math advisor. Finally, classes offered outside Mathematics **CANNOT** be used to satisfy the requirements of the Math Minor.*

### Advising

Students wishing to pursue a minor in Mathematics must develop a specific plan for its completion in consultation with an advisor. Appointments are scheduled [on-line](#)

Students are strongly urged to consult with a department advisor each term before selecting courses for the following term.

### Grade Policies

All courses for the minor program, including prerequisites, must be completed with a grade of at least a C-. Students with lower grades in prerequisite courses must receive special permission of the instructor to enroll in subsequent courses.

### Prerequisites

One of the sequences MATH 115&116, 175&176, 185&186, or 295&296, 217-297; or MATH 156. These all provide a thorough grounding in the calculus of functions of one variable.

Advanced Placement credits in MATH 120 and 121 also meet the prerequisite requirement.

Students who satisfy the prerequisites with the honors sequence 295-296 or 217-297 will need to consult an advisor for the proper selection of courses.

### Requirements

**Minimum Credits: 15**

15-18 credits of courses, A student must select at least 5 courses consisting of at least 1 Basic Course and at least 2 Upper-Level Courses. No more than once course may be elected from each of the three areas under the Basic Courses.

#### **Basic courses:**

- *Multivariable Calculus*: MATH 215, or 285
- *Linear Algebra*: MATH 214, 217, 417, or 419
- *Differential Equations*: MATH 216, or 286

#### **Upper-level courses:**

- *Analysis/Differential Equations*: MATH 316, 351, 354, 404, 450, 451, 452, 454, 555
- *Algebra/Number Theory*: MATH 312, 389, 412, 420, 471, 475, 493, 513, 561, 571, 575
- *Geometry/Topology*: MATH 433, 490
- *Applied Mathematics*: MATH 354, 371, 404, 423, 425, 450, 454, 462, 463, 471, 472, 550, 561, 563, 571
- *Discrete Mathematics*: MATH 310, 312, 389, 412, 416, 420, 425, 465, 475, 481, 561, 566, 567, 582
- *Financial/Actuarial Mathematics*: MATH 423, 424, 472, 520, 521, 523, 524

## **Mathematics of Finance & Risk Management (Financial Mathematics) submajor**

The program in Mathematics of Finance and Risk Management (or Financial Mathematics for short) is designed to provide a broad education in the quantitative aspects of risk management and finance. Financial instruments which are engineered today require sophisticated mathematical techniques for their valuation. These techniques come from the fields of probability, statistics and differential equations.

*Effective Winter 2021*

### Advising

Appointments are scheduled online at: [lsa.umich.edu/math/undergraduates](https://lsa.umich.edu/math/undergraduates). Students are strongly urged to consult with a department advisor each term before selecting courses for the following term.

### Grade Policies

All prerequisite courses must be satisfied with a grade of C– or above. Students with lower grades in prerequisite courses must receive special permission of the instructor to enroll in

subsequent courses.

For purposes of calculating grade point average, the term "field of the major" means the following:

1. All MATH courses.
2. All courses used to meet requirements for the major.
3. All required cognate courses (if any).
4. All mandatory prerequisites.
5. EECS 183

### Prerequisites

#### Prerequisites for all Mathematics Majors

Completion of one of the sequences ending with MATH 215-217, 285-217, or 295-296. A working knowledge of a high-level computer language such as C++ or a computer algebra system (such as Maple or Mathematica), at a level equivalent to completion of a course of three or more credits, and eight credits of PHYSICS, preferably PHYSICS 140/141 and 240/241, are recommended for all programs and required for some. (A grade of C- or better is strongly suggested for MATH 217.)

#### **Additional prerequisites for the Mathematics of Finance and Risk Management Submajor**

MATH 215&217, 285&217 or MATH 295&296. Each student must also complete: ECON 101 and 102 and EECS 183 all elected on a graded basis. The grade for ECON 101, ECON 102, and EECS 183 will be included in the major GPA.

### Requirements

A minimum of 10 courses, selected from the following:

- a. **Four basic courses** (one from each of the following four groups), completed with a grade of at least C-:
  1. *Differential Equations*: MATH 286 or 316
  2. *Probability*: MATH 525
  3. *Statistics*: STATS 426
  4. *Analysis*: Math 351 or 451
- b. **Four special courses for Financial Mathematics**:  
MATH 423, MATH 474, MATH 472 (or 471), MATH 526.
- c. **Two additional courses** in areas relating to Financial Mathematics approved by an advisor.

### Residency

Minimum number of courses taken in residence for transfer students majoring in **Mathematics** (applies to all sub-plans): Students should take a minimum of 18 credits at the University of Michigan, Ann Arbor campus. Six of these credits must come from the basic courses and nine from the core courses and/or cognate courses. The 18 credits may include pre-requisites taken in Math.

## Medical Anthropology Minor

Anthropology at the University of Michigan emphasizes four-field training. Our majors gain anthropological understanding of the human condition through exposure to Sociocultural Anthropology, Biological Anthropology, Anthropological Archaeology, and Linguistic Anthropology and their many interrelationships. Many students, however, take our courses to supplement other majors or out of general interest and have less need for four-field training. Academic minors in anthropology may benefit these students, providing structure to their course elections, and allowing thoughtful integration of anthropology into their academic plans. The department offers three minors: [Anthropology](#), [Biological Anthropology](#), and Medical Anthropology.

The minor in Medical Anthropology allows students to focus on the social basis of illness and healing from different cultural perspectives. The minor might be elected by students interested in client-practitioner interactions, traditional and complementary medicine, the production of medical knowledge, body politics, bioethics, and reproductive health, among other topics. It might also be relevant for those students interested in adding anthropological perspective to their preparation for a career in medicine, public health, or other health sciences.

*Effective Winter 2015*

**Exclusions:**

*Not open to students electing the [Science, Technology, and Society](#) minor in the Residential College or any other minor in the Department of Anthropology.*

[Advising](#)

All anthropology faculty members are available for informal discussion with students during scheduled office hours (check the Department office for times).

[Department advisors](#) are available to explain program objectives and requirements and to help with the planning of your program.

Students wishing to pursue a minor in the Department of Anthropology should contact the undergraduate advisor with any questions.

Appointments are scheduled in the Department office or [online](#).

[Prerequisites](#)

None, but ANTHRCUL 101 or 222 are recommended.

[Requirements](#)

**Minimum Credits: 16**

At least five courses (no fewer than 16 credits), to be chosen from the following categories as stated. The minor must include at least two courses at the 300-level or above.

1. **Core:** ANTHRCUL 344, Medical Anthropology
2. **Area and topical courses.** Choose four courses from the following list:
  - ANTHRBIO 297: Topics in Biological Anthropology, *section titled, "The Ghost in Your Genes: Epigenetics" (F18)*
  - ANTHRBIO 342 / ANTHRCUL 342: Nature/Culture Now!
  - ANTHRBIO 363: Genes, Disease, Culture
  - ANTHRBIO 364: Nutrition & Evolution
  - ANTHRBIO 462: Human Growth and Development across the Life Cycle
  - ANTHRCUL / WGS 212 / NURSING 225: The Global HIV/AIDS Epidemic
  - ANTHRCUL 232: Genes, Genealogies, Identities: Anthropological Perspectives
  - ANTHRCUL 256: Culture, Adaptation and Environment
  - ANTHRCUL 258: Honors Seminar in Anthropology. *section subtitled "Culture & Medicine"*
  - ANTHRCUL 325 / WGS 324 (WGS 324): Childbirth & Culture
  - ANTHRCUL / RCSSCI 327: Critical Theory in Medicine and Health
  - ANTHRCUL 341: The Globalization of Biomedicine (F18)
  - ANTHRCUL / ANTHRBIO 342: Nature/Culture Now!
  - ANTHRCUL 352: Anthropology of the Body
  - ANTHRCUL / HISTART 354. Art: Science, and Technology
  - ANTHRCUL / HISTORY / AAS 355: Health & Illness in African Worlds
  - ANTHRCUL 408 / AAS 409: Maternal/Child Health & Environmental Pollution in Africa
  - ANTHRCUL 437: The Anthropology of Death, Dying, and the Afterlife
  - ANTHRCUL 458: Topics in Sociocultural and Linguistic Anthropology, *sections titled "Contested Illness&Anthro Theories of the Body" or "Environmental Health & Inequality in Mexico City" (F18)*
  - AAS / HISTORY / ANTHRCUL 355: Health & Illness in African Worlds
  - AAS / WGS 365 (WGS 365): Global Perspectives on Gender, Health, & Reproduction
  - AAS 409 / ANTHRCUL 408: Maternal/Child Health & Environmental Pollution in Africa
  - HISTART / ANTHRCUL 354: Art, Science, and Technology
  - HISTORY / AAS / ANTHRCUL 355: Health & Illness in African Worlds
  - NURSING 225 / ANTHRCUL / WGS 212: The Global HIV/AIDS Epidemic
  - RCSSCI / ANTHRCUL 327: Critical Theory in Medicine and Health
  - WGS / ANTHRCUL / NURSING 225: The Global HIV/AIDS Epidemic
  - WGS 324 (WGS 324) / ANTHRCUL 325: Childbirth & Culture
  - WGS (WGS) / AAS 365: Global Perspectives on Gender, Health, & Reproduction
3. or a course(s) approved by the Undergraduate Advisor.

## Medieval and Early Modern Studies Minor

The minor in MEMS is designed to provide a basic, interdisciplinary familiarity with the pre-modern world. The minor fosters geographic and cross-cultural breadth, but also allows students to integrate their interdisciplinary studies with a defined historical, geographical, or topical focus planned with the department advisor. Possibilities include pre-modern cultural areas (Africa, the Americas, Asia, Europe, the Middle East) or focused thematic subjects (e.g., material culture; women and gender; science, technology, and medicine; Jewish studies; religion and philosophy; music, theatre and performance; colonialism).

*Effective Fall 2011*

Advising

Students wishing to pursue a minor in Medieval and Early Modern Studies must develop a specific plan for its completion in consultation with the Program's [designated advisor](#). Appointments are scheduled at the Program Office.

### Prerequisites

None.

### Requirements

**Minimum Credits: 15**

15 credit hours (and five courses), including at least two upper-division courses, in the medieval and early modern periods, chosen in consultation with the MEMS department advisor. These courses must include

1. **Geographic area courses.** Select one course from two of these five areas:
  - a. African cultures
  - b. American cultures
  - c. Asian cultures
  - d. European cultures
  - e. Middle Eastern cultures
2. **Disciplinary courses.** Select one course from three of these four disciplines:
  - a. historical studies
  - b. art historical or archaeological studies
  - c. language or literary studies
  - d. musicological studies

A single course may count toward both geographic and disciplinary distribution requirements. With the approval of the department advisor, students whose major includes a medieval and early modern studies course in one of these disciplinary categories may substitute one course from a discipline different from that of the major.

## Microbiology Major

Microbiology is an Interdepartmental Program supervised by the Microbiology Major Committee, with academic support provided by the Program in Biology. Participating units include the Departments of Ecology and Evolutionary Biology (EEB) and Molecular, Cellular, and Developmental Biology (MCDB) in LSA; the Epidemiology Department in the School of Public Health; and the Departments of Microbiology & Immunology and Internal Medicine in the Medical School.

Microbiology includes the study of viruses, algae, bacteria, protozoa, and fungi. Immunobiology is also included within the science of microbiology. A major in microbiology prepares students for graduate study in microbiology, biochemistry, agricultural science, and food science as well as for study in other areas of biology which emphasize cellular structures and their function. A bachelor's degree in microbiology may qualify students for entry-level positions in medical, industrial, or governmental laboratories.

Students intending to go to graduate school should have at least two terms of research experience. These can appear as graded courses, UROP participation, or be independent of the graded curriculum. Most graduate school-bound students will have 1-2 graded research courses (2-4 credits/each) on record.

*Effective Fall 2019*

#### **Exclusions:**

*Students who elect a major in Microbiology may not elect the following majors: Biology, Biology, Health, and Society (formerly known as General Biology); Cellular and Molecular Biology (CMB); CMB:BME; Ecology, Evolution, and Biodiversity; Ecology and Evolutionary Biology; Ecology, Evolution, and Biodiversity; Molecular, Cellular, and Developmental Biology (MCDB); Plant Biology; Biochemistry; Biomolecular Science; or Neuroscience. They may also not elect a minor in Biology, Ecology and Evolutionary Biology, Plant Biology; Chemistry; or Biochemistry.*

#### Advising

Students are advised by a combination of Undergraduate Biology Office staff and faculty department advisors. Advising topics include investigating majors, declaring a major, course planning, research and honors, major releases, graduate school and career advice. Students who are interested in the Microbiology major should consult a general advisor during the freshman year, and are strongly encouraged to meet with a department advisor early in their academic career, but no later than the second term of their sophomore year. It is not necessary to complete every prerequisite before declaring a major. To make an appointment, go to the Program in Biology website at <http://www.lsa.umich.edu/biology/>.

#### Grade Policies

#### **Total Credits and GPA Requirement for Microbiology:**

Minimum 31 cr. in Major

Minimum 2.0 GPA in Major

GPA is calculated from all mandatory prerequisites, all courses used for major requirements (including cognates), and all courses in BIOLOGY, EEB, MCDB, EPID, INTMED, and MICRBIOL.

The introductory biology sequence must be taken for a grade. Prerequisites other than introductory biology may be taken pass/fail; however, it is not recommended, especially for chemistry. Remember that at least a C- must be earned to pass a course taken pass/fail. Courses used for the major may not be taken pass/fail.

#### Prerequisites

#### **Introductory Biology Sequence:**

Choose Sequence A, B, or C:

- A. BIOLOGY 171, BIOLOGY 172 or 174, & BIOLOGY 173; or
- B. BIOLOGY 195 (AP/IB) & BIOLOGY 173; or
- C. BIOLOGY 191 (transfer credit), BIOLOGY 192, & BIOLOGY 173

### **Chemistry Sequence:**

- CHEM 210 & 211; and,
- CHEM 215 & 216

### **Quantitative Analysis Sequence:**

Choose any four courses from the following:

- Calculus I (MATH 115, 120 (AP), 175, 185, or 295)
- Calculus II (MATH 116, 121 (AP), 156, 176, 186, or 296)
- Physics I (PHYSICS 125, 135, 139 (AP), 140, or 160)
- Physics II (PHYSICS 126, 235, 239 (AP), 240, or 260)
- Computer Programming (EECS 183, 203, or 280)
- Statistics (STATS 180 (AP), 250, or 280); STATS 400-level or above (min. 3 credits);
- BIOLOGY 202; BIOPHYS/PHYSICS 290;
- Other course with a MATH 115 prereq. approved by a major advisor

*[Note: Any course used to fulfill this requirement cannot also be used as a major elective; i.e., a course cannot "double-count."]*

### **Requirements**

**Minimum Credits: 31**

### **Core Courses:**

- Microbiology: BIOLOGY 207
- Genetics: BIOLOGY 305
- Biochemistry: Choose from: MCDB 310, BIOLCHEM 415, or CHEM 351

### **Advanced Laboratory**

- Lab 1: Choose from: MCDB 429, EEB 447, or EEB 401 "Environmental Microbiology" section ONLY
- Lab 2: Choose from: 3 credits of Independent research (MCDB 400, EEB 400, INTMED 400, MICRBIOL 399, or EPID 399); MCDB 306; EPID 504; EPID 545; BIOLCHEM 416; or (MCDB 429, EEB 447, or EEB 401 "Environmental Microbiology" section ONLY) if not used above

### **Elective Requirement:**

- **Group 1: Specified Electives** (A minimum of 4 course for at least 12 credits):
    - EARTH 413; EEB 416, (447 or 401 "Environmental Microbiology" section ONLY, if not used to fulfill advanced lab), 446, 468; EPID 460; MCDB 408, 409, 415, 416, 436\*, 489; MICRBIOL 405, 409, 415, 430, 440\*, 460; INTMED 409, 460.
- \*Only one of MCDB 436 and MICRBIOL 440 will count toward the major.*



- **Group 2: Additional Electives** (*Select additional courses from Group 1 above or the list below to bring the total credits in the major to a minimum of 31 credits*):
    - Choose from: BIOLCHEM 416; BIOLOGY 225, 272; CHEM 230, 452; EARTH 313; EEB 313, (390, 391, or 392), 400, 401, 447, 476, (482 or 483); EPID 399, 504\*, 505, 507, 525, 543, 545\*; IHS 340 (*only if elected FA19 or later*); INTMED 406; any MATH course with MATH 116 as a prerequisite; MCDB 306, 400, 401, 427, 428, 429\*, 411; MICRBIOL 399; any STATS course at the 400-level or above not being used for Quantitative Analysis Prerequisite
- \*if not used to fulfill the Advanced Lab credit

### Constraints

- Prerequisites, introductory science courses, and non-specific (departmental) transfer courses are EXCLUDED from the 31 cr. required for the major.
- A maximum of three credits of independent research (EEB 400, MCDB 400, EPID 399, MICRBIOL 399, INTMED 400) may be counted toward the major.
- Only one of MCDB 436 and MICRBIOL 440 will count toward the major.

### Distribution Policy

No course used to fulfill a major requirement may be used toward the [LSA Distribution Requirement](#). In addition, courses in the BIOLOGY, EEB, MCDB, and MICRBIOL subject areas may not be used toward the Distribution Requirement.

### Honors

The Program in Biology administers an Honors Program to train students to conduct independent research in the biological sciences. Participating in the honors program allows students to develop their research skills, deepen their understanding of the field, and form productive relationships with faculty and other students. The achievement is noted on the diploma and official transcript.

In addition to completing all the requirements for the major, an honors degree requires:

1. An overall **and** major GPA of at least 3.4, and
2. the completion of a significant piece of independent research that is
  - a. reported in an honors thesis and
  - b. presented in a public forum.

For more information, consult the Program in [Biology Honors Program Information page](#) or a Program in Biology advisor.

## Middle East Studies Major

The major in Middle East Studies offers both a curriculum exclusively focused on language study taught in the target language and a curriculum exclusively focused on cultural studies taught in English. This structure ensures that students form a linguistic and cultural foundation while also encountering higher-level concepts and theories. It allows students the flexibility to create a program that accommodates their personal interests as well as academic needs.

#### Submajors:

- Ancient Middle East Studies
- Arabic Studies
- Armenian Studies
- Hebrew Studies
- Persian Studies
- Turkish Studies

#### Disciplinary Requirement

- Cultural Studies
- History
- Linguistics
- Literature
- Religion
- Visual Culture
- Other

*Effective Fall 2020*

#### **Exclusions:**

*Students who elect a Middle East Studies major may not also elect a major in Middle Eastern and North African Studies. Students can pursue both a Judaic Studies and a Middle East Studies major as long as the student does not elect to pursue both a Middle East Studies Hebrew submajor and a Judaic Studies Hebrew sub plan. Students pursuing a Middle East Studies Hebrew submajor or Judaic Studies Hebrew subplan cannot use the Hebrew credits used to fulfill the Hebrew submajor/subplan to also fulfill requirements for the Judaic Studies or Middle East Studies major. Students can both major and minor in Middle East Studies if the two programs have different focuses and/or different languages are used toward each.*

#### Advising

Students interested in declaring a Middle East Studies major or minor should plan to meet with an advisor before doing so to create a comprehensive and cohesive plan of study. Appointments are scheduled through an online calendar available on the department website.

#### Grade Policies

No course will count toward the major unless the student receives a grade of C- or better.

## Prerequisites

- MIDEAST 200: Introduction to the Middle East.
- Two terms or proven first-year proficiency (placement test and/or successful completion of first-year coursework) in a language appropriate to the student's chosen submajor.

## Requirements

### Minimum Credits: 26

The major in Middle East Studies requires a minimum of 26 credits at the 200-level or above, with at least two courses (in the disciplinary and elective courses) at the 400-level or above. Students must choose both a submajor and a discipline, and complete the MES Major Language Requirement with a submajor-appropriate selection.

**Submajor Requirement:** Students must declare one submajor: Ancient Middle East Studies, Arabic Studies, Armenian Studies, Hebrew Studies, Persian Studies, or Turkish Studies.

**Disciplinary Requirement:** At least three courses (and a minimum 10 credits), focused on a single discipline. At least two courses must be from the Department of Middle East Studies. Disciplinary courses can be chosen from a pre-approved list or, by exception, chosen in consultation with, and approved by, an MES department advisor.

**Middle East Studies Language Requirement for the Major:** At least two additional terms in the language appropriate to the submajor (A minimum of 6 credits).

Four terms or fourth-term proficiency appropriate to the selected submajor. Some of the submajors require fourth-term proficiency in a single language. Students are strongly encouraged to continue their language training beyond the four terms required. This is particularly important for students contemplating graduate studies. Students may test out of the Language Requirement for the MES Major by placement test, but will be required to make up the credits toward the major by taking additional coursework in either the Disciplinary or Elective Requirements.

Select one of the following language choices that matches the submajor:

- *Arabic, Armenian, Persian, or Turkish Studies:* Two additional terms in the selected language.
- *Hebrew Studies:* Three additional terms of language. Students pursuing the Hebrew Studies submajor must take an additional term of Hebrew language instruction at the 300-level or above to complete the Language Requirement. Students also must include two upper division courses which are taught in Hebrew or require the reading of Hebrew texts in the Elective or Disciplinary requirements.
- *Ancient Middle East Studies:* Two additional terms of language beyond the prerequisite.

Students pursuing the Ancient Middle East Studies submajor may take two semesters of the same ancient language or of a different language (or one semester each of two languages) from that taken for the prerequisite to satisfy the MES Major Language Requirement for a total of four semesters of language. Students may use up to three ancient languages toward the major (including the prerequisites), chosen from the following Ancient Languages: Akkadian, Aramaic, Coptic, Sumerian, Classical Hebrew, Classical Greek, Hittite, Middle Egyptian, Syriac, or Ugaritic.)

**Electives:** At least three courses (and a minimum 10 credits), chosen from the disciplines not selected for the disciplinary requirement. At least two courses must be from the Department of Middle East Studies. These courses may be in a single discipline or cross-disciplinary. Electives can be chosen from a pre-approved list or, by exception, chosen in consultation with, and approved by, an MES department advisor. Language classes can be counted as electives, with the following restrictions: No more than one elective may be a 300-level or above language course appropriate to the selected sub-major. No more than one elective may be a 200-level or above language course in a second Middle East Studies language.

At least one course within either the Discipline or the Elective Requirement must be from the pre-modern period and at least one course within either the Discipline or the Elective Requirement must be modern.

### Constraints

- No more than 8 credits may be elected as Independent Study.
- No more than one course elected outside the department of Middle East Studies can be applied toward the Disciplinary Requirement.
- No more than one course elected outside the department of Middle East Studies can be applied toward the Elective Requirement.

### Residency

A minimum of 14 of the required 26 credits for the major must be taken at the U-M Ann Arbor campus.

### Honors

The Honors subplan is open to all students who maintain a cumulative grade point average of at least 3.4 and at least 3.5 in the courses elected as part of the major. Students must complete all regular requirements for the major as well as demonstrate the ability to do original work by writing an Honors thesis.

Applications for Honors are due to the department by the last day of class of the student's junior year. Students may discuss the application process at any time before then with an MES department advisor. Once approved, students enroll in a two-semester, variable credit sequence of independent study coursework to finish the Honors thesis. A recommendation for the designation of "Honors," "High Honors," "Highest Honors," or "No Honors" in Middle East Studies is determined on the successful completion of this coursework and on the quality of the student's Honors thesis.

Further information concerning the Honors subplan can be obtained at the departmental office or the Honors Program Office (1330 Mason Hall).

## Middle East Studies Minor

The minor in Middle East Studies provides students with the opportunity of gaining fundamental knowledge of Middle East civilizations, through courses focused on either an area (e.g. Arabic Studies, Armenian Studies, Biblical Studies, Egyptology, Hebrew and Judaic Studies, Iranian Studies, Islamic Studies, Mesopotamian Studies, or Turkish Studies) or a discipline (e.g. Middle

East literature, visual culture, history, religion, etc.) taught within the Department of Middle East Studies. Students have the option of using intermediate-level and above language courses towards program requirements.

*Effective Fall 2020*

#### **Exclusions:**

*Students can both major and minor in Middle East Studies if different languages and/or disciplines are used toward each.*

#### Advising

Students interested in declaring a Middle East Studies major or minor should plan to meet with an advisor before doing so to create a comprehensive and cohesive plan of study. Appointments are scheduled through an online calendar available on the [department website](#).

#### Grade Policies

No course will count towards the minor unless the student receives a grade of C- or better.

#### Prerequisites

MIDEAST 200: Introduction to the Middle East

#### Requirements

##### **Minimum Credits: 16**

At least 16 credits of courses chosen as follows:

1. At least three courses in Middle East Studies (MIDEAST) offered through the Department of Middle East Studies focused either:

A) Within one area (e.g. Arabic Studies, Armenian Studies, Biblical Studies, Egyptology, Hebrew and Judaic Studies, Iranian Studies, Islamic Studies, Mesopotamian Studies, or Turkish Studies); or

B) Around disciplines or lines of inquiry not necessarily defined by area (e.g. Middle East literature, visual culture, history, religion, etc.).

2. Students may count up to two semesters of either:

A) A modern Middle East language (e.g. Arabic, Armenian, Hebrew, Persian, Turkish) at the fourth semester or above; or

B) An ancient Middle East language (e.g. Aramaic, Classical Hebrew, Middle Egyptian, Coptic, Hittite, Akkadian, Sumerian, Syriac) at the second semester or above.

3. At least two of the MIDEAST courses must be at the 300-level or above.

Because of the great variety of areas of study possible in the program, and the diversity of the department's curriculum, there is no pre-set sequence of courses required. Each student determines their focus in consultation with a department advisor at the beginning of the program.

Recommended courses to complete the minor will be discussed and determined at that time. Throughout their study, students should plan to meet regularly with an advisor and to consult provided course lists for their chosen area of focus so that a cohesive plan of study may be pursued.

### Residency

At least 9-credits must be elected at the University of Michigan-Ann Arbor.

# Middle Eastern and North African Studies Major

[The Center for Middle Eastern and North African Studies](#) offers a multidisciplinary area major program to students who want to obtain a broad background on the modern Middle East and North Africa.

*Effective Fall 2016*

### Exclusions:

*Not open to those who elect a major in Near Eastern Studies.*

### Advising

Undergraduate Advisors at the International Institute are available to meet with undeclared students who would like to learn more about the program, and also with current majors and minors who would like to discuss course selection, degree requirements, major/minor releases, and other matters of concern. Appointments can be made through our online appointment calendar by clicking on: [meet with an advisor](#). Information on all of our undergraduate programs and Walk-In Advising hours can also be found on our website: [here](#). The International Institute's Undergraduate Advising Office is currently located at 1080 South University Avenue, Suite 2660.

### Prerequisites

**One of the following first-year language sequences or the equivalent:**

- ARABIC 101 and 102
- ARMENIAN 101 and 102
- HEBREW 101 and 102
- PERSIAN 101 and 102
- TURKISH 101 and 102

**Strongly recommended:**

- NEAREAST 200 (Introduction to the Middle East)
- AAPTIS 204 (Introduction to Islam)

### Requirements

## Minimum Credits: 30

A minimum of 30 credits at the 200-level and above, chosen in consultation with and approved by the undergraduate department advisor. The courses chosen must include:

### 1. Core Courses

- MENAS 493
- One 300 or 400-level, advisor approved, course in Anthropology, Sociology, or Women's Studies
- HISTORY 443 and one additional 300 or 400-level, advisor approved, course in pre-1800 Middle East history
- Political Science, any one of the following: POLSCI 351, 352, 353.

### 2. **MENAS Language Requirement for the Major.** One year of the following languages beyond the first year: Arabic, Armenian, Hebrew, Persian, or Turkish.

### 3. **Electives.** Two approved electives, selected in consultation with the advisor, with appropriate Middle East content.

## Distribution Policy

No course used to fulfill a major requirement may be used toward the [LSA Distribution Requirement](#). In addition, courses in the MENAS subject area may not be used toward the Distribution Requirement.

## Honors

Special arrangements are made for qualified students to elect an Honors major. Candidates for an Honors major undertake independent research which is reported in a senior Honors thesis. Prospective Honors majors should consult with the Honors department advisor before the end of the junior year and should enroll in one of the senior Honors thesis courses approved by the advisor.

# Modern European Studies Minor

The minor in Modern European Studies is open to students with any kind of academic background who wish to better understand European societies from a variety of disciplinary perspectives. After gaining a solid knowledge of European history, students can branch out in many directions: they can further explore historical processes, delve into economic problems, investigate social relations, or examine Europe's cultural achievements and conflicts, among other possibilities. The minor encourages a broad understanding of Europe, both geographically and thematically. With the European Union now extending from Portugal to the Russian borderlands, and with global processes reconfiguring Europe's relationships with the rest of the world, the minor offers a unique opportunity for students to familiarize themselves with an enormously diverse continent that is constantly re-examining its roots and discussing its future.

*Effective Fall 2010*

## Advising

Undergraduate advisors at the International Institute are available to meet with undeclared students who would like to learn more about the program, and also with current majors and minors who would like to discuss course selection, degree requirements, major/minor releases,

and other matters of concern. Appointments can be made through our online appointment calendar by clicking on: [meet with an advisor](#). Information on all of our undergraduate programs and Walk-In Advising hours can also be found on our website: [here](#). The International Institute's Undergraduate Advising Office is currently located at 1080 South University Avenue, Suite 2660.

### Prerequisites

Fourth-term proficiency in a language of the European Union (other than English) or other European language by permission of the advisor.

### Requirements

#### Minimum Credits: 15

At least two courses must be upper-level (300 or above).

1. **Modern European history** : HISTORY 318 or 319.
2. **Elective courses**: Three courses chosen in consultation with, and approved by, the CES academic advisor, from one of the following tracks:
  - A. ***Politics, Economy, and Society of Europe and the EU***
    - One upper-level course on modern European or EU politics, society, or economics.
    - Two additional social science courses on modern Europe.
  - B. ***European Arts and Culture***
    - One upper-level course on art, literature, or culture of modern Europe
    - Two additional humanities courses on modern Europe
3. **Capstone**: A fourth elective course (3 credits), chosen at the discretion of the student and the advisor and taken during the final two academic terms of study, that offers an opportunity to synthesize what the student has learned about modern Europe. It should involve researching and writing a paper of at least 12 pages in length. Possible themes include EU expansion, colonialism/post-colonialism, economic development, migration and immigration, European identity, and European literary traditions.

Courses must be distributed over at least three of the following fields: anthropology, economics, history, history of art, literature, music, philosophy, political science, screen arts and cultures, and sociology

### Constraints

Students may not use more than one course to meet the requirements of both a plan for the major and a minor.

No course may be used to satisfy the requirements of more than one minor.



# Modern Middle Eastern and North African Studies Minor

The Center for Middle Eastern and North African Studies offers an interdisciplinary minor to students who wish to gain insight into the political, economic, and social issues affecting the Middle East and North African, and who wish to achieve an understanding of the region's history and culture. Emphasis in this minor is on the modern Middle East and North Africa.

*Effective Fall 2006*

## **Exclusions:**

*A minor in Modern Middle Eastern and North African Studies is not open to students with a major in Middle Eastern and North African Studies or a major or minor in the Department of Near Eastern Studies .*

## Advising

Undergraduate advisors at the International Institute are available to meet with undeclared students who would like to learn more about the program, and also with current majors and minors who would like to discuss course selection, degree requirements, major/minor releases, and other matters of concern. Appointments can be made through our online appointment calendar by clicking on: [meet with an advisor](#). Information on all of our undergraduate programs and Walk-In Advising hours can also be found on our website: [here](#). The International Institute's Undergraduate Advising Office is currently located at 1080 South University Avenue, Suite 2660.

## Prerequisites

MIDEAST 200 : Introduction to the Middle East

## Requirements

### **Minimum Credits: 15**

At least 15 credits of courses, chosen in consultation with and approved by advisor:

1. A 400-level history course
2. A 400-level social science course in either Anthropology, Political Science, or Sociology
3. MENAS 493

Courses must be distributed over three of the following disciplines: 3rd year of middle eastern language, anthropology, history, history of art, middle eastern literature, political science, religion, sociology or women's studies.

## Constraints

Elementary and intermediate-level language courses in Near Eastern Studies may not count toward the minor.

## Residency

At least one half of the courses counting toward the minor must be taken at the UM-Ann Arbor campus.

# Molecular, Cellular, and Developmental Biology Major

The curriculum in Molecular, Cellular, and Developmental Biology offers students an integrated program of study and training in the biological and physical sciences. It is a pathway to graduate study in areas of biology and medicine that emphasizes a quantitative and analytical approach to the life sciences.

*Effective Fall 2020*

## Exclusions:

*Students who elect a major in Molecular, Cellular, and Developmental Biology may not elect the following majors: Biology; Biology, Health, and Society (formerly known as General Biology); Cellular and Molecular Biomedical Science (formerly known as CMB:BME); Microbiology; Plant Biology; Biochemistry; Biomolecular Science; or Neuroscience. They may also not elect a minor in Biology; Plant Biology; Chemistry; or Biochemistry.*

## Advising

Students interested in any major in the biological sciences are encouraged to meet with an advisor to discuss their academic plans as soon as possible! Students need not have completed all of the major prerequisites to declare, but should have completed the introductory biology sequence with a 2.0 or better and be in good academic standing. To make an appointment, go to the Program in Biology website at <http://www.lsa.umich.edu/biology/>.

## Grade Policies

### Total Credits and GPA Requirement for Molecular, Cellular, and Developmental Biology:

Minimum 31 cr. in Major

Minimum 2.0 GPA in Major

GPA is calculated from all mandatory prerequisites, all courses used for major requirements (including cognates), and all courses in BIOLOGY, EEB, and MCDB.

The introductory biology sequence must be taken for a grade. Prerequisites other than introductory biology may be taken pass/fail; however, it is not recommended, especially for chemistry. Remember that at least a C- must be earned to pass a course taken pass/fail.

Courses used for the major may not be taken pass/fail.

## Prerequisites

### Introductory Biology Sequence:

Choose Sequence A, B, or C:

A. BIOLOGY 171, BIOLOGY 172 or 174, & BIOLOGY 173; or

B. BIOLOGY 195 (AP/IB) & BIOLOGY 173; or

C. BIOLOGY 191 (transfer credit), BIOLOGY 192, & BIOLOGY 173

### Chemistry Sequence:

- CHEM 210 & 211; and
- CHEM 215 & 216

### Quantitative Analysis Sequence:

Choose four courses from the following:

- Calculus I (MATH 115, 120 (AP), 175, 185, or 295)
- Calculus II (MATH 116, 121 (AP), 156, 176, 186, or 296)
- Physics I (PHYSICS 125, 135, 139 (AP), 140, or 160)
- Physics II (PHYSICS 126, 235, 239 (AP), 240, or 260)
- Computer Programming: EECS 183, 203, and/or 280
- Statistics (STATS 180 (AP), 250, or 280); and/or STATS 400-level or above (min. 3 credits)
- BIOLOGY 202
- BIOPHYS/PHYSICS 290

*[Note: Any course used to fulfill this requirement cannot also be used as a major elective; i.e., a course cannot "double-count."]*

## Requirements

**Minimum Credits: 31**

### Core Courses:

- Fundamentals of Cell Biology (BIOLOGY 272) or Developmental Biology (BIOLOGY 205)
- Genetics: BIOLOGY 305
- Biochemistry: Choose from: MCDB 310, BIOLCHEM 415, or CHEM 351
- Cellular or Molecular Biology: Choose one from: MCDB 427 or MCDB 428

### Electives:

#### Group I - Advanced MCDB Laboratory Courses:

- Choose two courses from: MCDB 306, 400 (3 cr. min./max.), 423, 424, 429

#### Group II - Advanced MCDB Courses:

- Choose two courses from: MCDB 401, 402, 403, 404, 405, 406, 408, 409, 410, 411, 415, 416,

417, 418, 420, 421, 422, 425, 426, 427 (if not used for core), 428 (if not used for core), 430, 433, 434, 435, 436, 440, 441, 444, 447, 448, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 462, 463, 469, 471, 489, 589, or an additional course from Group I

### Group III - Biology & Chemistry Electives:

- Choose course(s) from the following list to reach 31 credits in major:
  1. Additional courses from Group I or II (above)
  2. Any specific BIOLOGY, EEB, or MCDB course at the 200-, 300-, or 400-level not used to fulfill another requirement (except BIOLOGY 200, 201, 215, 241, 299; or EEB 300, 301, 302; or MCDB 300, 301, 302, 320, 360, 412, 460, or 461)
  3. Chemistry 230 or 260

### Constraints

- A maximum of three credits of independent research (MCDB 400) may be counted toward the major. Three credits must be completed in one term to meet the Advanced Laboratory requirement or the Advanced MCDB Course requirement.
- Prerequisites, introductory science courses, and non-specific (departmental) transfer courses are EXCLUDED from the 31 cr. required for the major.

### Honors

The Program in Biology administers an Honors Program to train students to conduct independent research in the biological sciences. Participating in the honors program allows students to develop their research skills, deepen their understanding of the field, and form productive relationships with faculty and other students. The achievement is noted on the diploma and official transcript.

In addition to completing all the requirements for the major, an honors degree requires:

1. an overall **and** major GPA of at least 3.4,
2. complete the thesis program application via the Program in Biology web page,
3. participation in at least two terms of independent research, and,
4. the completion of a significant piece of independent research that is
  - reported in an honors thesis and
  - presented in a public forum.

Note that undergraduate research students typically register for an independent research course (as appropriate for their major) during each term of research. Formal course registration is encouraged, but not required. For more information, consult the [Program in Biology Honors Program Information page](#) or a Program in Biology advisor.

## Minor in Multidisciplinary Design

The Multidisciplinary Design Program offers students a wide variety of long-term, team-based engaged learning opportunities to bridge the gap between the classroom and professional experience. Students are invited to apply for a faculty research or externally-sponsored project team, or curricularize through significant involvement on a design-based student project team.

To earn the Minor in Multidisciplinary Design, students complete a set of four core experiences rather than a prescribed list of classes, including: an introductory design course, a multi-term design project, a topical complementary course and a final leadership/mentorship course. There are many options available to satisfy these requirements, and course selections are tailored to students' interests and degree plan.

There is one optional specialization within the Minor in Multidisciplinary Design: Global Health Design.

The Multidisciplinary Design Minor sets you apart from other students and demonstrates your deep understanding of design in a real-life context. This minor incorporates practical teamwork skills with classroom learning, culminating in an intensive, hands-on, multi-term design project. The courses to complete the MD minor are highly individualized, and customized to support you as you develop your skills on a project that you care about.

The Multidisciplinary Design Minor is currently available to students in Engineering; Architecture; Art & Design; Business; Education; Information; Kinesiology; Literature, Science and the Arts; Music, Theatre & Dance; and Pharmacy.

#### *Minor Requirements*

The Multidisciplinary Design Minor requires 15 credit hours across 4 key experiences. This program is **highly individualized**. The courses below represent common enrollments for MDP students.

- **Introductory Design, Build Test Experience** (2 – 4 credits)
  - The following courses have most commonly been used to fulfill the DBT (Design, Build, Test) Experience: ENGR 100 (DBT sections only); ENGR 255; BME 350; EECS 183; ME 250; ARTDES 120 or 130
  - *The DBT requirement can also be fulfilled through an additional semester on your multi-term project team.*
  - Other approved courses on an individual basis.
- **Multi-Term Design Project** (minimum of 7 credits across 2 or more terms)
  - Connect with a project through **student organizations**; apply for **corporate sponsored projects** and **FRST research labs** at the MDP Project Opportunity Fair in October.
  - **PLEASE NOTE:** the Multi-Term Design Project must be earned at 300-level or higher
  - Most common curricularization option: ENGR 355/455
  - Other approved courses or projects on an individual basis
- **Connections Course** (3 – 4 credits)
  - Broadens your perspective and lends depth to your work on the Multi-Term Design Project
  - Cannot be required for your major; must be approved by MDP Academic Advisor
  - Courses outside of your major (or, better yet, outside your college!) **highly** encouraged.
  - Must earn a letter grade of at least a C
  - Click to fill out the [Petition for Connections Course Form](#).
  - Some examples of Connections Courses:

M-Fly Team	Aerospace Engineering	ENTR 599.018 Interpersonal Skills: Leveling up to Leadership
Stryker Diagnostic Team	Art & Design	IOE 548: Integrated Product Development
Solar Car Team	Chemical Engineering	MO 302: Positively Leading People & Organizations
Woven Wind Team	Electrical Engineering	UP 357: Architecture, Sustainability and the City
Pillar Project Team	Computer Science Engineering	SI 422: Needs Assessment and Usability Evaluation
General Motors Project Team	Business Administration	ES 395: Entrepreneurial Management

- **Mentorship/Leadership Course** (2 credits)
  - Enrollment through ENGR 456 only
  - Attend semester-long seminar (*6 evening meetings and writing assignments*)
  - Mentoring experience ([further details can be found here](#))

#### *How to Declare the Minor*

- Be in good academic standing (2.0 or above, in both term and cumulative GPAs).
- Be declared into a major or concentration, as determined by your School or College.
- Have successfully earned academic credit on a [design project team](#).
- [Click here to schedule an appointment with the MDP Academic Advisor to declare the MDP minor.](#)

**PLEASE NOTE :** All courses/credits must be earned at the University of Michigan-Ann Arbor; no transfer credit can be applied to the MDP Minor. All courses/credits must be taken for a letter grade, except for ENGR 456. Minor GPA and all individual components must be at a 2.0 GPA or higher.

## Museum Studies Minor

The primary goal of the minor in museum studies is to teach students how museums work, both in historical and contemporary contexts. Doing so involves learning to critically engage the historical, social, cultural, artistic and scientific dimensions of heritage, both tangible and intangible, within the museum. The museum studies minor seeks to foster "museum literacy" by introducing students to the processes by which meaning is inscribed upon objects within the context of museums and to the roles museums, broadly defined, play in society. Institutions, objects and collections, and society thus form the curriculum's conceptual foci.

**Objects and Collections** — The artifact, collections of artifacts maintained by museums, and the information associated with them:

the nature of objects; learning from objects; disciplinary perspectives on the object; the role of museum artifacts in research; conservation; connoisseurship; collectors and collecting; tangible and intangible culture; how objects acquire their meaning; the real vs. the represented; exhibit design (how museums choose to display objects)

**Institutions** — The wide variety of organizations that collect and display artifacts for education, research, or entertainment:

the history of museums; administration, governance, and ethics; non-profit and for profit models of museums; national vs. local museums; museums in their various forms (i.e., science centers, zoos, botanical gardens, history centers, art museums, themed experiences); the relationship of museums to libraries and archives ; rationalizing the museum within society; museum design and architecture; assessment; technology in museums; organization of and access to museum information; professional associations at the state, national and international levels

**Society** — The audiences that museums engage, individually or collectively, and the communities whose cultures are represented in museum displays:

the role of museums in society; the representation of ethnicity, gender, race, and culture in museums; the role of museums in nation building; public culture; repatriation and debates over the ownership of cultural properties and cultural heritage; visitor studies; learning in museums; defining the museum experience; audience and visual perception studies

Investigations into the interrelationships that exist between these three foci will add to the wealth of material addressed in the curriculum. Indeed, some of the most interesting issues exist at the intersections of these foci.

Students will derive multiple secondary benefits from this course of study - new content knowledge, an enhanced ability to conduct research in one's academic discipline, a new means by which to understand other cultures and societies, a heightened awareness of the points of view afforded through multidisciplinary study and understanding the relationship of how one's discipline relates to other disciplines, an increased capacity for critical thinking and observation, and the personal empowerment derived from becoming more informed users of cultural assets, especially those available at the University of Michigan.

Despite being situated in the College of LSA, the undergraduate minor has been designed to accommodate majors from other schools and colleges at the university. While it has been broadly conceived, the museum studies minor will hold special appeal to students concentrating in Anthropology, Classical Archaeology, History, History of Art, American Culture, and Communication and Media Studies, where students are first introduced to these topics.

*Effective Fall 2009*

[Advising](#)

Advising responsibilities are divided between the Museum Studies Program Student Services

Specialist and Museum Studies faculty, specifically the Director and Associate Director. General questions regarding curriculum requirements will be handled by the Student Services Specialist. The Specialist will also serve as the coordinator for the practicum requirement (MUSEUMS 409). The Director and Associate Director advise students on issues concerning elective course selection, graduate study, and career planning.

### Prerequisites

None for the minor *per se*, although individual courses elected to meet the requirements of the minor may have course prerequisites.

Students will be eligible to declare their desire to pursue the Museum Studies minor upon completion of MUSEUMS 301 (sophomore standing).

### Requirements

#### Minimum Credits: 18

1. **Core Courses:** MUSEUMS 301 and 401.  
MUSEUMS 301 and MUSEUMS 401 provide a theoretical/historical overview of museums as examined through the constructs of institutions, objects and collections, and society as well as an examination of the critical issues confronting museums in the contemporary world.
2. **Museum-Based Practicum:** MUSEUMS 409 (Practicum in Museums) will be available to students who have declared the minor in Museum Studies. MUSEUMS 409 establishes a critical bridge between theory and practice and - through the use of mentoring, class discussion, and engagement with the principles of reflective practice -- will assure that students draw the most from this experiential requirement. Based on the premise that theoretical grounding is necessary for a successful practicum experience, students will not be allowed to seek MUSEUMS 409 credit for museum-based practical experiences undertaken before completing MUSEUMS 301. Students interested in acquiring additional museum experience may repeat MUSEUMS 409 for a total of six credits. In such instances the second three credits may replace one of the required three elective courses.
3. **Electives:** Three elective courses chosen in consultation with, and approved by, the museum studies faculty advisor. These courses are selected from designated 300- and 400-level courses in the three thematic areas (institutions, objects and collections, and society) of the program. Students must elect one course from at least two of the three areas.
  - A. Institutions
  - B. Objects & Collections
  - C. Society

A complete list of current electives can be found on the [Museum Studies website](#).

The electives offer students the opportunity to take courses to further their knowledge of institutions, objects and collections, and society in many departments in the university. Those students selecting courses not directly focused on the museum will have the opportunity to make critical ties back to the field through the completion of mentored writing assignments. To receive elective credit for a course that is not explicitly museum-focused, upon receiving prior approval a student will be required to write a brief (5-page) rationale paper that addresses the relationship between the content of the course and issues considered in the two museum studies core courses, MUSEUMS 301 and 401. The academic staff of the Museum Studies Program will evaluate these papers.



# Music Minor

The Music Minor offers students the opportunity to explore music to enrich their studies and receive formal recognition on their diploma. The minor also makes music studies more accessible to students with already demanding majors, such as engineering. Students who have played with an ensemble regularly will likely only need 2 or 3 additional classes to complete the minor.

An academic minor in music is developed in consultation with an undergraduate advisor in music. Students interested in the Minor in Music should contact Tom Erickson ([tericks@umich.edu](mailto:tericks@umich.edu); 734-764-8623), Becky Olsen ([beckyo@umich.edu](mailto:beckyo@umich.edu); 734-763-9283), or Deedee Ulintz ([dianals@umich.edu](mailto:dianals@umich.edu); 734-764-0592) for more information about the minor or to schedule an advising appointment.

*Effective Winter 2020*

## Exclusions:

*A minor in Music is not open to students with a major in Music, including those in the University of Michigan School of Music, Theatre & Dance.*

## Advising

Students can contact Tom Erickson ([tericks@umich.edu](mailto:tericks@umich.edu); 734-764-8623), Deedee Ulintz ([dianals@umich.edu](mailto:dianals@umich.edu); 734-764-0592), or Becky Olsen ([beckyo@umich.edu](mailto:beckyo@umich.edu); 734-763-9283) via email or telephone to schedule advising appointments.

## Prerequisites

None, but ability to read music and instrumental or vocal performance experience is recommended.

## Requirements

### Minimum Credits: 15

15 credits *of music courses* must be taken to fulfill the minor requirements.

One introductory course in MUSICOL or THEORY chosen from:

- MUSICOL 121: Introduction to the Art of Music
- MUSICOL 122: Introduction to World Music
- MUSICOL 123: Introduction to Popular Music
- MUSICOL 130: Opera!
- MUSICOL 345: History of Music - Middle Ages to Baroque
- MUSICOL 346: History of Music - Baroque to modern era
- THEORY 137: Introduction to the Theory of Music
- THEORY 238: Introduction to Musical Analysis

Minimum four additional electives in music, at least two of which must be at the 300-level or above. Elective selections must include one or more courses in two of the following five areas: COMP, MUSICOL, THEORY, PAT, or performance.

- COMP 221: Introduction to Elementary Composition
- COMP 222: Composition
- COMP 233: Special Topics in Composition
- COMP 415: Introduction to Electronic Music
- COMP 416: Seminar in Electronic Music
- MUSICOL 121: Introduction to the Art of Music
- MUSICOL 122: Introduction to World Music
- MUSICOL 123: Introduction to Popular Music
- MUSICOL 130: Opera!
- MUSICOL 343: Music and Islam
- MUSICOL 345: History of Music - Middle Ages to Baroque
- MUSICOL 346: History of Music - Baroque to Modern Era
- PAT 200: Introduction to Electronic Music
- PAT 204: Creative Coding for Music
- PAT 305 / MUSPERF 300: Video Game Music
- PAT 313: The Art of Electronic Music
- PAT 314: Electronic Music & Social Justice
- PAT 472 / ARTSADMN 472: Business of Music
- THEORY 137: Introduction to the Theory of Music
- THEORY 238: Introduction to Musical Analysis

performance courses may include private instruction\*, applied GUITAR, PIANO, or VOICE, or ENS\*\*:

- BASSOON 150
- CARILLON 150
- CELLO 150
- CLARINET 150
- DBLBASS 150
- ENS 344: Campus Philharmonia & Symphony Orchestra
- ENS 346: University & Campus Bands
- ENS 348: Marching Band, Basketball & Hockey Bands
- ENS 351: Arts Chorale
- ENS 363: Men's Glee Club
- ENS 356: Women's Glee Club
- ENS 360: Campus Jazz Ensemble
- ENS 405, 406: Beginning Javanese Gamelan
- ENS 407: Javanese Gamelan Ensemble
- EUPHBARI 150
- FLUTE 150
- FRENHORN 150
- GUITAR 111 (class guitar)
- GUITAR 112 (class guitar)
- HARP 150
- HARPSCH 150
- JAZZ 150
- OBOE 150
- ORGAN 150
- PERCUSS 150
- PIANO 110 (class piano)
- PIANO 150

- SAX 150
- TROMBONE 150
- TRUM 150
- TUBA 150
- VIOLA 150
- VIOLIN 150
- VOICE 111 (class voice)
- VOICE 150

*\*Private lesson availability is limited, and the School of Music, Theatre & Dance does not guarantee placement. Priority is given to School of Music performance majors. Additionally, private lessons on some instruments may not be available in a given term. Please see the [Application for Private Instruction page](#) on the SMTD website for more details.*

*\*\*Placement in Ensemble courses may require an audition. Please see the [Performance Opportunities page](#) on the SMTD website for more details.*

### Constraints

AP credits may not be used to satisfy requirements of the minor with one exception. AP Credit in THEORY may qualify, if approved by the LSA Music Advisor, for the introductory course in MUSICOL or THEORY. In this instance, a minimum of 5 other courses, totaling 15 credits, must be elected for the minor.

Any course elected to fulfill the required introductory course in MUSICOL or THEORY cannot also be applied toward satisfying the Electives requirement.

With approval by the LSA Music Advisor, a maximum of two non-SMTD music courses may be used to satisfy appropriate requirements for the LSA Music Minor.\*

\*Music courses offered by non-SMTD units:

- AAS / RCHUMS / WGS (WGS) / HONORS 354: Race and Identity in Music
- AAS 366: Music of Africa
- AMCULT 209: History of American Popular Music
- AMCULT / HISTORY / LATINOAM 226: The Latin Tinge
- AMCULT 228: American Musical Soundscapes
- AMCULT 337: A Survey of American Blues Music
- AMCULT 407: The History of American Folk Music: Culture, Politics, Music\
- AMCULT 409: American Roots Music
- AMCULT / WGS 411 (WGS 411): Rednecks, Queers, and Country Music
- COMM 455: Music and Mediated Identities
- PSYCH 211: Project Outreach, *section titled "mind, Music, and the Community"*
- PHYSICS 288: The Physics of Music
- RCMUSIC 249 (RCHUMS 249): Foundations of Music
- RCHUMS 251: Topics in Music
- RCHUMS 253: Choral Ensemble: Residential College Singers
- RCHUMS 256: Studying and Playing Southeast Asian Music
- RCHUMS 259: Music Improvisation
- RCMUSIC 320 (RCHUMS 250): Chamber Music

- RCMUSIC 334 (RCHUMS 252): Topics in Musical Expression
- RCHUMS 350: Creative Musicianship
- RCHUMS 351: Creative Musicianship Lab
- RCHUMS 352: Found Instruments: Building, Design, and Performance
- RCHUMS 356: The Symphonic Century: Music and Revolution in the 19th Century
- RCMUSIC 353 (RCHUMS 258): Afro-Cuban Drumming and Styles
- RCHUMS / ENS 406: Beginning Javanese Gamelan
- RCHUMS / ENS 407: Javanese Gamelan Ensemble
- SOC 255: The Sociology of Music

### Other Department Policies

Additional music courses offered by the School of Music, Theatre & Dance are available and with approval by the LSA Music Advisor, may be used to satisfy appropriate requirements of the LSA Music Minor. Enrollment in these courses may be restricted to SMTD students. Interested students should contact the instructors of these courses for permission to enroll.

Additional SMTD music courses open on non-SMTD students:

- ARTSADMN 406: Special Topics
- ARTSADMN 410: Arts Entrepreneurship Forum
- ARTSADMN 422: Writing About Your Art
- ARTSADMN 423: Grants & Fundraising
- ARTSADMN 426: Arts Fundraising
- ARTSADMN 428: Arts Leadership
- ARTSADMN 432: Recording Industry
- ARTSADMN 477: Social Value Arts
- JAZZ 450: Contemplative Practices Seminar
- JAZZ 454.002: Special Topics
- JAZZ 455: Creativity and Consciousness
- MUSED 210: Special Topics
- MUSICOL 343: Music and Islam
- MUSPERF 200: Engaging Performance

### Residency

Upon approval of the LSA Music Advisor, up to six credits earned outside of the University of Michigan or its sponsored programs may be used to fulfill requirements for the minor.

## Native American Studies Minor

The Native American Studies Program offers undergraduate and graduate courses in the field. Its curriculum includes an undergraduate minor and graduate courses organized around multiple disciplines in the humanities and social sciences.

The minor in Native American Studies permits students to explore the North American Indian experience in an interdisciplinary manner. The goal of the minor is to assist students in coherently planning a curriculum that will enable them to grapple intelligently and in an informed manner with the history, experience, and contributions of Native Americans in the United States and Canada. Courses in language, literature, the social sciences, and the humanities form the main areas of study, but students may occasionally have an opportunity to explore Native American arts, historic and contemporary.

Students interested in pursuing a minor in NAS should contact the Director of Native American Studies.

*Effective Winter 2014*

**Exclusions:**

*A minor in Native American Studies is not open to students with any minor in the Department of American Culture.*

Advising

Students can set up advising appointments for any of the program's major or minor plans by visiting [www.lsa.umich.edu/ac/undergraduate/advising](http://www.lsa.umich.edu/ac/undergraduate/advising).

Prerequisites

None.

Requirements

**Minimum Credits: 15**

At least 5 courses totaling 15 credits, at the 200-level or above. At least two courses (6 credits) must be elected at the 300-level or above.

1. **General Surveys:** One course chosen from:
  - AMCULT 216: Introduction to Native American Studies – Social Science
  - NATIVEAM 217 / AMCULT 217: Introduction to Native American Studies – Humanities
  - NATIVEAM 316 / AMCULT 316 / ANTHRCUL 315: Native American Peoples of North America
  - NATIVEAM 367 / AMCULT 367 / HISTORY 367: American Indian History
2. **Electives:** Additional credits in Native American Studies to bring minor total to 15 [Courses from Requirement 1 may not be used to meet Requirement 2]. Electives may be chosen from the following list:
  - AMCULT 262 / RELIGION 262: Introductory Study of Native Religious Traditions
  - AMCULT 372: Hula (F17)

- AMCULT 301: Topics in American Culture, *section subtitled "Native American Feminism"*
- AMCULT 310: Topics in Ethnic Studies, *section subtitled "Blacks, Indians, and the Making of America"*
- AMCULT 333: Green Indigeneities (F17)
- AMCULT 428: Native American Literature
- AMCULT 496: Social Science Approaches to American Culture, *section subtitled "Native American Mental Health"*
- AMCULT 498: Capstone Seminar in American Culture, *sections subtitled "Native American Autobiography," "African American and Native American Women Writers"*
- ANTHRARC 490: Ancient North America (F17)
- ENGLISH 407: Topics in English Language and Literature, *section subtitled "Contemporary Native American Women Writers"*
- HISTORY 496: Indians and Empires in North America (F17)
- NATIVEAM 322 / AMCULT 322: Intermediate Ojibwe
- NATIVEAM 323 / AMCULT 323: Intermediate Ojibwe
- NATIVEAM 328 / AMCULT 328 / ENGLISH 382: Native American Literature
- NATIVEAM 422 / AMCULT 422: Advanced Ojibwe
- NATIVEAM 423 / AMCULT 423: Advanced Ojibwe
- NATIVEAM 461 / AMCULT 461 / ANTHRCUL 461 / LING 461: Language, Culture, and Society in Native North America
- RELIGION 262 / AMCULT 262: Introductory Study of Native Religious Traditions
- SPANISH 472: Indigenous Peoples of the Americas (F17)

Other courses, such as courses in other departments and special topics courses not listed above, may be taken with the approval of the Director of Native American Studies. These may include

- "Histories of Native American Women,"
- "19th-Century Native American Literature,"
- "Contemporary Native American Literature,"
- "Contemporary Literature by Native Americans."

## Neuroscience Major

Neuroscience is an Interdepartmental Program administered jointly by the Department of Psychology and the Department of Molecular, Cellular, and Developmental Biology (MCDB).

Neuroscience (B.S.) may be elected as an interdepartmental major, supervised by the *Undergraduate Neuroscience Steering Committee*.

The overall goals of this major are to:

1. provide a course of study in the discipline of Neuroscience that integrates cell/molecular and behavioral components of the field; and
2. provide a course of study that better prepares students for graduate training in the field of Neuroscience than do the current majors in Molecular, Cellular, and Developmental Biology (MCDB); Biology; or Biopsychology, Cognition, and Neuroscience (BCN).

An understanding of how the nervous system functions spans both molecular and cellular activity that is best taught by cell and molecular neurobiologists, and behavior that is best taught by psychologists. The well-trained student will receive instruction that allows her or him to understand the usefulness of genetics, cellular biology, and behavioral tests in this complex field. This degree will provide the cross-disciplinary training that will provide a head-start into postgraduate studies in Neuroscience.

*Effective Winter 2019*

#### **Exclusions:**

*Students who elect a major in Neuroscience may not elect the following majors: Brain, Behavior, and Cognitive Sciences; Biopsychology, Cognition, and Neuroscience; Biomolecular Science; Biology; General Biology; Molecular, Cellular, and Developmental Biology (formerly known as Cell and Molecular Biology, or CMB); Microbiology; Plant Biology; or Biochemistry. They may also not elect a minor in Biology; Plant Biology; Chemistry; or Biochemistry.*

#### Advising

Students considering a neuroscience major are urged to meet with a Neuroscience major advisor during their first or second year at the University. It is not necessary to complete all the prerequisite courses before declaring a Neuroscience major, nor is it necessary to complete all the prerequisite courses before beginning to enroll in upper level courses required of the major

Students choosing Neuroscience as a field of the major develop an approved plan for the major with a department advisor who must approve the original plan for the major and any exceptions to the stated requirements for the major.

Students should also consult a department advisor when planning the final term's elections to ensure that all requirements for the major have been met and to secure an advisor's approval on a *Major Release* form.

To make an advising appointment, go to: <http://lsa.umich.edu/neurosci/undergraduates>

#### Prerequisites

- BIOLOGY 171 and 172/174 and 173; or BIOLOGY 195 and 173; or BIOLOGY 191 and 192, and 173; and,
- CHEM 210/211 and 215/216; and,
- STATS 250 or STATS 280; and,
- Quantitative Prerequisites – Two courses from the following:
  - Calculus I (MATH 115, 120, 185, or equivalent)
  - Calculus II (MATH 116, 121, 156, 176, 186, or equivalent)
  - Physics I (PHYSICS 125, 135, 140, 160, or equivalent)

- Physics II (PHYSICS 126, 235, 240, 260, or equivalent)
- EECS 183 (Elementary Programming Concepts)
- Any STATS course that has STATS 250 as a prerequisite
- [With the permission of an advisor, other courses that help students develop quantitative skills can be substituted.]

## Requirements

**Minimum Credits: 32**

### ***Core Requirements:***

- Cellular & Molecular Neurosci.: BIOLOGY 222
- Introduction to Behavioral Neuroscience: PSYCH 230
- Human/Animal Physiology: BIOLOGY 225
- Genetics: BIOLOGY 305
- Biochemistry: one of MCDB 310, BIOLCHEM 415, or CHEM 351

***Group A. Molecular and Cellular Neuroscience Electives.*** Choose one course from the following:

- MCDB 402, 403, 418, 421, 422, 426, 450, 451 (*only if elected FA19 or later*), 452, 453, 455, 456, 458, 459, 463, or HUMGEN 480

***Group B. Behavioral & Cognitive Neuroscience Electives.*** Choose two courses from the following:

- PSYCH 240, 330, 333, 334, 336, 337, 339, 340, 343, 345, 430, 431, 433, 434, 435, 436 (*only if elected FA19 or later*), 440, 442, 531
- NEUROL 455
- NEUROSCI 470

***Group C. Additional Elective:*** Choose one additional course from Group A or B (above) or from Group C:

- BIOLOGY 205, 207, 272 (*only if elected FA20 or later*)
- BIOLCHEM 640;
- EEB 492;
- MCDB / EEB 397;
- MCDB 401, 405, 411, 417, 427, 428, 435, 436, 440, 441, 454, 462;
- PHRMACOL 310;
- PSYCH 335, PSYCH 338 / ANTHRBIO 368, 346 (prior to W18), PSYCH 349 / LING 347, PSYCH 414 / WGS 452 (WGS 452), 420 (3 credits only), PSYCH 439 / ANTHRBIO 468, 441, 447, 448, PSYCH 532 / ANATOMY / PHYSIOL 541

***Group D. Lab Requirement:*** Choose at least two courses for a minimum of four credits total:



1. *Method-Based Laboratory courses*: Choose at least one course from: BIOLOGY 226; MCDB 306, 423, 424, 429; PSYCH 302, 331
2. *Research-Based Laboratory Courses*: Choose an additional course from Group D-1 (above) or Group D-2: MCDB 300, 360 (*only if elected FA19 or later*), 400, 460 (*only if elected FA19 or later*); PSYCH 326, 422, 424, 426, 428

### Constraints

- Student double majoring in Psychology and Neuroscience or Cognitive Science and Neuroscience may share a maximum of 3 courses toward their two programs.
- Each course must be taken for a minimum of two credits each and be completed in a single academic term.
- Only three credits of independent study may count toward the major.

### Other Department Policies

Neuroscience majors may NOT use any BS/NS Psychology or introductory Biology courses toward their College Area Distribution requirement.

### Distribution Policy

No course used to fulfill a major requirement may be used toward the [LSA Distribution Requirement](#). In addition, courses in the BIOLOGY, EEB, MCDB, subject areas, and BS courses used in PSYCH may not be used toward the Distribution Requirement.

### Honors

#### *Effective Winter 2014*

The Neuroscience B.S. degree is the basis for the Honors degree in Neuroscience. Students must elect two terms of independent research (under PSYCH 424 & 426, MCDB 300, or MCDB 400), maintain an overall and GPA in the major of 3.4, complete an Honors thesis and give a research presentation based on their Honors work.

Prior to applying to the Neuroscience Honors Program students must identify a research mentor from the approved Neuroscience Honors Thesis Sponsor/Co-Sponsor Faculty list. Students may conduct Honors research with faculty in other units on the University of Michigan campus who are not on this list, but must have a formal co-sponsor relationship with a faculty member who is on the approved list.

Students apply to the Honors Program in Neuroscience by submitting a Neuroscience Honors Application with a research proposal. Neuroscience Honors applications are due by no later than the end of the add/drop period one semester prior to graduation (i.e., approximately September 25 for students graduating at the end of Winter term, and approximately January 25 for students graduating at the end of the Fall term or Summer term). When special circumstances apply, the honors committee may accept an application beyond the normal due date. Upon approval by the

chair of the Neuroscience Steering Committee students are declared into the Honors plan. Honors theses must be submitted by December 1, April 1, or August 1 of the term of graduation.

Written evaluations of the Honors thesis must be submitted by the mentor and up to two faculty readers. Honors theses must be submitted no later than one calendar month prior to the date of graduation.

For more information, including the Honors Program Application, please visit:  
<http://lsa.umich.edu/neurosci/undergraduates/honors-program.html>

## Oceanography Minor

The minor in Oceanography is designed to provide students with broad introductions to oceanography, to the geological processes active on the seafloor and the seashore, and to the geological evolution of the ocean basins and their sediment records of past climates. Note that by LSA rules, only one course may be elected in common to a minor and a major.

Our innovative and flexible majors provide an interesting path for students to follow on their way to an LSA degree. From our field camp at Camp Davis in Wyoming, to lab work on campus, Michigan students have an opportunity to explore the geological sciences in exciting ways.

The Department of Earth and Environmental Sciences offers:

- an [Earth and Environmental Sciences Major](#) and an **Honors Plan**
- a **Teacher's Certificate Program**, for prospective science teachers who are candidates for a secondary teaching certificate in earth science and general science; and,
- Academic minors in [Earth Sciences](#), [Environmental Geology](#), [Geology](#), [Oceanography](#), and [Paleontology](#).

*Effective Winter 2021*

### Exclusions:

*Not open to students electing the minor in Earth Sciences.*

### Advising

Students wishing to pursue a minor in the Department of Earth and Environmental Sciences must develop a specific plan for its completion in consultation with the department's designated advisor. Appointments are scheduled online [www.lsa.umich.edu/earth/undergraduate](http://www.lsa.umich.edu/earth/undergraduate)

## Prerequisites

None.

## Requirements

**Minimum Credits: 15**

1. **One introductory geoscience course** must be taken from one of the following two groups:
  - *Group 1.* Courses with laboratory: EARTH 116, 118&119, 120, 201, 218 & 219.
  - *Group 2.* Courses without laboratory (EARTH 119, 205&206, 219).
2. **Core courses:** EARTH 222, 223.
3. **Elective courses (5-7 credits)** to be elected from the following:
  - CHEM 467
  - EARTH 305, 320, 321, 333, 409, 420, 421, 422, 446, 449, 452, 465, 467, 478, 479;
  - EEB 380
  - AOSS 320, 321, 410, 420, 467
  - ENSCEN 420, 455, 467
  - NAVARCH 320, 440
  - or permission of advisor

# Organizational Studies Major

Organizational Studies is an interdisciplinary major program, emphasizing the influence of economic, psychological, sociological, political, and other factors on individuals and complex organizational systems. The field is concerned with how organizational systems function, their effects on individuals and the larger society, and with the processes of organizational change.

The curriculum is designed to provide:

1. core courses focusing on concepts fundamental to organizational theory and research;
2. cluster and elective courses to provide breadth and depth in understanding links between the individual and organizations on the one hand, and organizations and society on the other; and
3. courses designed to provide field-based experience in organizational research, analysis and practice.

The major is also designed to balance the study of challenging theoretical issues with diverse and refined methods of empirical inquiry.

Students may find this major appropriate preparation for careers or graduate work in business administration, consulting, communication and media, education, human resources, industrial and organizational psychology, public health, public policy, social and non-profit administration, the sociology of work and organizations, and related fields.

*Effective Winter 2019*

## Advising

Appointments may be scheduled with the department advisor, or the prospective student advisor via our online web scheduling system. See our homepage [www.lsa.umich.edu/orgstudies](http://www.lsa.umich.edu/orgstudies)

## Grade Policies

Pre-requisite courses must be taken for a grade.

## Prerequisites

Students must complete one course in each of the following three areas:

1. Economics (ECON 101)
2. Psychology (PSYCH 111, 112, 114, or 115)
3. Sociology (SOC 100, 102, 195 or 300).

Prerequisite courses must be taken for a grade (not P/F).

All students should be aware that additional prerequisites are required for many of the upper-level courses in the OS curriculum. Depending on their particular area of interest, students may wish to complete additional entry-level courses in political science, communication studies, women's studies, and/or economics as they prepare to apply to the OS Program.

**Application.** Students must apply for and be accepted into the major. **Students are declared into the major by the department advisor only.**

Application for the major can be submitted during the sophomore year. It is preferred that applicants have all three prerequisites completed at the time of application. At a minimum, to be eligible to apply, you must have completed (with final grades showing) at least two of the three prerequisite courses, and be currently enrolled in the third. Admission is very competitive and enrollment in the major will be limited to assure a high quality educational experience. Program faculty will make admission decisions based on a holistic review, with consideration given to overall grade point average at the time of application, with special attention given to grades in the three prerequisite courses, resume, and a personal statement written by the applicant.

## Requirements

**Minimum Credits: 34**

1. **Core requirements.** Two courses are required [6 credits]:
  - o ORGSTUDY 305: Inside Organizations
  - o ORGSTUDY 310: Formal Organizations and Environments
2. **Senior Capstone Research Requirement.** ORGSTUDY 410 (or ORGSTUDY 497&498 for Honors majors).

3. **Cluster Requirements.** 7 courses (21 credits minimum), chosen from Clusters A, B, and C:
- Two courses must be from Cluster A, two from Cluster B, and the remaining three in any cluster (A,B, or C)
  - Two of the cluster courses must be 300/400-level ORGSTUDY courses.
  - No more than 2 cluster courses can be at the 200-level

The cluster requirements are designed to provide disciplinary variety in the study of organizations, drawing on courses in a number of fields, and ranging across multiple levels of organizational analysis.

- A. **Organizations and Individuals (Cluster A)** [2 course minimum]. Cluster A courses focus mainly on questions and topics concerning the organized behavior of individuals or the behavior of individuals in organizations. These courses may address the relations of individuals to larger structures such as the family or formal organizations, but their concern with the larger structures will typically remain the impact thereof on *individual* psychology or *individual* behavior.

*A complete list of acceptable Cluster A courses is available on the [Organizational Studies website](#).*

- B. **Organizations and Society (Cluster B)** [2 course minimum]. Cluster B courses are those that focus mainly on questions and topics concerning the organization of social groups (e.g., ethnic groups), historical processes (e.g., the rise of capitalism), and/or medium to large social structures (e.g., corporations, national governments, or global governing bodies). Although they may at times address the impact of such larger social structures and processes on individual behavior or may include attention to particular individuals from U.S. or world history, the primary concern of Cluster B courses is with questions about how social groups, historical processes, and social structures emerge, remain stable, and/or change.

*A complete list of acceptable Cluster B courses is available on the [Organizational Studies website](#).*

- C. **Interest Cluster Courses (Cluster C)** [minimum of 9 credits]. Cluster C courses are electives intended to allow majors to pursue their curriculum pathway interests in a more specialized way. These should have an organizational theme and can be of either the micro or macro variety, but are almost always more narrow and focused in their content.

*A complete list of acceptable Cluster C courses is available on the [Organizational Studies website](#).*

Courses taken as ORGSTUDY 395: *Current Issues in Organizational Studies*, ORGSTUDY 490: *Advanced Research Team*, and ORGSTUDY 495: *Special Topics* may be included, when appropriate and in consultation with the department advisor, as a course in Cluster A, Cluster B, or Cluster C.

4. **Quantitative Skills Requirements** [3 credit minimum]. One course from the following:
- SOC 210
  - STATS 250 or 280

5. **Electives** (*as needed*). Students may choose electives from any requirement area on the OS curriculum list as needed to reach the overall 34 credit requirement for the OS major.

### Constraints

- Additional courses may on occasion be used as part of the plan for the major with written approval from the department advisor.
- No more than six credits of upper-level independent study / experiential credit may count toward the major.
- ORGSTUDY 499 does not automatically count toward the major, but may be petitioned in individual cases.

### Residency

Limit of two courses taken off the AA campus (not including Camp Davis, Biological Station, or Michigan-in-Washington programs)

### Distribution Policy

No course used to fulfill a major requirement may be used toward the [LSA Distribution Requirement](#). In addition, courses in the ORGSTUDY subject area may not be used toward the Distribution Requirement.

### Honors

#### *Effective Fall 2014*

The Organizational Studies Honors Plan (OSHC) is designed to enable advanced undergraduate students to gain experience in the design, conduct, and analysis of research on organizations and organizational behavior. In the program, the Honors student will collaborate directly with a faculty mentor to complete an original research project. For students with strong academic records and an interest in research, the Honors program can serve as a capstone for undergraduate studies, and as important preparation for graduate studies or other future endeavors.

The Organizational Studies Honors Plan is focused solely on research skills and activities, and interested students should be certain that they have a serious interest in academic research and the capability and desire to complete a prolonged independent study project culminating in a major empirical research paper.

**Formal Application to the OS Honors Plan.** To qualify for the Honors plan, students must have a cumulative GPA of 3.4 or higher, and must maintain it through graduation. To apply to the OSHC, an application including a project proposal that has been approved by the faculty mentor must be submitted. **Deadline for submitting OS Honors Plan application:** First Friday in March

of the junior year. If admitted, the student will enroll in the OS Senior Honors Research sequence in the senior year (ORGSTUDY 497 & 498). These are independent study courses in which the student will work on research and a thesis with a faculty mentor, and together may replace ORGSTUDY 410 to fulfill the senior research capstone requirement.

***Program Completion.*** The Honors student must submit the final thesis to the faculty mentor by the first Friday in March of their senior year, and also must present the findings at the OS Honors Symposium in early April.

Each thesis is evaluated by a faculty panel consisting of three readers: the faculty mentor, an independent faculty reader, and the OS Honors coordinator. The readers will complete their evaluation of the thesis by the end of classes. To receive an Honors designation on the college degree, the faculty readers must approve the thesis, and the Honors student must have a cumulative GPA of at least 3.40 at graduation.

Students interested in the Organizational Studies Honors Plan may obtain further information on the OS website.

## Paleontology Minor

The minor in Paleontology is designed for students interested in the history of life on Earth. Entry and core courses will provide students with insight into the major features of the fossil record, the methods used in historical sciences, and the theoretical issues dealt with by paleontologists. The advanced courses are meant to satisfy more specific interests.

Our innovative and flexible majors provide an interesting path for students to follow on their way to an LSA degree. From our field camp at Camp Davis in Wyoming, to lab work on campus, Michigan students have an opportunity to explore the geological sciences in exciting ways.

The Department of Earth and Environmental Sciences offers:

- an [Earth and Environmental Sciences Major](#) and an **Honors Plan**
- a **Teacher's Certificate Program**, for prospective science teachers who are candidates for a secondary teaching certificate in earth science and general science; and,
- Academic minors in [Earth Sciences](#), [Environmental Geology](#), [Geology](#), [Oceanography](#), and *Paleontology*.

*Effective Fall 2018*

**Exclusions:**

*Not open to students electing the minor in Earth Sciences.*

## Advising

Students wishing to pursue a minor in the Department of Earth and Environmental Sciences must develop a specific plan for its completion in consultation with the department's designated advisor. Appointments are scheduled online [www.lsa.umich.edu/earth/undergraduate](http://www.lsa.umich.edu/earth/undergraduate)

## Prerequisites

None.

## Requirements

**Minimum Credits: 15**

1. **Entry courses** (3-6 credits required). The "entry point" into the minor may include paleontology-oriented courses (EARTH 103, 106, 125, 150) or geology-related courses (EARTH 116, 118&119, 120, 149, 201, 205, 206, 207).
2. **Core courses** (4 credits required). EARTH 418 and 419 are required.
3. **Elective courses** (remaining 5-8 credits). Students may choose from:
  - EARTH 313, 431, 437, 438, 439, 444, 445, 498 (for 1-3, but no more than 3 credits), 506, 510, 511, 513, 536 (no more than 1 credit)
  - ENVIRON 431
  - EEB 390, 445
  - or permission of advisor

# Minor in Performing Arts Management and Entrepreneurship (PAME)

The SMTD minor in Performing Arts Management and Entrepreneurship (PAME) invites exceptional students to add arts management and venture training to their academic portfolio. Such training is intended to amplify the careers of students engaged with the performing arts through knowledge, skills, and hands-on experiences to increase and broaden the impact of their creative talents. Similarly, students in Business, Communications, Design, or other programs throughout the University can add an arts business dimension to their curriculum. Understanding ideation, budgeting, fundraising, project management, marketing, production, social impact, corporate structures, and creative problem solving techniques can help advance all careers in the arts. Whether working independently, within a for-profit or social-profit institution, or most likely in some combination of ventures, performing arts management and entrepreneurship training amplifies the symbiosis of artistry, business, and community that enriches the performing arts and culture as a whole.

Applying and Advising: Students interested in the PAME minor should contact [ProfessorGreg Poggi](mailto:ProfessorGregPoggi) or [smtdexcel@umich.edu](mailto:smtdexcel@umich.edu). The PAME minor is open to all eligible U-M undergraduate students. Those interested in this minor must take at least one course from the list of gateway courses to become eligible for the minor. Once a gateway course is



completed successfully, the student would interview with a PAME advisor and apply for admission to the minor.

**Conditions:** An overall GPA of 2.0 or above within the minor must be achieved; all courses used to fulfill minor requirements must be elected both for credit and for a grade; students may elect both an LSA music minor and the PAME minor; up to six credits earned outside of U-M or its sponsored programs may be used to fulfill requirements for the minor.

**Exclusions:** Production practica are not eligible courses for the minor; no more than two courses fulfilling a requirement in the PAME minor may simultaneously be counted to cover another degree requirement; AP credits may not be used to satisfy minor requirements.

**Requirements: At least 15 credits with a minimum of five courses chosen from each of the following three categories.** All eligible courses taken prior to application to the minor can be used to fulfill the 15 credit requirement. The minor requires one introductory course, a minimum of two electives, and at least one practicum course or capstone project. A student's path through the minor should be developed in consultation with an advisor to meet a student's professional goals. While taking the introductory course early in a student's period of study is recommended, courses may be taken in any order.

#### Required Introductory Course

Minimum 1 course selected from the following:

- THEATRE 385: Performing Arts Management (2 credits; *THEATRE 250 is a prerequisite for THEATRE 385*)
- ARTSADMN 450: Arts Entrepreneurship Essentials (3 credits)
- ARTSADMN 472: Business of Music (3 credits)

#### SMTD Elective Courses

Complete at least 2 courses among eligible elective courses

- ARTSADMN 406: Special Topics in Arts Administration (3 credits)
- THEATRE 435: Producing in American Theatre (3 credits)
- THEATRE 438: Legal Issues in the Arts (3 credits)
- ARTSADMN 475: Music Industry Workshop: Starting Music Businesses (3 credits)
- ARTSADMN 477: Creating Social Value through the Arts (3 credits)
- ARTSADMN 410: Arts Entrepreneurship Forum (2 credits)
- THEATRE 426: Fundraising and the Arts (2 credits)
- ARTSADMN 401: Your Career in the Arts (1 credit)
- ARTSADMN 402: Money Smarts for Artists (1 credit)
- ARTSADMN 421: DIY Marketing and Social Media (1 credit)
- ARTSADMN 422: Writing About Your Art (1 credit)
- ARTSADMN 423: Grant Writing and Fundraising Basics (1 credit)
- ARTSADMN 424: Legal Essentials for Artists (1 credit)
- ARTSADMN 428: Arts Leadership (1 credit)
- ARTSADMN 431: Running Your Own Ensemble, Theatre Troupe, or Dance Company (1 credit)
- ARTSADMN 432: The Recording Industry (1 credit)
- ARTSADMN 433: Media Technology Careers (1 credit)
- ORGSTUDY 495: Non-Profit Organizations (2 credits)

- RCHUMS 334: Community Empowerment through the Arts (4 credits)
- Other related courses by petition and approval of the PAME academic advisor (variable credits)

### Practica

Complete a capstone project through at least one of the following courses. Note that anyone course may be repeated once and a maximum of four practicum courses may be used for the minor.)

- ARTSADMN 475: Music Industry Workshop: Launching Music Businesses (3 credits)
- ARTSADMN 477: Creating Social Value through the Arts (3 credits)
- ARTSADMN 491: Internship (1-4 credits)
- ARTSADMN 493: Special Projects (1-3 credits)
- ARTSADMN 495: EXCEerator Practicum (1-3 credits)
- ARTSADMN 497: Community Service Project (1-3 credits)

## Philosophy Major

Philosophy is the systematic study of questions any thoughtful human being faces concerning the nature of knowledge, reality, thought, and value. What is valuable and what is value? What gives thought and language meaning? What is truth, and how can we know it? The main value of philosophy lies in its contribution to a liberal arts education. It can, however, also provide excellent preparation for a wide variety of professions (notably, law), because of the training it provides in rigorous thinking and incisive and clear writing. Philosophy cuts across other academic disciplines by examining their concepts, methods, and presuppositions. So a concentration or academic minor in Philosophy can also be a superb complement to a concentration in another field. Further details are available on the department's web page [www.lsa.umich.edu/philosophy](http://www.lsa.umich.edu/philosophy).

*Effective Fall 2019*

### Advising

Prospective majors, especially students contemplating graduate work in philosophy, should consult a department advisor as early as possible in order to work out an appropriate, unified program. Appointments are scheduled through the on-line scheduling system available on the department's web page: [www.lsa.umich.edu/philosophy/undergraduate/advisorappointments](http://www.lsa.umich.edu/philosophy/undergraduate/advisorappointments).

### Grade Policies

No course will count toward the major unless the student receives a grade of C- or better. This includes all courses including prerequisites, required courses, and electives.

### Prerequisites

Any 100- or 200-level course other than PHIL 180, 201, 296 (logic courses) and PHIL 288, 289. None of these courses counts toward the requirements for the major.

## Requirements

### Minimum Credits: 25

Majors must take at least 25 credits of Philosophy.

In fulfilling the credit requirement students must also satisfy the following distribution requirements:

1. *Formal Methods*: PHIL 296, 303, 305, 413, or 414
2. *History of Philosophy*: One course from among:
  - PHIL 288 (W18), 289 (W18), 388, or 389;
  - and one additional course from among: PHIL 288 (W18), 289 (W18), 323 (W18), 371, 385 (W18), 386 (W18), 388, 389, 391 (W18), 392 (W18), 393/CLCIV 369 (W18), 405, 406, 433 (W18), 458, 460, 461, 462, 463, 464, 466 (W18), 467, 474 (W18), and 492
3. *Value*: One of PHIL 361: Ethics or 366: Political Philosophy or 367: Social and Political Philosophy or PPE 300: Introduction to Political Economy
4. *Mind and Reality*: Either PHIL 345: Language and Mind or 381: Science and Objectivity or 383: Knowledge and Reality
5. Three additional courses:
  - a. Two additional 400-level courses (other than PHIL 419, 455, 498, or 499). Note: students are not permitted to use any course to satisfy more than one requirement. For example, if you use a 400-level course to satisfy the logic or history requirements, you cannot use that same course to satisfy this requirement.
  - b. One additional course at the 300-level or higher, such as PHIL 345: Language and Mind or 383: Knowledge and Reality

The courses needed to satisfy these requirements are not always offered every term. Majors should plan their programs so that they can be sure to take the courses they need before they can graduate.

## Residency

At least 16 credits, including requirement 5.1, must be taken in residence.

## Distribution Policy

No course used to fulfill a major requirement may be used toward the [LSA Distribution Requirement](#). In addition, courses in the PHIL subject area may not be used toward the Distribution Requirement.

## Honors

Qualified students who are interested in an Honors major in Philosophy should consult a department advisor as early as possible. Except in cases where special permission is granted, students must have a cumulative grade point average of at least 3.4 and a 3.5 average in completed courses in philosophy in order to be eligible for admission. Honors majors are

required to complete 28 (rather than 25) credits in the major, including PHIL 401 and 498 or 499, which is taken in the senior year. Before enrolling in PHIL 498 or 499, students must submit a thesis proposal for the department's approval. Only students who have written an Honors thesis will be considered for graduation with Honors degrees. Students are admitted to the Honors major at the beginning of the junior year (or later) by permission of the Honors department advisor.

## Philosophy Minor

The Academic Minor in Philosophy (formerly known as the General Philosophy Minor) is designed to provide students with an education in philosophy that will complement a major in some other discipline and that will, among other things, illuminate philosophical issues that arise in that other discipline. The *Philosophy minor* aims to provide students basic philosophical skills and training, exposure to rigorous core courses, and some advanced work but does not aim for the breadth and comprehensiveness of the major or for depth in any particular area.

*Effective Winter 2020*

### Exclusions:

*A minor in Philosophy is not open to students with a major in Philosophy.*

### Advising

Students wishing to pursue a minor in Philosophy must develop a specific plan for its completion in consultation with the department's designated advisor. Appointments are scheduled through the on-line scheduling system available on the department's web page:

[/lsa.umich.edu/philosophy/undergraduates/advisor-appointments.html](https://lsa.umich.edu/philosophy/undergraduates/advisor-appointments.html)

### Grade Policies

No course will count toward the minor unless the student receives a grade of C- or better. This includes all courses including prerequisites, required courses, and electives.

### Prerequisites

Any 100- or 200-level course other than PHIL 180, 201, 296 (logic courses) and PHIL 288 or 289 (intro history courses).

### Requirements

#### Minimum Credits: 15

1. **At least one course at the 400-level**, other than formal methods (PHIL 413, 414)
2. **A minimum of 15 credits of Philosophy**, at least 9 of which (including the required 400-level course) must be taken in residence.

3. No course will count toward the minor unless the student receives a grade of C- or better.

### **Additional Requirements:**

- i. One course in Logic or Formal Methods (PHIL 180, 183 (F18), 201, 296, 303, 305, 413, or 414)
- ii. Two courses from: PHIL 288 (F18), 289 (F18), 345, 361, 365, 366, 367, 381, 383, 388, 389
- iii. One 400-level course, which must not include 401, 402, 413, 414, or 455

### **Residency**

At least nine credits, including the required 400-level course, must be taken in residence.

# **Philosophy, Politics, and Economics (PPE) Major**

The Department of Philosophy, in conjunction with the Department of Economics and the Department of Political Science, offers PPE as an interdisciplinary major program in political economy. The program will stress analytic rigor and critical reasoning, and is unique in combining normative inquiry, empirical methods, and formal tools of analysis. It integrates the study of the relationships of government, political processes, property, production, markets, trade, and distribution from the standpoint of assessing these arrangements with respect to the interests and progress of humanity. The following features are characteristic of research in political economy:

- Exploration of the relations between individual action and collective outcomes as they shape and are shaped by environmental conditions, institutions, social norms, ideologies, and strategic and communicative interaction
- Special attention to the consequences of these relations for politics (voting, political parties, lobbying, elections, social movements, revolution, civil war, state failure, oligarchy, dictatorship, corruption, *etc.*), law and economic policies (taxation, regulation, property and trade regimes, macroeconomic management, *etc.*), aggregate economic outcomes (business cycles; the provision, degradation, or maintenance of public goods, *etc.*), and justice and human welfare (poverty, inequality, intergroup relations, freedom, *etc.*)
- Formal methods of analysis including decision theory, game theory, evolutionary game theory, behavioral economics, and agent-based modeling; the use of analytic frameworks (such as principal-agent problems and positional competition) to understand characteristic problems that arise for human beings across disparate domains of action
- Critical reflection on the uses and limits of these methods and frameworks in light of empirical information and interpretations drawn from other disciplines, including history, psychology, and sociology, as well as normative and conceptual analysis

- Integration of formal, empirical, interpretive, and normative inquiry to evaluate and design existing and alternative economic systems, constitutions, smaller-scale institutions, organizations, and social norms with a view toward improving their justice and service to human welfare.

The PPE major provides Michigan undergraduates with a rigorous, integrated, and interdisciplinary program of study that brings together three major approaches to understanding human beings and their social and political interactions. Core courses will expose students to a wide range of analytical tools and research methods in the social sciences, and will seek to foster the critical reasoning and rhetorical skills that are essential for philosophical writing and argumentation.

*Effective Fall 2019*

### Advising

PPE is governed by the director of PPE and a PPE committee composed of one faculty member from each of Philosophy, Economics, and Political Science. It is administered by the Philosophy Department. PPE advising is managed by the Undergraduate Studies Committee in Philosophy. Appointments with a department advisor may be scheduled online at:  
[https://webapps.lsa.umich.edu/advappts/AA\\_StuSelfSvc1.aspx?ctgy=PHIL](https://webapps.lsa.umich.edu/advappts/AA_StuSelfSvc1.aspx?ctgy=PHIL).

### Grade Policies

Admission to PPE is conditional on earning C- or better in all prerequisites. No course will count toward the major unless the student receives a grade of C— or better.

### Prerequisites

1. one 100- or 200-level PHIL course other than PHIL 180, 183, 201, 296 (logic)
2. one introduction to political science: POLSCI 101 or 111 or 140 or 160
3. ECON 101 and ECON 102
4. One course in calculus (MATH 115, 116, 121, 156, 176, 185, 186, 215, 285, 295, or 296).

### Application

Students must apply for and be accepted into the major. **Students are declared into the major by a department advisor only.**

Due to the rigorous and interdisciplinary nature of its subject matter, and to ensure a high quality educational experience, the PPE program will be selective (as it is in many other PPE programs in the U.S.) and require an application. Applications are considered for a limited period in the Winter term. Applicants will be notified of admission before registration for Fall term classes. Newly entering transfer students who need to declare a major may apply in the Fall term. Application deadlines will be announced on the PPE website. The optimal time for a student to apply to PPE is the Winter term of the sophomore year.

It is advisable for second-year applicants to have completed or be currently enrolled in the prerequisites to the major, and at least one further course that can be counted toward the major. However, applications are welcome from all students who have concrete plans to promptly complete all prerequisites. Admissions will be primarily based on the grade point average in the prerequisite courses and other courses satisfying PPE requirements, overall grade point average, and a brief personal statement. Admission to PPE is conditional on earning C- or better in all prerequisites (with a C or better in the calculus prerequisite).

## Requirements

### Minimum Credits: 33

The major consists of 12 courses. Courses must be distributed as follows:

#### 1. PPE Core Courses:

- A. *Economics*: ECON 401: Intermediate Microeconomics
- B. *Gateway*: PPE 300: Introduction to Political Economy
- C. *Capstone*: PPE 400: Senior Seminar in Political Economy (Honors students take PPE 401-2 instead)

#### 2. Core Distribution Requirements

PPE integrates normative inquiry and formal analytical tools with the substantive study of politics and economics. The PPE major therefore requires two courses each in normative theory, political economy, and formal methods.

- A. *Formal Reasoning*: one course in statistics and one additional course in statistics, logic, decision theory, or game theory from the list below.
  - i. One course in statistics. Choose from among:
    - ECON 404: Statistics for Economists
    - ECON 405: Introduction to Statistics
    - POLSCI 300: Quantitative Empirical Methods of Political Science
    - STATS 250: Introduction to Statistics and Data Analysis
    - STATS 280: Honors Introduction to Statistics and Data Analysis
    - STATS 426: Introduction to Theoretical Statistics
  - ii. A course in other formal methods central to political economy – statistics, logic, decision theory, or game theory from the following:
    - ECON 398: Strategy
    - ECON 409: Game Theory
    - PHIL 296: Honors Introduction to Logic
    - PHIL 303: Introduction to Symbolic Logic
    - PHIL 305: Introduction to Formal Philosophical Methods
    - PHIL 413: Formal Philosophical Methods
    - PHIL 414: Mathematical Logic
    - PHIL 443: Foundations of Rational Choice Theory
    - PHIL 444: Groups and Choices
    - POLSCI 381: Political Science Research Design
    - POLSCI 391 / CMLXSYS 391: Introduction to Modeling Political Processes
    - POLSCI 488: Political Dynamics
    - POLSCI 490: Game Theory and Formal Models
    - POLSCI 499: Quantitative Methods of Political Analysis

- CMPLXSYS 391 / POLSCI 391: Introduction to Modeling Political Processes
  - MATH 425 / STATS 425: Introduction to Probability
  - SOC 315: Economic Sociology *only section titled, "Money Markets & Power"* (F18); all topics (W18)
  - STATS 425 / MATH 425: Introduction to Probability
- B. *Normative Theory*: two 300- or 400- level courses in political philosophy, political theory, or welfare economics from the list below. One philosophy course must be taken to satisfy either the normative theory requirement or one of the three required theme courses.
- ECON 408 / PHIL 408: Philosophy and Economics
  - ECON 496: History of Economic Thought
  - PHIL 359: Law and Philosophy
  - PHIL 361: Ethics
  - PHIL 366: Introduction to Political Philosophy
  - PHIL 367: 19th Century Social and Political Philosophy
  - PHIL 369: Philosophy of Law
  - PHIL 384: Applied Epistemology: Race, Ethnicity & Knowledge
  - PHIL 408 / ECON 408: Philosophy and Economics
  - PHIL 430: Topics in Ethics
  - PHIL 431: Normative Ethics
  - PHIL 433: History of Ethics
  - PHIL 441: Social Philosophy
  - PHIL 442: Topics in Political Philosophy
  - PHIL 445: Philosophy of Law
  - PHIL 446: Social and Political Philosophy of Language
  - POLSCI 301: Development of Political Thought: To Modern Period
  - POLSCI 302: Development of Political Thought: Modern and Recent
  - POLSCI 306: American Political Thought
  - POLSCI 400: Selected Topics in Political Theory (*appropriate sections*)
  - POLSCI 401 / WGS 422 (WGS 422): Feminist Political Theory
  - POLSCI 402: Liberalism and Its Critics
  - POLSCI 403 / CLCIV 403: Greek Political Thought
  - POLSCI 404: Foundations of Modern Political Thought
  - POLSCI 405: Political Philosophy of the Enlightenment
  - POLSCI 409: Twentieth Century Political Thought
  - POLSCI 495: Undergraduate Seminar in Political Theory (*appropriate sections*)
  - CLCIV 403 / POLSCI 403: Greek Political Thought
  - WGS 422 (WGS 422) / POLSCI 401: Feminist Political Theory
- C. *Political Economy*: two courses engaging the economics of government or the politics of economic activity or institutions from the list below.
- AAS 347 / RCSSCI 343 / SOC 335: Urban Inequality in America
  - CMPLXSYS 391/POLSCI 391: Introduction to Modeling Political Processes
  - ECON 330 American Industries (prior to Fall 2017)
  - ECON 398: Strategy
  - ECON 402: Intermediate Macroeconomic Theory
  - ECON 408 / PHIL 408: Philosophy and Economics
  - ECON 409: Game Theory



- ECON 425 / POLSCI 425: Inequality in the United States
  - ECON 432: Government Regulation of Industry
  - ECON 481: Government Expenditures
  - ECON 482: Government Revenues
  - PHIL 408 / ECON 408: Philosophy and Economics
  - POLSCI 322: Legislative Process
  - POLSCI 337: Comparative Constitutional Design
  - POLSCI 340: Governments and Politics in Western Europe, *section titled "A Game-Theoretic Approach to West European Politics"*
  - POLSCI 341: Comparative Politics of Developed Democracies
  - POLSCI 343: Political Economy of Developed Democracies
  - POLSCI 348: Political Economy of Development
  - POLSCI 363: International Organization & Integration
  - POLSCI 364: Public International Law
  - POLSCI 369: Politics of International Economic Relations
  - POLSCI 387: Comparative Analysis of Government Institutions
  - POLSCI 389: Topics in Contemporary Political Economy, *section titled "Political Strategy & Debate"*
  - POLSCI 391 / CMPLXSYS 391: Introduction to Modeling Political Processes
  - POLSCI 425 / ECON 425: Inequality in the United States
  - POLSCI 432: Law and Public Policy
  - POLSCI 462: Strategic Interaction in World Politics
  - POLSCI 496: Undergraduate Seminar in American Government and Politics, *sections titled "U.S. State Economic Development Policies", "Modern Debates in U.S. Constitutional Law"*
  - RCSSCI 343 / SOC 335 / AAS 347: Urban Inequality in America
  - SOC 335 / AAS 347 / RCSSCI 343: Urban Inequality in America
3. **Themes:** three additional courses (or two additional courses plus the Honors thesis sequence for Honors students) in a single theme in political economy. *At least two of these courses must be at the 400-level, and two must come from distinct academic disciplines.* PPE students are advised to start planning their themes as soon as they are admitted to the major. One philosophy course must be taken to satisfy either the normative theory requirement or one of the three required theme courses.

Students will devise a plan for advanced study focusing on a single theme in political economy, which may be normative, methodological, theoretical, or applied. Each student will write up a rationale for their theme in consultation with their PPE advisor and submit it to their advisor for approval. Possible themes could include advanced studies in any of the core areas, or focus on particular subjects/methods – for example, decision-making & strategic interaction, globalization, justice & equality, or comparative political economy. Courses listed under the core requirements may be used to satisfy the theme requirement as long as they are not also being used to satisfy the core requirement. The PPE committee will recommend courses for the theme requirement and post those to the PPE website. Students may propose courses not on the list that make a coherent fit with their theme. PPE advisors are authorized to approve such courses for the theme requirement.

Non-Honors students would follow their theme with the capstone seminar.

## Other Department Policies

PPE Majors may use introductory Political Science, Philosophy, or Economics courses toward their College Area Distribution requirement.

## Residency

At least 16 credits must be taken in residence.

## Distribution Policy

No course used to fulfill a major requirement may be used toward the [LSA Distribution Requirement](#). In addition, courses in the PPE subject area may not be used toward the Distribution Requirement.

## Honors

To be admitted to the Honors PPE program, students must have at least a 3.4 cumulative GPA and a 3.5 in courses used to satisfy PPE requirements, or permission of the director of PPE. Prospective PPE Honors students should begin planning their Honors program with their advisor as soon as possible.

In addition to fulfilling the prerequisites, PPE core, and distribution requirements, Honors students will take two courses in their theme and dedicate their thesis to a research project in that theme.

Honors students will fulfill their thesis requirement using the vehicles offered for that purpose by one of PPE's 3 sponsoring departments (Philosophy, Political Science, or Economics). Students should choose the appropriate thesis track depending on their primary disciplinary orientation and the content of their theme. Honors students will submit a thesis proposal for approval by the director of PPE, and must in addition meet all prerequisites and requirements for honors in the sponsoring department supervising the thesis.

- For a thesis oriented toward Philosophy: Seniors will first enroll in PHIL 401, the thesis-preparation seminar in Philosophy. The following term, they will enroll in PPE 402, in which they will work with an individual advisor who has agreed to supervise their research.
- For a thesis oriented toward Political Science: Students must first complete POLSCI 381: Political Science Research Design with an A- or better. They must then submit a research proposal and secure a thesis advisor by the end of their junior year by applying for honors through the Political Science major application process, which is normally open from February until the end of Winter term. Seniors whose applications are accepted will enroll in POLSCI 493 and POLSCI 494, a two-semester thesis-writing sequence that runs in conjunction with supervision under an individual thesis advisor.
- For a thesis oriented toward Economics: Seniors will enroll in ECON 495: Seminar in Economics or ECON 498: Honors Independent Research, and secure an advisor in consultation with their

instructor. Most economics-oriented PPE theses would be expected to enroll in ECON 495, which is the primary Honors thesis vehicle for Economics majors.

Honors in PPE will be recommended by a two-person committee consisting of the student's advisor plus a second reader in one of the other units, on the basis of the written thesis and an oral defense. The final award of Honors is conditional on achieving a 3.5 GPA overall and in PPE, and on approval by the Director of PPE.

## Physics Major

The undergraduate major in physics is designed to provide—through quantitative analysis—a thorough introduction to our current understanding of the physical world. A major in physics leads to a wide array of post-graduation options, including: graduate level study of physics and related disciplines; direct entry to the job market in technical, analytic, and education settings; and professional school in medicine, law, or business.

Undergraduates concentrating in physics have several degree choices:

- Physics
- [Interdisciplinary Physics](#)
- Honors Physics Program
- [Physics Minor](#)

The University of Michigan has one of the country's premier physics programs with top-notch facilities for instruction and a variety of experimental and theoretical research groups open to undergraduate students.

*Effective Winter 2017*

### Advising

Students with any questions about courses or majors in Physics should speak with Physics department advisors.

Students wishing to pursue a minor in Physics must develop a specific plan for its completion in consultation with the department's designated advisor.

Advising appointments can be scheduled in the Physics Student Services Office, 1440 Randall Lab [(734) 764-5539] or via the online advising calendar

<http://lsa.umich.edu/physics/undergraduate-students/major---minor-programs.html>

## Grade Policies

Students must earn at least a C-in all courses they plan to include in the major, including the prerequisites.

## Prerequisites

Students prepare for the study of physics by completing the following introductory sequences (four courses total).

### **One of the following 100 level lectures:**

- PHYSICS 135: Physics for the Life Sciences I (should be elected concurrently with PHYSICS 136)
- PHYSICS 140: General Physics I (should be taken concurrently with PHYSICS 141)
- PHYSICS 160: Honors Physics I (should be elected concurrently with PHYSICS 141 or 161)

### **One of the following 100 level labs:**

- PHYSICS 136 Physics for the Life Sciences Laboratory I (should be elected concurrently with PHYSICS 135)
- PHYSICS 141: Elementary Laboratory I (should be taken concurrently with PHYSICS 140)
- PHYSICS 161: Honors Introductory Mechanics Lab (should be elected concurrently with PHYSICS 160)

### **One of the following 200 level lectures:**

- PHYSICS 235: Physics for the Life Sciences II (should be elected concurrently with PHYSICS 236)
- PHYSICS 240: General Physics II (should be elected concurrently with PHYSICS 241)
- PHYSICS 260: Honors Physics II (should be elected concurrently with PHYSICS 241 or 261)

### **One of the following 200 level labs:**

- PHYSICS 236: Physics for the Life Sciences Laboratory II (should be elected concurrently with PHYSICS 235)
- PHYSICS 241: Elementary Laboratory I (should be elected concurrently with PHYSICS 240)
- PHYSICS 261: Honors Electricity and Magnetism Lab (should be elected concurrently with PHYSICS 260)

Students who begin the introductory sequence should have completed at least one semester of calculus (MATH 115 or equivalent). Students who have not already done so should continue their study of mathematics concurrently with their PHYSICS coursework, progressing through differential equations (typically the fourth semester of calculus).

Students who passed one or more AP Physics exams with a score of 5 or higher or who passed the IB HL exam with a 4 or higher are strongly encouraged to elect the honors introductory sequence (PHYSICS 160, 161, 260, and 261).

It is not necessary to complete all courses in the prerequisite sequences in order to declare the physics major. Students are encouraged to officially declare as soon as they make the decision.

## Requirements

### **Minimum Credits: 29**

Once a student has mastered introductory content and declared the major, they prepare for advanced study of the discipline by fulfilling the Intermediate Courses Requirement (four courses), then move on to master advanced concepts, skills, problems, and topics of the discipline by completing the Advanced Courses Requirement (four courses), Advanced Laboratory Requirement (two courses), and an Advanced Elective Requirement (two courses).

### **Intermediate Courses Requirement**

Students must complete all of the following:

- PHYSICS 340: Waves, Heat, and Light –OR– PHYSICS 360: Honors Physics III
- PHYSICS 351: Methods of Theoretical Physics I
- PHYSICS 390: Introduction to Modern Physics (must be taken concurrently with PHYSICS 391)
- PHYSICS 391: Introduction to Modern Physics Lab (must be taken concurrently with PHYSICS 390)

Ideally, PHYSICS 351 is elected no later than the second semester of the sophomore year. It is an enforced prerequisite for PHYSICS 390 and the Advanced Courses Requirement. PHYSICS 390 and 391 can be elected concurrently with PHYSICS 401 or 405 (part of the Advanced Courses Requirement).

### **Advanced Courses Requirement**

Students must complete all of the following:

- PHYSICS 401: Intermediate Mechanics
- PHYSICS 405: Intermediate Electricity and Magnetism
- PHYSICS 406: Statistical and Thermal Physics
- PHYSICS 453: Quantum Mechanics

Students are encouraged to complete both PHYSICS 401 and 405 before electing PHYSICS 453.

### **Advanced Laboratory Requirement**

Students must complete the following two courses:

- PHYSICS 441: Advanced Laboratory I
- PHYSICS 442: Advanced Laboratory II

### **Elective Requirement**

Students round out their study of physics by taking two of the following elective courses:

- PHYSICS 402: Optics

- PHYSICS 411: Introduction to Computational Physics
- PHYSICS 413 / CMPLXSYS 541: Introduction to Nonlinear Dynamics and the Physics of Complexity
- PHYSICS / BIOPHYS / CHEM 417: Dynamical Processes in Biophysics
- PHYSICS / BIOPHYS 433: Biocomplexity
- PHYSICS 435: Gravitational Physics
- PHYSICS 438: Electromagnetic Radiation
- PHYSICS / BIOPHYS 450: Laboratory Techniques in Biophysics
- PHYSICS 452: Methods of Theoretical Physics II
- PHYSICS 460: Quantum Mechanics II (requires previous completion of PHYSICS 453)
- PHYSICS 463: Introduction to Solid State Physics (requires previous completion of PHYSICS 453)
- PHYSICS / CMPLXSYS 470: Experiments in Nonlinear Dynamics

### Constraints

Courses elected as pass/fail may not be included in the major.

### Residency

A minimum of 15 credits at the 300 level or above must be completed in residence.

### Distribution Policy

No course used to fulfill a major requirement may be used toward the [LSA Distribution Requirement](#). In addition, courses in the PHYSICS subject area may not be used toward the Distribution Requirement.

### Honors

Talented and highly motivated students who have an interest in conducting independent research are encouraged to complete an honors major. In addition to the requirements for major, honors majors must complete an additional six PHYSICS credits numbered at the 400 level or above and produce a senior thesis under the supervision of a faculty member. (*Note: PHYSICS 415 will not count toward a Physics Honors major*).

## Physics Minor

The University of Michigan has one of the country's premier programs for the training of undergraduate and graduate students in physics. The Physics Department has abundant facilities for instruction in physics and offers a wide variety of experimental and theoretical research programs open to undergraduate and graduate students.

Undergraduates concentrating in physics have several degree choices:

- [Physics \(B.S.\)](#)

- [Interdisciplinary Physics \(A.B. or B.S.\)](#)
- Honors Physics Program
- Physics Minor

A total of 60 credits of mathematics and natural science must be elected to receive the Bachelor of Science degree.

Interested undergraduates may also want to look into work in medical physics (a promising path for pre-med students) in the [Applied Physics program](#), or in the [Engineering Physics program](#).

The analytical and quantitative thinking skills you will develop as you work toward any of these degrees will be of great value in many different **careers**. Most physics majors at U-M follow one (or more) of three paths after graduation:

- graduate work in physics or another field
- employment in industry, software development, or associated field
- professional school in medicine, business, law, or associated area.

The goal of physics is to understand the behavior of matter and energy on every level, from the origins of the universe in the Big Bang to the interior of atoms in your computer screen. In seeking a pure understanding of how the world works, physicists have revolutionized our lives.

Completing an undergraduate degree in physics will give you a rich understanding of how the world works. It will also prepare you either for continued study in graduate or professional school, or for careers in industry, education, medicine, and finance.

*Effective Winter 2019*

#### **Exclusions:**

*A minor in Physics is not open to students with any major in the Department of Physics, or with a major in Engineering Physics.*

#### [Advising](#)

Students with any questions about courses or minors in Physics should speak with Physics department advisors.

Students wishing to pursue a minor in Physics must develop a specific plan for its completion in consultation with the department's designated advisor.

Advising appointments can be scheduled in the Physics Student Services Office, 1440 Randall Lab, by phone at (734) 936-0659, or via the [online advising calendar](#).

## Grade Policies

Students must earn at least a C- in all courses they plan to include in the minor.

## Prerequisites

None.

## Requirements

**Minimum Credits: 18**

### 1. Introductory Course Sequence:

- One of the following 100-level mechanics lectures: PHYSICS 135, PHYSICS 140, or PHYSICS 160
- One of the following 100-level mechanics labs: PHYSICS 136, PHYSICS 141, or PHYSICS 161
- One of the following 200-level E&M lectures: PHYSICS 235, PHYSICS 240, or PHYSICS 260
- One of the following 200-level E&M labs: PHYSICS 236, PHYSICS 241, or PHYSICS 261

### 2. PHYSICS 340 or PHYSICS 360

### 3. PHYSICS 390 and PHYSICS 391

## Constraints

### Test Credit and the Physics Minor

Although PHYSICS course credit may be awarded on Advanced Placement (AP) Physics or International Baccalaureate (IB) exams, LSA policy does not allow test credits to be counted toward the requirements of a minor. Students with Physics test credit must complete additional courses within the Physics department for a total of at least 15 PHYSICS course credits.

Additional course selection(s) may include PHYSICS courses at the 300-level or above and are subject to approval by a department advisor.

## Residency

At least 10 credits must be taken in-residence

# Plant Biology Major

The Plant Biology major provides undergraduates with training in those areas of science that are essential to an understanding of modern plant sciences. Like the Biology major, this major deals



with all of the major levels of biological organization (molecular, cellular, organismal, ecological, and evolutionary), but differs from the Biology major by its greater emphasis on the biology of plants. This program is well suited for those who wish to study biology as part of a liberal education, or to prepare for a teaching career in secondary schools. It also provides excellent preparation for graduate study in basic and applied areas of the plant sciences and related fields, such as ecology, genetics, microbiology, and biochemistry.

*Effective Winter 2019*

#### **Exclusions:**

*Students who elect a major in Plant Biology may not elect the following majors: Biology, Biology, Health, and Society (formerly known as General Biology); Cellular and Molecular Biomedical Science (formerly known as CMB:BME); Molecular, Cellular, and Developmental Biology (MCDB - formerly known as Cellular & Molecular Biology or CMB); Ecology, Evolution, and Biodiversity; Ecology and Evolutionary Biology; Microbiology; or Neuroscience. They may also not elect a minor in Biology; Ecology and Evolutionary Biology; Plant Biology; Chemistry; or Biochemistry.*

#### [Advising](#)

Students are advised by a combination of Undergraduate Biology Office staff and faculty department advisors. [Advising](#) topics include investigating majors, declaring a major, course planning, research and honors, major releases, graduate school and career advice. Students who are interested in the Program in Biology majors or minors should consult a general advisor during the freshman year, and are strongly encouraged to meet with a department advisor early in their academic career, but no later than the second term of their sophomore year. It is not necessary to complete every prerequisite before declaring a major.

To make an appointment, go to the Program in Biology website at [www.lsa.umich.edu/biology](http://www.lsa.umich.edu/biology).

#### [Grade Policies](#)

### **Total Credits and GPA Requirement for Plant Biology**

Minimum 30 cr. in Major

Minimum 2.0 GPA in Major

GPA is calculated from all mandatory prerequisites, all courses used for major requirements (including cognates), and all courses in BIOLOGY, EEB, and MCDB.

The introductory biology sequence must be taken for a grade. Prerequisites other than introductory biology may be taken pass/fail; however, it is not recommended, especially for chemistry. Remember that at least a C- must be earned to pass a course taken pass/fail.

Courses used for the major may not be taken pass/fail.

## Prerequisites

### Introductory Biology Sequence:

Choose Sequence A, B, or C:

- A. BIOLOGY 171, BIOLOGY 172 or 174; & BIOLOGY 173; or
- B. BIOLOGY 195 (AP/IB) & BIOLOGY 173; or
- C. BIOLOGY 191 (transfer credit), BIOLOGY 192, & BIOLOGY 173

### Chemistry Sequence:

- CHEM 210 & 211; and,
- CHEM 215 & 216

### Quantitative Analysis Sequence:

- STATS 180 (AP), STATS 250, or STATS 280; and
- Two courses from the following options:
  - CALCULUS I: MATH 115, 120 (AP), 175, 185, or 295
  - CALCULUS II: MATH 116, 121 (AP), 156, 176, 186, or 296
  - General Physics I: PHYSICS 125, 135, 139, 140, or 160
  - General Physics II: PHYSICS 126, 235, 239, 240, or 260
  - Elementary Programming: EECS 183
  - Mathematics of Life: BIOLOGY 202

## Requirements

**Minimum Credits:** 30

**Required General Courses:** Select at least three of the four courses listed. (***Note:** the fourth course not used to fulfill this requirement may be taken as an additional elective.*)

- Ecology: BIOLOGY 281 or EEB 381
- Genetics: BIOLOGY 305
- Biochemistry: Choose from: MCDB 310, BIOLCHEM 415, or CHEM 351
- Evolution: EEB 390, 391, or 392

**Required Plant Biology Courses:** (***Note:** Any course used to fulfill this requirement cannot also be used as an Elective Plant Biology Course: i.e., a course cannot "double-count".*)

- BIOLOGY 230 (Plant Biology)

- BIOLOGY 255 (Plant Diversity), **or** EEB 420 (Plant Evolution), **or** EEB 436 (Woody Plants)
- MCDB 321 (Plant Physiology), **or** MCDB 430 (Plant Molecular Biology), **or** MCDB 433 (Plant Biochemistry)

**Elective Plant Biology Courses:** Two courses from the Elective Plant Biology Lab course list are required; one must be a lab. (***Note:** Any course used to fulfill this requirement cannot also be used as a Required Plant Biology Course: i.e., a course cannot "double-count".*)

- Group I - Choose one course from the approved Elective Plant Biology Lab course list: EEB 300\*, 348, 372, 400\*, 436, 455, 457, 468, 556; MCDB 300\*, 400\*; EARTH 432  
(\*EEB/MCDB 300 or 400 (Independent Research), elected for a minimum of 3 credits in a single term and conducted in a plant biology research lab, may be used to fulfill the lab requirement.) (3 credit max. applies; see CONSTRAINTS below.)
- Group II - Choose one course from: EEB 348, 372, 401 (applicable sections only), 420, 436, 455, 457, 468, 472, 489, 491, 498, 556; MCDB 321, 401 (applicable sections only), 405, 406, 430, 433, 462; EARTH/ENVIRON 431; EARTH 432

### Additional Courses:

- Choose additional BIOLOGY, EEB, and MCDB courses at the 200-level and above, to reach 30 major credit hours.
  - BIOLOGY 200, BIOLOGY 241, BIOLOGY 299, EEB/MCDB 301, EEB/MCDB 302, EEB/MCDB 800, MCDB 412, MCDB 600, and non-specific (departmental) transfer courses are EXCLUDED.
  - The fourth course not taken under "Required General Courses" above may be used here.

### Constraints

- Prerequisites, introductory science courses, and non-specific (departmental) transfer courses are EXCLUDED from the 30 cr. required for the major.
- A maximum of three credits of independent research (EEB/MCDB 300 or 400) may be counted toward the major.

### Distribution Policy

No course used to fulfill a major requirement may be used toward the [LSA Distribution Requirement](#). In addition, courses in the BIOLOGY, EEB, MCDB, and MICRBIOL subject areas may not be used toward the Distribution Requirement.

### Honors

The Program in Biology administers an Honors Program to train students to conduct independent research in the biological sciences. Participating in the honors program allows students to develop their research skills, deepen their understanding of the field, and form productive relationships with faculty and other students. The achievement is noted on the diploma and official transcript.

In addition to completing all the requirements for the major, an honors degree requires:

1. an overall **and** major GPA of at least 3.4, and
2. the completion of a significant piece of independent research that is
  - a. reported in an honors thesis and
  - b. presented in a public forum.

For more information, consult the Program in Biology Honors Program Information page or a Program in Biology advisor.

## Playwriting (Minor)

The minor offers a foundation that explores the collaborative nature of writing for the stage.

The Playwriting Minor focuses on principles and techniques for the composition of creative works in theatre. The program includes in-depth instruction in the craft of writing, analysis, script editing/reading, and possible creation of full production(s). The minor is dedicated to examining new play development, applied theatre, devised theatre, and other nontraditional ways of creating stories. The minor is also geared towards preparing students who wish to work in other theatrical spaces such as dramaturgy, literary management, and education.

The Playwriting minor focuses on principles and techniques for the composition of creative works in theatre, as well as possible exploration in different writing genres (i.e. screenwriting, fiction, and poetry). The minor includes in-depth instruction in the craft of writing, analysis, script editing/reading, and possible creation of full production(s). The minor is open to all undergraduate U-M students.

**Applying and Advising:** Students interested in the Playwriting minor should contact [Professor José Casas](#). Students in the playwriting minor must adhere to any prerequisites that are required of any given class.

**Conditions & Exclusions:** Up to six credits earned outside of U-M or its sponsored programs may be used to fulfill requirements for the minor; No more than one course fulfilling a requirement in the Playwriting minor may simultaneously be counted to cover another degree requirement.

**Requirements: Minimum seventeen credits over three areas**

### [Required Topics Courses I](#)

THEATRE 227: Introductory Playwriting (3 credits)

THEATRE 327: Playwriting II (3 credits)

THEATRE 427: Advanced Playwriting (3 credits)

### [Required Topics Courses II](#)

(3 credits selected from the following)

THEATRE 101: Introduction to Acting (3 credits)

THEATRE 181: Acting I (3 credits)

### Electives

ENGLISH 223: Introduction to Creative Writing (3 credits)

ENGLISH 230: Introduction to Novel and Short Story (3 credits)

RCHUMS 281: Introduction to Comedy and Tragedy: Inside the Dramatic Process (4 credits)

RCHUMS 341: Community Empowerment through the Arts: An Intro to Theory and Practice (3 credits)

RCHUMS 482: Director and Text<sup>1</sup> (4 credits)

THEATRE 241: Directing I<sup>1</sup> (3 credits)

THEATRE 283: Script Analysis (2 credits)

THEATRE 321: History of Theatre I (3 credits)

THEATRE 322: History of Theatre II (3 credits)

THEATRE 323: American Theatre and Drama (3 credits)

THEATRE 325: Contemporary American Theatre and Drama (3 credits)

THEATRE 332: Performing Archives and Oral Histories<sup>1</sup> (3 credits)

THEATRE 333: Documentary Theatre (3 credits)

THEATRE 340: Devising Theatre<sup>1</sup> (3 credits)

THEATRE 399: Topics in Drama<sup>1,2</sup> (1-4 credits)

THEATRE 417: Theatre Internship<sup>2</sup> (1-3 credits)

THEATRE 429: Writing for Production (3 credits)

THEATRE 434: Writing Musical Theatre<sup>1</sup> (2-3 credits)

THEATRE 435: Producing in American Theatre (3 credits)

Screen Arts and Culture (SAC) 210: Intro to Screenwriting (3 credits)

Screen Arts and Culture (SAC) 308: Screenwriting for Non-majors (3 credits)

<sup>1</sup>*Courses must be approved by Instructor and/or must meet any prerequisites that may be required.*

<sup>2</sup>*Courses must be approved by Program Advisor/Playwriting Faculty Member.*

## Polish Major

The Polish Program at the University of Michigan is considered one of the strongest, possibly the strongest, Polish programs in the country. Language courses are the core, with offerings including First, Second, Third, and Fourth Year Polish. U-M is thus the only American university to offer four levels of Polish every year. It also offers on a regular basis Polish literature survey courses, as well as courses on Polish drama, novel, film, and popular culture. People of Polish heritage form the fourth largest ethnic group in the state of Michigan, and a great number of students at the University of Michigan have Polish roots. The strength of the program has been possible thanks to intensive cooperation with the Center of Russian and East European Studies. The Center actively supports Polish activities across the campus and helps coordinate a large network of faculty that include in their teaching and research different aspects of Polish culture. The Polish program also benefits from the activities of the Copernicus Endowment, most notably its annual Copernicus Lectures delivering leading Polish scholars, artists, writers, and public figures.

The concentration is intended for undergraduates who have an interest in Polish language and

culture for academic, cultural, or frequently heritage reasons. It will appeal to students who are contemplating professional, scholarly, or business careers that will involve work in Poland. Its goal is to give interested students a solid base in Polish language and culture, knowledge they can apply in a future academic and/or professional career. It aims to enable research and day-to-day communication, at the same time that it provides competence in salient aspects of Polish literature and culture.

In addition to the major, the department offers an academic minor in Polish Language, Literature, and Culture.

*Effective Winter 2013*

#### Advising

Piotr Westwalewicz should be consulted by prospective majors before the end of the sophomore year. Appointments are scheduled online at [www.lsa.umich.edu/slavic/undergraduate/advising](http://www.lsa.umich.edu/slavic/undergraduate/advising).

#### Prerequisites

POLISH 121, 122, 221, and 222, or the equivalent.

#### Requirements

##### **Minimum Credits: 27**

At least 15 of the 27 credits must be upper-level (300 or above).

1. **Polish Language:** 6-12 credits of POLISH 321, 322, 421, 422; or equivalent
2. **Polish Literature:** 6-9 credits of POLISH 325, 326, 432
3. **Polish Culture:** 6-9 credits of POLISH 214, 215, 314, 450, SLAVIC 490\*
4. **Electives.** 3-9 credits of:
  - SLAVIC 225, 240, 270, 312, 396, 490\* (Polish topics);
  - HISTORY 330, 331
  - REEES 396

*\*(appropriate sections of SLAVIC 490 include “Rocks Kill Communism” and “Revolution in the Attic”)*

Up to two terms of another Slavic language (Bosnian / Croatian / Serbian, Czech, Russian, Ukrainian); see department for additional course options).

#### Residency

At least 15 of the 27 required credits must be taken in residence or through a study abroad program affiliated with the University of Michigan. Study Abroad credit may count toward the major. Please consult with the Polish advisor prior to studying abroad.

#### Distribution Policy

No course used to fulfill a major requirement may be used toward the [LSA Distribution Requirement](#). In addition, courses in the RUSSIAN, BCS, CZECH, POLISH, SLAVIC, and UKR subject areas may not be used

toward the Distribution Requirement.

# Polish Language, Literature, and Culture Minor

The minor in Polish Language, Literature, and Culture is designed to give students a fundamental competence in Polish language upon which they can build, as well as a knowledge of some of the major cultural achievements and individual masterpieces of Polish literature and cinema.

The intended audience comprises all undergraduates with substantial interest in Polish studies, but with insufficient time to pursue a major in this area. Such students might include those who envision doing professional work in Poland, those intending to pursue graduate work in areas related to Polish culture and society, as well as those who may wish to learn more about their own heritage.

*Effective Winter 2021*

## Exclusions:

*Academic minors in Slavic Languages and Literatures are not open to those electing a major or any other academic minor in the department of Slavic Languages and Literatures, nor those electing a concentration in Russian, East European, and Eurasian Studies.*

Students could concurrently pursue this academic minor with one in REES with the following restrictions:

- (1). REES academic minors may not count any course for which Slavic is the home unit.
- (2). Slavic academic minors may not count REES 397 or any course for which REES is the home unit, which includes SLAVIC 395 and 396.

## Advising

Students wishing to pursue an academic minor in the Department of Slavic Languages and Literatures must develop a specific plan for its completion in consultation with the department's designated advisor, Dr. Piotr Westwalewicz.

Appointments are scheduled online at [www.lsa.umich.edu/slavic/undergraduate/advising](http://www.lsa.umich.edu/slavic/undergraduate/advising)

## Prerequisites

POLISH 121, 122, and 221, or equivalent.

## Requirements

### Minimum Credits: 16

1. **Polish language:** POLISH 222, or equivalent
2. **Polish literature and culture:** 6 credits in POLISH 214, 215, 314, 325, 326, 432, 450, SLAVIC 490\*

### 3. Electives:

- 6 credits in SLAVIC 225, 240, 270, 312, 396, 423, 490 (*appropriate sections\**)
- HISTORY 330, 331
- Up to three credits of Third-Year Polish (POLISH 321 and 322) may be counted.

See department for additional course options

*\* (appropriate sections of SLAVIC 490 include “Rocks Kill Communism” and “Revolution in the Attic”)*

### Residency

At least 9 of the 16 required credits must be taken in residence or through a study abroad program affiliated with the University of Michigan.

Study Abroad credit may count toward the minor. Please consult with the Polish advisor prior to studying abroad.

## Political Economy & Development (PED) (Sub-Major)

In this sub-plan, students take courses that help them reason about the global economy and about comparing the political economies of nation-states and regions. Among topics covered are international economics, the political economy of development, regulation of economies, international trade, political contestation over economics, government budgeting, comparative labor economics, and political-economic history. Students gain an ability to analyze historical and contemporary global trends in these topics, and to compare experiences of nation-states and peoples across time and space.

*Effective Winter 2021*

### Exclusions:

The Political Economy and Development (PED) sub-plan is only available to declared International Studies majors and is not a major or minor. The sub-plan will be notated on the student's official transcript.

### Advising

The International Studies Advisor will assist students in developing a program of study. Advising for the Honors plan is provided by the PICS Director and the PICS Honors Thesis advisor. For more information, see: [www.ii.umich.edu/pics/undergraduates/advising](http://www.ii.umich.edu/pics/undergraduates/advising).

### Grade policies

Students must earn a C- or better in all required PICS courses.



## Prerequisites

The following requirements must be met before declaration:

- INTLSTD 101: Introduction to International Studies
- ECON 101: Principles of Economics I
- Students must have started or completed 4<sup>th</sup>-term language proficiency

## Requirements

**Additional Pre-requisites and/or requirements are listed on the [International Studies Major page](#).**

1. **Language Requirement:** Sixth term proficiency.
2. **Core Courses (7 credits):**
  - INTLSTD 301: Topics in International Studies
  - INTLSTD 401: International Studies Advanced Seminar
3. **Research Methods Course (3 credits):** One research methods course chosen from the following list:
  - ECON 309: Experimental Economics
  - ECON 401: Intermediate Microeconomic Theory
  - ECON 451: Intermediate Introduction to Statistics and Econometrics I
  - POLSCI 300: Quantitative Empirical Methods of Political Science
  - POLSCI 391 / CMPLXSYS 391: Introduction to Modeling Political Processes
  - POLSCI 490: Game Theory & Formal Models
  - SOC 210: Elementary Statistics
  - STATS 250: Introduction to Statistics & Data Analysis
  - STATS 280: Honors Introduction to Statistics and Data Analysis

*Note: Completion of the Methods requirement is recommended prior to enrolling in INTLSTD 301.*

4. **Regional Course (3 credits):** One geographic emphasis course devoted to a single world region or country that is related to foreign language of study.
5. **PED Courses (12 credits):** Four courses, chosen from an approved list (see below), to gain knowledge in sub-plan area.
  - At least one course must be an ECON course on approved sub-plan list. (Note: these courses may have additional prerequisites.)
  - At least one course must be at the 400 level.
  - Must include at least two academic subjects.

*Note: Complete term specific sub-plan course lists may be found on the [PICS courses website](#).*

6. **Three electives (9 credits):** The electives are designed to allow students to further personalize their major. Students will elect three advanced courses which will be expected to build upon the theme of their sub-plans. The selected courses should thus contribute to the coherence of the student's overall concentration. Students may select additional sub-plan, regional, or relevant study abroad courses, however there is no preapproved list of electives. Because there is no

preapproved list, students *must* seek and obtain the approval of elective courses - on a course-by-course basis - **from a PICS advisor**. It is strongly advised that this approval be obtained *before* taking the class.

**PED courses** include, but are not limited to:

- AAS 260: The Political Economy of African Development
- AAS 408: African Economies: Social and Political Settings
- AAS 426: Urban Redevelopment, *section titled "Cities in Contemp Africa"*
- AAS 432: Violent Environments
- AAS 458: Issues in Black World Studies, *sections titled "Business & Politics in Developing Countries" "Health & African Development" "When China Comes to Town"*
- AAS 460: Africa & Post-war Development Theory & Policy
- AAS 497 / POLSCI 458: Party Politics & Democracy in Sub-Saharan Africa
- ANTHRCUL 328: Globalizing Consumer Cultures
- ANTHRCUL 334: Anthropology & Development
- ANTHRCUL 343 / POLSCI 342: Eastern Europe
- ANTHRCUL 439: Economic Anthropology & Development
- BA / STRATEGY 445: Base of the Pyramid
- EARTH / ENVIRON 380: Natural Resources, Economics & the Environment
- EAS 571 / ECON 471: Environmental Economics
- ECON 340: International Economics
- ECON 350: Comparative Economic Systems
- ECON 441: International Trade Theory
- ECON 442: International Finance
- ECON 444: The European Economy
- ECON 445: The Economy of the People's Republic of China
- ECON 461: The Economics of Development I
- ECON 462: The Economics of Development II
- ECON 466: Economy of Population (*only if elected FA19 or later*)
- ECON 471 / EAS 571: Environmental Economics
- ECON 490: Topics in Microeconomics, *section titled "Trade and Financial Globalization" (only if elected FA19 or later)*
- ECON / HISTORY 494: Topics in Economic History, *section titled "History of the Atlantic Economy"*
- ENVIRON 270: Our Common Future: Ecology, Economics & Ethics of Sustainable Development
- ENVIRON 302: Topics in Environmental SS, *section titled "Energy Politics"*
- ENVIRON 313 / POLSCI 394: Environment & Development
- ENVIRON 367: Global Enterprise & Sustainable Development
- ENVIRON 375 / ECON 370: Environmental & Resource Economics
- ENVIRON / EARTH 380: Natural Resources, Economics & the Environment
- FIN 412: International Finance Management I (*only if elected FA19 or later*)
- HISTORY 239: The World Before 1492
- HISTORY 312 / POLSCI 362: History of European Integration
- HISTORY / SOC 332 / POLSCI / REES / SLAVIC 395: Russia and the Soviet Union: Reform, Revolution, and the Socialist Experiment

- HISTORY / ECON 494: Topics in Economic History, section titled "History of the Atlantic Economy"
- INTLSTD 401: International Studies Advanced Seminar, *sections titled*  
*"Humanitarian Dilemmas"*  
*"Migration, Human Smugglings and Trafficking"*  
*"Business & Politics in Developing Countries"*  
*"Origins of Economic Growth"*  
*"Norm Diffusion: International, Regional & Public Policy"*  
*"The Politics of Debt"*
- POLSCI 336: Comparative Politics
- POLSCI 342 / ANTHRCUL 343: Eastern Europe
- POLSCI 343: Political Economy of Developed Democracies
- POLSCI 348: Political Economy of Development
- POLSCI 353: The Arab-Israeli Conflict
- POLSCI 355: Democracy and Development in Africa
- POLSCI 362 / HISTORY 312: History of European Integration
- POLSCI 369: Politics of International Economic Relations
- POLSCI 389: Topics in Contemporary Political Science, *section titled "State & Market in Contemporary China"*
- POLSCI 394 / ENVIRON 313: Environment & Development
- POLSCI / REEES / SLAVIC 395 / HISTORY / SOC 332: Russia and the Soviet Union: Reform, Revolution, and the Socialist Experiment
- POLSCI 396 / SLAVIC 396 / REEES 396 / SOC 393: East Central Europe: Nationalism, Socialism, Democracy
- POLSCI 458 / AAS 497: Party Politics & Democracy in Sub-Saharan Africa
- POLSCI 489: Advanced Topics in Contemporary Political Science, *sections titled*  
*"Business & Politics in Developing Countries"*  
*"African Economies: Social and Political Settings"*
- POLSCI 497: Undergraduate Seminar in Comparative and Foreign Government, *section titled "Development & the Quality of Governance"*
- POLSCI 498: Undergraduate Seminar in International Politics, *sections titled*  
*"Politics of International Finance"*  
*"Norm Diffusion: International, Regional & Public Policy"*  
*"The Politics of Debt"*
- RCSSCI 226: Globalization: Social Theory & Practice
- RCSSCI 315: International Grassroots Development
- REEES / POLSCI / SLAVIC 395 / HISTORY / SOC 332: Russia and the Soviet Union: Reform, Revolution, and the Socialist Experiment
- REEES 396 / SLAVIC 396 / POLSCI 396 / SOC 393: East Central Europe: Nationalism, Socialism, Democracy
- SLAVIC / POLSCI / REEES 395 / HISTORY / SOC 332: Russia and the Soviet Union: Reform, Revolution, and the Socialist Experiment
- SLAVIC 396 / POLSCI 396 / REEES 396 / SOC 393: East Central Europe: Nationalism, Socialism, Democracy
- SOC 204: International Migration and the Politics of Membership in a Globalizing World (*only if elected FA19 or later*)
- SOC / HISTORY 332 / POLSCI / REEES / SLAVIC 395: Russia and the Soviet Union: Reform, Revolution, and the Socialist Experiment

- SOC 393 / SLAVIC 396 / POLSCI 396 / REEES 396: East Central Europe: Nationalism, Socialism, Democracy
- SOC 430: World Population Dynamics
- SPANISH 438: Political & Economic Thought in Latin America/Spain
- STRATEGY 310: The World Economy
- STRATEGY 361: International Management
- STRATEGY / BA 445: Base of the Pyramid

### Distribution Policy

No course used to fulfill a major requirement may be used toward the [LSA Distribution Requirement](#). In addition, courses in the INTLSTD subject area may not be used toward the Distribution Requirement.

## Political Science Major

Political science is the systematic study of governmental and political structures, processes, and policies. This study uses institutional, quantitative, and philosophical approaches. The field is highly diverse, ranging across political theory, comparative government, international relations, American government, public policy, and research methods. Political scientists concentrate on public opinion and voting, organized political behavior, governmental institutions, studies of single countries, comparisons across countries and relations among countries. The field addresses both normative and empirical concerns.

*Effective Fall 2016*

### Advising

Normally, the decision to major is made late in the sophomore year or early in the junior year. Advising appointments are scheduled by going to the [Political Science website](#) or by contacting the department office. Appointments for the Honors advisor are scheduled at 1330 Mason Hall.

### Prerequisites

Students should prepare for advanced study in the discipline by completing two of the following introductory courses:

- POLSCI 101: Introduction to Political Theory
- POLSCI 111: Introduction to American Politics
- POLSCI 140: Introduction to Comparative Politics
- POLSCI 160: Introduction to World Politics

In rare circumstances, departmental advisors may approve the use of an upper-level course to meet the prerequisite.

## Requirements

### **Minimum Credits: 30**

At least 30 credits in POLSCI at the 300 level or above (in addition to required prerequisites). Only eight credits of Experiential and Independent Study credit may be included in the major. Only four of these credits can come from POLSCI 399.

Core courses must be elected from the 300-level or higher and include at least:

- two courses at the 400-level, or
- one 400-level POLSCI course and one ULWR POLSCI course.

Students are encouraged to elect an undergraduate topics seminar at the 400 level (POLSCI 495, 496, 497, or 498) in their senior year.

Political science majors are expected to acquire an appreciation of the diverse styles of political inquiry by electing at least one course in four of the following five subfields: political theory, American government, comparative politics, world politics, and methodology. Coursework from both the prerequisite and upper-level courses are used to meet this requirement. STATS 250 does not count toward methods requirements for the major.

### **Roster of POLSCI subfields and courses**

- **American**  
111, 300, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 326, 327, 329, 330, 331, 332, 333, 334, 335, 380, 385, 410, 432, 482, 484, 486, 496
- **Comparative**  
140, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 382, 387, 395, 396, 397, 451, 497
- **Methods**  
381, 391, 488, 490, 499
- **Theory**  
101, 301, 302, 306, 307, 308, 309, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 495
- **World**  
160, 360, 361, 363, 364, 365, 368, 369, 370, 371, 372, 379, 462, 463, 498

## Residency

- At least 12 credits – including both 400 level courses – must be taken on the Ann Arbor campus.
- Only 12 credits of study abroad coursework in political science may be counted toward the major.
- Students are encouraged to seek preapproval of study abroad selections.

### Distribution Policy

No course used to fulfill a major requirement may be used toward the [LSA Distribution Requirement](#). In addition, courses in the POLSCI subject area may not be used toward the Distribution Requirement.

### Honors

Especially well-qualified students are encouraged to undertake an Honors plan, which involves preparing a thesis under the direction of a faculty member. To become eligible for the Honors plan, students must take POLSCI 381 before their senior year. During the senior year, students enroll in a proseminar in which they prepare the thesis.

The department collects applications to the Honors plan during the winter of each academic year. Students usually apply during their junior year. Sophomore majors who have completed POLSCI 381 may apply during their sophomore or junior year. To be admitted to the Honors plan, students must have:

- received an A-range grade in POLSCI 381,
- a grade point average of 3.5 or higher both overall and in Political Science courses,
- secured a faculty member as a thesis advisor,
- written a thesis research proposal (which is generally done in POLSCI 381).

The Honors plan requires at least 34 credit hours of POLSCI coursework at the 300 level or above and must include the following:

- POLSCI 381: Political Science Research Design
- POLSCI 493 : Senior Honors Proseminar (fall only)
- POLSCI 494: Senior Honors Proseminar (winter only)
- at least one course in four of the following five subfields: political theory, American government, comparative politics, world politics, and methodology.

A student must end their undergraduate career with at least a 3.5 GPA in political science coursework and a 3.4 overall GPA in order to receive any level of Honors with their diploma.

### Teaching Certificate

Students interested in obtaining a secondary teaching certificate with a teaching major or minor in Political Science should consult "Teacher Certification Program" and the School of Education Teacher Education Office, 1228 School of Education Building, (734) 615-1528.

## Political Science Minor

The minor in political science gives students training in a rigorous discipline and way of thinking and understanding problems. This is an indispensable part of any liberal arts major. Political Science gives students a better understanding of the way public affairs are conducted and a more practical knowledge of how citizens, elected representatives, judges, and administrators approach

the decisions they are called upon to make. A minor in political science prepares students to become more active citizens by training them to become astute and informed observers of political behavior in their own country and around the world.

*Effective Fall 2015*

#### **Exclusions:**

*A minor in Political Science is not open to students with a major in the Department of Political Science.*

#### Advising

Students wishing to pursue a minor in Political Science must develop a specific plan for its completion in consultation with the Department's designated advisor.

#### Prerequisites

Students should prepare for advanced study in the discipline by completing two of the following introductory courses:

- POLSCI 101: Introduction to Political Theory
- POLSCI 111: Introduction to American Politics
- POLSCI 140: Introduction to Comparative Politics
- POLSCI 160: Introduction to World Politics

In rare circumstances, departmental advisors may approve the use of an upper-level course to meet the prerequisite.

#### Requirements

##### **Minimum Credits: 15**

In addition to the prerequisite courses, students who wish to complete the minor in Political Science must complete five POLSCI courses at the 300 level or above for a minimum of 15 credits.

The minor in Political Science is a structured course of study. A sustained focus on two disciplinary subfields makes it possible for students to acquire this structure without completing a full major. Therefore, core courses in the minor must be taken in the same subfield (political theory, American politics, comparative politics, or world politics) as the prerequisite courses.

Only three credits of Experiential and Independent Study credit may be included in the minor.

#### Residency

At least three of the five upper level courses must be taken on the Ann Arbor campus.

# Polymer Chemistry Minor

The Polymer Chemistry minor provides a concentrated exposure to a subspecialization within Materials Science from a chemical sciences perspective.

The curricula in Chemistry serve those preparing for careers in chemistry, biochemistry, medicine, chemical engineering, pharmacy, and allied fields as well as those seeking a general knowledge of chemistry as part of a liberal arts education. Beyond the first-year courses, there is an emphasis on development of technical knowledge and laboratory experience needed in chemistry and related scientific fields. The undergraduate majors prepare students for work in research and testing laboratories, as well as for business positions in which a chemistry background is desirable. Graduate work is necessary for those planning to do college and university teaching or industrial research.

It is strongly recommended that students who are thinking of degrees in chemistry should arrange an appointment with a Chemistry advisory via the online advising system as soon as possible, preferably before the end of the freshman year but certainly before the end of the sophomore year. The online appointment scheduling system can be found here: <http://www.umich.edu/~michchem/undergrad/index.html>.

*Effective Fall 2015*

## Exclusions:

*The Polymer Chemistry Academic Minor is not open to students concentrating in Biochemistry, Biomolecular Science, Interdisciplinary Chemical Sciences, or Chemistry.*

*Students electing a minor within the Department of Chemistry may only elect **ONE** of the five minors offered by the Department.*

## Advising

Students wishing to pursue a minor offered by the Chemistry Department must develop a specific plan for its completion in consultation with the Department's designated advisor. [Chemistry](#), [Chemical Physics](#), Polymer Chemistry, and [Chemical Measurement Science](#) minors are arranged in consultation with any Chemistry department advisor, while [Biochemistry](#) minors are arranged in consultation with any Biochemistry advisor. Information about scheduling advising appointments is available from the Department's [website](#).

## Grade Policies

The department requires that a student earn a grade of at least C- in all CHEM courses and mathematics and physics courses which are prerequisite for subsequent elections. A major program grade point average of at least 2.0 is required; this includes chemistry courses, mathematics and physics prerequisites and advanced electives which are part of a plan for the major. Prerequisites must be taken for a grade. Students must request any change in a grade within the first fifteen University Business days of the first full term following the term in which the disputed grade was issued.



### Prerequisites

- MATH 115 (or 120), or equivalent;
- PHYSICS 135, 140, or equivalent.

### Requirements

#### **Minimum Credits: 18**

At least 18 credits of courses as follows: CHEM 210/211, CHEM 215, CHEM 260 or 370, CHEM 302 or 303, CHEM 436, CHEM 538.

### Teaching Certificate

Those seeking a B.S. or B.S. Chem. degree with a teaching certificate in Chemistry must fulfill departmental as well as School of Education requirements. Students who plan to earn a teaching certificate with a teaching major or minor in Chemistry should contact the School of Education Teacher Education Office.

## Portuguese Minor

Portuguese is one of the 10 most widely spoken languages in the world uniting approximately 250 million speakers throughout several continents including Brazil, Portugal, Angola, Mozambique, Cape Verde, Guinea-Bissau, São Tomé & Príncipe, and East Timor. It is also the language of immigrant communities in North America, Central Europe, South Africa, and in the Asia/Pacific region.

Students can select language courses from the beginning level, PORTUG 101-102, through 231-232 or 415. The entire Portuguese program has been revamped, with the creation of 8 new courses emphasizing the whole of the Portuguese-speaking world: Brazil, Portugal, and Lusophone Africa.

The objectives of the Portuguese minor are to facilitate students' proficiency and knowledge acquisition in the Portuguese language and on the cultures of the Lusophone (or Portuguese-speaking) world, namely, Angola, Brazil, Cape Verde, Mozambique, Guinea-Bissau, Portugal, and São Tomé and Príncipe. This minor offers students the opportunity to complement the knowledge gained in their principal field while focusing on linguistic competence and a grounding in one of the world's most spoken languages and its greatly diverse cultures. In addition to enhanced career opportunities, it also fosters critical thinking skills in relationship to cultures other than their own.

The Portuguese minor would attract undergraduate students at the University of Michigan from a variety of disciplines, ranging from the humanities and social sciences to the business school and the health sciences, who wish to complement their degree studies with proficiency in the Portuguese language as well as a solid knowledge foundation of Lusophone countries.

When combined with study in another field, knowledge of a Romance language will open doors to a wide variety of career and educational opportunities. Today, learning of other languages, peoples, and cultures is not only useful, it is imperative.

*Effective Fall 2019*

### Advising

Appointments are scheduled [online](#) or at the department office, 4108 Modern Languages Building, (734) 764-5344.

### Prerequisites

PORTUG 232 or the equivalent.

### Requirements

#### **Minimum Credits: 18**

A minimum of 18 credits beyond PORTUG 232. PORTUG 287: Advanced Portuguese Conversation and Composition is required. Students must choose PORTUG courses beyond PORTUG 287 for the remaining part of the coursework, with the exception of PORTUG 280, which may be counted toward the 18 credits for the Portuguese minor.

### Constraints

Students pursuing the minor in Portuguese may petition to have up to three courses (no more than 9 credits) from other units (for example, History, Afro-American and African Studies, as well as Latin American and Caribbean Studies), taught in English, which have a Brazilian, Lusophone African, and/or Portuguese focus to count for the minor. Courses from outside the PORTUG subject be approved in advance by a Portuguese advisor in the department of Romance Languages & Literatures.

### Residency

At least 9 of the 18 credits for the minor must be taken in residence or in a study abroad program affiliated with the University of Michigan.

## Psychology Major

The overall goal of the Psychology concentration is to provide students with a broad background in the various levels of analysis and methodological approaches used in the study of behavior, particularly human behavior, and to prepare students for graduate study in a number of fields. Students can gain research training, experience in a wide variety of community settings, and tailor course selections to meet their long-term post-graduate goals. A Psychology degree, in conjunction with courses chosen from other disciplines, can prepare students for careers interacting with people of all ages and backgrounds in a wide range of fields.

The curriculum in psychology is intended to enhance one's understanding of behavioral science and of oneself and others in terms of concepts developed by study. The undergraduate major program is not intended to prepare students for any specific vocational objective; to become a professional psychologist requires from two to four years (or more) of graduate study.

**Curriculum Guides.** Curriculum Guides are available for both Psychology and Biopsychology, Cognition, and Neuroscience majors. Clusters are groupings of courses (both within the Department of Psychology and throughout other programs at the University of Michigan) that focus on a more specific area related to psychology. Students are encouraged to refer to these clusters when making academic and career goals.

The following clusters are currently available:

- Behavioral and Cognitive Neuroscience
- Business, Systems, and Organizations
- Culture, Context, and Communities
- Development, Psychopathology, and Mental Health
- Evolution, Biology, and Behavior
- Gender, Psychology, and Society
- Health, Development, and Aging
- Intergroup Relations
- Language, Thought, and Culture
- Law, Criminal Justice, and Forensics

*Effective Winter 2018*

**Exclusions:**

*Students who elect a major in Psychology may not elect the Biopsychology, Cognition, and Neuroscience major.*

[Advising](#)

Students choosing psychology as a field of the major develop an approved plan for the major with a department advisor. Students then assume responsibility for completing their program of study or for making revisions which will not jeopardize their graduation. Students are, however, encouraged to consult a department advisor at any time. A department advisor must approve the original plan for the major and any exceptions to the stated requirements for the major. Students should also consult a department advisor when planning the final term's elections to ensure that all requirements for the major have been met and to secure an advisor's approval on a Major Release form. Appointments for students are scheduled at 1343 East Hall or online through the [Department website](#).

**Peer Advising**

Advising by Undergraduate Psychology Academic Peer Advising Program students is available at 1343 East Hall during the fall and winter terms.

## Grade Policies

Credit/No-credit courses may be used toward the Lab requirement, but will not count toward the total number of psychology credits required for major. A total of six credits of Psychology letter-graded Experiential lab (community or research-based courses) may be counted towards the Psychology major.

## Prerequisites

- an introductory course (PSYCH 111, 112, or 114) with a "C" or better
- STATS 250 or 280 with a "C-" or better

## Requirements

### Minimum Credits: 32

A minimum of 40 credits, including the prerequisites and courses within the major. At least two courses must be taken at the 300-level.

### 1. **Breadth Requirement:** One course from each of three breadth groups

- Group I: PSYCH 220 or 240
- Group II: PSYCH 250 or 270
- Group III: PSYCH 280 or 290 or 291

### 2. **Lab Requirement:** To meet the lab requirement, students may complete either:

- two (at least 3 credits each) courses from the list of Methods-based Lab courses;
- one (at least 3 credits) course from the list of Methods-based Lab courses and one (at least 3 credits) course from the list of Experiential Lab courses (i.e., Community-based or Research-based); or
- the Psychology Thesis Research sequence (at least 6 credits total)

**Methods-Based Lab Courses:** PSYCH 302, 303, 331/332, 341, 351, 361, 371, 381, 383, 391, 422, 423, 426, 429, 451, 457 *section titled "Developmental Methods" or "Research Methods in Educational and Cross Cultural Settings"*.

### **Experiential Lab Courses:** (3 credits minimum to satisfy requirement):

- Community-based Lab Courses: PSYCH 211, 304, 305, 306, 307, 308, 310, 311, 317, 319, 324, 325, 404, 405, 485;
- Research-based Lab Courses: PSYCH 226, 322, 323, 326, 327, 422, 423, 424, 428

A total of six credits of Psychology letter-graded Experiential lab (community or research-based courses) may be counted towards the Psychology major.

### **Thesis Research Sequence:** Honors - PSYCH 424 & 426; non-Honors - Psych 428 & 429

A minimum of three credits of Research-based courses must be taken in a single academic term to satisfy the Psychology Lab requirement. Students wishing to pursue the Psychology Honors Research Major should acquire research and statistical skills early in their major before applying.

### **3. Electives:** Additional 300- and 400-level Courses for the major.

The remainder of the major is filled by at least four upper-level Psych lecture or seminar courses for a minimum of 12 credits:

- at least two of the courses must be at the 300-level (PSYCH 225 or COGSCI 200 may be substituted for one of these courses)
- at least one of the courses must be at the 400-level

### Constraints

Student double majoring in Psychology and Neuroscience may share a maximum of 3 courses toward their two programs.

### Residency

Of the 40 overall credits (pre-requisites and courses for the major), 24 must be completed in-residence (AA Campus Department of Psychology and U-M Study Abroad). Of these 24 credits, 12 credits must be upper-division (300 or above).

### Distribution Policy

No course used to fulfill a major requirement may be used toward the [LSA Distribution Requirement](#). In addition, courses in the PSYCH subject area may not be used toward the Distribution Requirement.

### Honors

#### **The Honors Major in Psychology and in Biopsychology, Cognition, and Neuroscience**

Psychology and Biopsychology, Cognition, and Neuroscience students with strong academic records and an interest in research are encouraged to consider participating in the Honors Major. The Honors Major is designed to enable advanced students to gain experience in design, conduct, and analysis of research studies. Students experience an intensive collaboration with a faculty member, and complete a significant effort to create new scientific knowledge. The Honors Major can serve as a capstone for their undergraduate studies, and as important preparation for graduate training or employment in a variety of fields.

1. **Requirements.** In addition to completing all the requirements for the major, an Honors degree designation requires having and maintaining a cumulative GPA of at least 3.4, participation in

two terms of independent study Honors courses, presenting in the Annual Research Forum, and the completion and acceptance of a written thesis describing an original research project conducted in collaboration with a faculty mentor.

2. **Faculty Partnership.** Students wishing to pursue Honors should explore their interests in research and statistics early in their academic career. The student must then identify a faculty research mentor to work in partnership on an Honors project. The research mentor can be any faculty member or research scientist holding a faculty appointment in the University. Students must have one mentor from the Psychology Department. With the mentor as a collaborator, the student will prepare a project plan and timeline for completion. Application deadlines are posted on the Psychology Honors website.
3. **Admission to the Honors Major.** A student and their faculty research mentor must apply together for admission to the Honors Major; this includes an application and research proposal. Students are encouraged to apply the semester before their final year at the university (i.e., the end of their Junior year) to begin the Fall term of their Senior year.
4. **Courses.** Once accepted into the Honors Major, Psych and BCN majors will be issued overrides for PSYCH 424 for the first semester of their thesis, and PSYCH 426 in their final semester. The Honors courses are graded and may be used towards the lab requirements (PSYCH 424 = experiential/research lab; PSYCH 426 = methods lab) when taken for the appropriate number of credits (see Honors Major advisor for guidance). PSYCH 426 may satisfy the college upper-level writing requirement. Students may be required to take a Methods-based lab in addition to these courses, and are encouraged to meet with the Honors Major advisor to plan how each course will count toward their plan.
5. **The Honors Thesis.** The required senior Honors thesis is a written report describing the design and execution of the research project conducted in collaboration with the faculty mentor. The thesis will be due one calendar month before the anticipated graduation date. All Honors theses must be prepared in American Psychological Association (APA) format, and typically run 30-40 double-spaced pages in length. One electronic and hard copy of the thesis and a submission form must be submitted.
6. **Evaluation of Thesis.** The thesis will be evaluated by two-three readers: the mentor, an outside reader (a faculty member not involved in the research project), and a possibly representative of the Honors Major. Students and mentors are responsible for suggesting a second reader prior to submitting their application. The reports of all readers will address the quality of the science reported in the thesis, as well as the quality of the written presentation. The report of the mentor will also address the role the student played in the design, execution, and interpretation of the experiments reported in the thesis, and should point out the role played by others on the project. The Honors Director will then meet to review the recommendations of the readers and decide on the appropriate level of Honors. The Honors Director will attempt to maintain uniform standards, and is not constrained by the recommendations of the readers. Based on LSA guidelines, a determination of "No Honors," "Honors," "High Honors," or "Highest Honors" is made. This determination of an Honors designation must be completed prior to the actual awarding of the degree.

Students interested in the Psychology Department Honors Major should attend an informational session and review program details on the website prior to applying.

## Pure Mathematics (Sub-Major)

The Pure Mathematics Program is designed to provide broad training in basic modern mathematics including an introduction to the methods of rigorous mathematical proof and exposure to the major areas: Algebra, Analysis, and Geometry/Topology.

*Effective Winter 2021*

## Advising

Appointments are scheduled online at: [lsa.umich.edu/math/undergraduates](https://lsa.umich.edu/math/undergraduates). Students are strongly urged to consult with a department advisor each term before selecting courses for the following term.

## Grade Policies

All prerequisite courses must be satisfied with a grade of C– or above. Students with lower grades in prerequisite courses must receive special permission of the instructor to enroll in subsequent courses.

For purposes of calculating grade point average, the term "field of the major" means the following:

1. All MATH courses.
2. All courses used to meet requirements for the major.
3. All required cognate courses (if any).
4. All mandatory prerequisites.
5. EECS 183

## Prerequisites

### **Prerequisites for all Mathematics Majors**

Completion of one of the sequences ending with MATH 215-217, 285-217, or 295-296. A working knowledge of a high-level computer language such as C++ or a computer algebra system (such as Maple or Mathematica), at a level equivalent to completion of a course of three or more credits, and eight credits of PHYSICS, preferably PHYSICS 140/141 and 240/241, are recommended for all programs and required for some. (A grade of C- or better is strongly suggested for MATH 217.)

### **Additional prerequisites for the Pure Mathematics Submajor**

Completion of one of the sequences ending with MATH 215-217, 285-217, or 295-296. (A grade of C- or better is strongly suggested for MATH 217.)

All Pure Mathematics majors are also strongly encouraged to take PHYSICS 140-141 and 240-241 and to acquire a working knowledge of a high-level computer language (e.g., Fortran, C, or C++) at a level equivalent to the completion of EECS 183.

## Requirements

- a. **Four basic courses** (one course from each of the following four groups), completed with a grade of at least C-:
  - Modern Algebra: MATH 412 or 493
  - Differential Equations: MATH 286 or 316
  - Analysis: MATH 351 or 451

- Geometry/Topology: MATH 431, 433, 490, or 590
- b. **Four elective courses** (mathematics) chosen from a list of approved electives and approved by a department advisor.
- c. **One cognate course** outside the Mathematics Department, but with advanced mathematical content.

## Residency

**Minimum number of courses taken in residence for transfer students majoring in Mathematics** (applies to all sub-plans): Students should take a minimum of 18 credits at the University of Michigan, Ann Arbor campus. Six of these credits must come from the basic courses and nine from the core courses and/or cognate courses. The 18 credits may include pre-requisites taken in Math.

## Distribution Policy

No course used to fulfill a major requirement may be used toward the [LSA Distribution Requirement](#). In addition, courses in the MATH subject area may not be used toward the Distribution Requirement.

# Quantitative Methods in the Social Sciences

Because humans are complex, the questions that are asked and the data that are gathered are also complex. For decades social scientists have gathered data by using surveys, interviews, observations, and experiments. The resulting data reflected choices within the control of the researcher. Now, data are increasingly being generated without any researcher intervention. Our world is full of data coming from multiple types of devices, interaction with applications on these devices, digitized documents, and much more.

The [Quantitative Methods in the Social Sciences \(QMSS\) program](#) seeks to unite Michigan's excellence in social science with the current revolution in the data science.

The minor in Quantitative Methods in the Social Sciences will train the next generation of social scientists in the methods needed to harness all types of quantitative data in order to generate new insights and solutions to the problems of today and tomorrow.

A minor in QMSS will deepen the knowledge and skills for a broadly diverse group of students to work in the rapidly changing environment of the analysis of human data. Existing programs focus on computational methods, big data, data management etc. While QMSS is acutely aware of the need for skills in those domains, the foundational courses focus on a) social science applications (understanding human behavior and beliefs through data analysis, solving societal problems) and b) the particular strengths and needs of students in the social sciences, who often select a topic area (inequality) or discipline (psychology) rather than a methodology or a particular mathematical skillset when they select their major.

Further, students interested in social science research are often asked to take long lists of prerequisites with content they won't need before they can take the "useful" courses that exist in computer science and related disciplines. To teach these methods for social science students, QMSS has flipped the curriculum so that students are learning material relevant to them and this material is grounded in / connected to their interests. This leads to increased engagement with



the curriculum and a strong understanding of its application to the real world - and their future job prospects. Likewise, the QMSS minor will benefit students with advanced technical and mathematical skills who are interested in majors in the social sciences and need courses like these to help them reason through the application of their tools to social questions.

*Effective Fall 2020*

### Advising

Advising Appointments will be available online through the LSA Advising Appointment System beginning in February 2020.

Some basic information about minor requirements and fall course offerings are available on the QMSS website. If you have an urgent need, please email [qmss.program@umich.edu](mailto:qmss.program@umich.edu) to be connected with advising assistance.

### Grade Policies

A student must earn an overall GPA of at least 2.0 in courses taken in the minor, including required courses, electives and the capstone course.

The QMSS program is investing heavily in resources to help students achieve success. Program faculty are dedicated to providing individualized assistance to declared minors and students enrolled in the program's core courses with both course concepts and student research projects - in the capstone course as well as self-directed research endeavors.

### Prerequisites

The core courses for the QMSS minor do not require any prerequisite courses. The foundational courses will introduce students to quantitative methods in data analysis and are intentionally designed so that they are accessible to students who have not yet taken college-level statistics courses, and/or have not completed the requirements for their own social science major/minor. This minor is designed to complement, not replace, statistical and methodological training in each of the social science disciplines. The capstone course will require senior status, as well as declaration of both a QMSS minor and a major in a social science department.

### Requirements

**Minimum Credits: 17**

#### **Core Courses (8 credits):**

1. QMSS 201: Intro to Quantitative Methods in the Social Sciences (4 credits)
2. QMSS 251: Computational Social Sciences (4 credits)

#### **Electives (6 credits):**

As an interdisciplinary major focused on the social sciences, in addition to the required courses, the minor includes 6 elective credits of social science courses with significant instruction in quantitative methods, quantitative reasoning, experiment design, and data analysis. It is expected that one of these courses will be within the student's major, and the course credits can

be counted both towards their major and the QMSS minor. The second elective should normally come from another social science discipline, reinforcing the interdisciplinary intent of the minor. A list of courses that will have automatic approval as electives for the QMSS minor appears below. The program assumes that there will be new courses developed and topics courses regularly offered in LSA social science departments as well as interdisciplinary programs on campus that will meet these requirements. QMSS program advisors will review and approve these courses by student request. QMSS program advisors will also evaluate and approve courses submitted for transfer credit and study abroad credit that meet these requirements as electives.

***LIST OF AUTOMATICALLY APPROVED ELECTIVE COURSES, BY SOCIAL SCIENCE DEPARTMENT***

- Anthropology
  - ANTHRBIO 463 / PSYCH 463 / ENVIRON 473: Statistical modeling and data visualization in R
- Communication and Media
  - COMM 22: Quantitative Skills for Communication Studies (4)
- Economics
  - ECON 251: Introduction to Statistics and Econometrics II (4)
  - ECON 258: Topics in Applied Data Analysis (3)
  - ECON 309: Experimental Economics (3)
  - ECON 327: Economics of Crime (3)
  - ECON 401: Intermediate Microeconomic Theory (4)
  - ECON 402: Intermediate Macroeconomic Theory (4)
  - ECON 451: Intermediate Introduction to Statistics and Econometrics (4)
- Linguistics
  - LING 394: Topics in Linguistics, *section titled "Speech Errors"* (3)
  - LING 412: Speech Perception (3)
- Organizational Studies
  - ORGSTUDY 410: Advanced Research Methods in Organizational Studies (4)
- Political Science
  - POLSCI 300: Quantitative Empirical Methods of Political Science (4)
  - POLSCI 387: Comparative Analysis of Government Institutions (3)
  - POLSCI 485: Elections Forensic (3)
  - POLSCI 489: Advance Topics in Contemporary Political Science *section titled, "Computational Political Science"* (3)
- Psychology
  - PSYCH 302: Research Methods in Cognitive Neuroscience (3)
  - PSYCH 303: Research Methods in Psychology (3)
  - PSYCH 341: Advanced Laboratory in Cognitive Psychology (3)
  - PSYCH 381: Advanced Laboratory in Social Psychology (3)
  - PSYCH 463: Statistical Modeling and Data Visualization (4)
  - PSYCH 448: Mathematical Psychology (3)
- Sociology
  - SOC 210: Elementary Statistics (4)
  - SOC 310: Sociological Research Methods (4)
  - SOC 430: World Population Dynamics (3)
  - SOC 472: Advanced Laboratory in Social Psychology (3)
- NOTE: Additional courses may be used to fulfill minor elective requirements with advisor approval.

### **Capstone Course (3 credits):**

QMSS 451: Senior Capstone: Social Sciences Study Management

### Residency

For completion of the minor, QMSS 201, 251, and 451 must be taken in residence on the Ann Arbor campus, or at off-campus sites directed by Ann Arbor faculty. This includes STDABRD, Camp Davis, Biological Station, Michigan-in-Washington.

## **Religion Minor**

*The Religion minor is an interdisciplinary minor housed in the History department, but is not a History minor.*

We live in a world in which religion matters. Religious issues and conflicts dominate the headlines, from extraordinary acts of renewal to horrifying acts of destruction. Even in defining what religion is, and is not, proves a high-stakes challenge for institutions from the U.S. Supreme Court to the UN to local police or business owners.

The minor in Religion offers LSA students a rich and varied curriculum that provides the opportunity to explore the world's religions from antiquity to the present. Though the minor is housed in the History Department, it is designed to be a broad introduction to religion from many disciplinary angles and viewpoints.

We imagine the audience for our minor to be any LSA students interested in the phenomenon and the study of religion, whether it be from their own faith tradition, some other tradition, or the more general phenomenon of religion itself. Students interested in the humanities and social sciences, but also students of law, medicine, or business would benefit from this minor.

*Effective Winter 2016*

### Advising

Appointments with History advisors are scheduled online from the department's webpage: [www.lsa.umich.edu/history/undergraduate](http://www.lsa.umich.edu/history/undergraduate). Students should see an advisor as soon as they decide on their major or minor.

The History Department offers a three-tiered advising structure.

### **Tier 1: Faculty Advisors from the History Department's Undergraduate Committee**

- declaring a history major - obtaining general advice about the nature, purpose, and utility of a history degree
- recommending a faculty mentor
- approving study abroad and transfer credit

- declaring an academic minor in History

To make an appointment, go to <http://www.lsa.umich.edu/history/undergraduate/advising>.

## **Tier 2: The Assistant Director of Undergraduate Studies**

- obtaining general advice about the requirements for the major
- checking progress towards the major or minor
- completing the graduation checklist and release

To make an appointment, go to <http://www.lsa.umich.edu/history/undergraduate/advising>.

## **Tier 3: Individual Faculty Mentors**

- obtaining approval for a survey sequence and a major theme
- getting advice about course selection
- obtaining advice about career planning

Students generally meet with a Tier 2 advisor for help in selecting a mentor, but all subsequent advising will be done by that individual professor.

Faculty who go on leave will designate a substitute, and inform all their mentees of the temporary change.

Students must arrange appointments directly with their mentors, and are expected to do so at least once a term. It is the student's responsibility to take the initiative in setting up these meetings.

### **Prerequisites**

None.

### **Requirements**

#### **Minimum Credits: 15**

A minimum of 5 courses and 15 credits, distributed as follows

1. **Core Course.** HISTORY 105: Introduction to Religion.
2. **Additional Courses.** Four additional courses (at least 12 credits), to be chosen in consultation with a faculty advisor.
  - At least two of these four courses must be at the 300-level or higher.
  - The four courses must cover at least two of the following religious traditions or philosophical traditions – Buddhism [BUD]; Christianity [CHR]; Comparative [COMP]; Hinduism [HIN]; Islam [ISLM]; Judaism [JUD] – or another religious tradition approved by a faculty advisor.

- All four courses must be from the approved list of courses that count for the Religion minor.

## **Courses Approved for Religion Minor**

### **History**

HISTORY / INTLSTD / RELIGION 209: Death, Immortality, and Afterlife (*only if elected FA19 or later*) [COMP]

HISTORY / MEMS 210: Early Medieval Europe [CHR]

HISTORY / MEMS 213: The Reformation [CHR]

HISTORY 222 / JUDAIC / WGS 224 (WGS 224): Sex and Sexuality in Jewish History and Culture (F18)

HISTORY 230: Humanities Topics in History, *sections titled "Angels and Demons in Early Christianity" or "The Bible in History"* [COMP]

HISTORY / MENAS 243: The Dawn of Islamic History [ISLM]

HISTORY 244 / MIDEAST 284 / JUDAIC 244 / MENAS 244: The History of the Arab-Israeli Conflict [COMP]

HISTORY / AAS 245: Islam in Africa [ISLM]

HISTORY / ASIAN / RELIGION 248: Jesus Comes to Asia [CHR]

HISTORY / MEMS 253: Europe, 300-1648: The Rise and Fall of the Middle Ages (*only if elected FA19 or later*) [CHR]

HISTORY / JUDAIC 265: Intro to Jewish Law [JUD]

HISTORY 259 / MIDEAST 339 / RELIGION 358: Israel Before the Exile: Its History & Religion [JUD]

HISTORY / AMCULT / AAS 267: Religion in the Making of African America [COMP]

HISTORY 269 / JUDAIC / RELIGION 260: Introduction to the Talmud and the Rabbis [JUD]

HISTORY / AMCULT 270: Religion in America [COMP]

HISTORY / RELIGION 271 / ANTHRCUL 221: Religions of Latin America [COMP]

HISTORY / RELIGION 286: A History of Eastern Christianity from the 4th to the 18th Century [CHR]

HISTORY 287: Horror and Enchantment: A History of the Spanish and Portuguese Early Modern World (*only if elected WN20 or later*) [COMP]

HISTORY / JUDAIC 290 / MIDEAST 287: Jews and Muslims [COMP]

HISTORY 291: A World History of Happiness: Care of the Self from the Greeks to the Sufis (*only if elected WN20 or later*) [COMP]

HISTORY / CLCIV / WGS 303 (WGS 303): Women in the Ancient Mediterranean [COMP]

HISTORY 304: Interdisciplinary Topics in History, *section titled "Magic, Mystery, and Religion in the Hellenistic World"* (*only if elected FA19 or later*) [COMP]

HISTORY 308 / ASIAN / RELIGION 307: Eat, Pray, Love: Devotional Traditions in South Asia [COMP]

HISTORY / MEMS / WGS 316 (WGS 316): Medieval Women [CHR]

HISTORY 324: Muslims in Contemporary Europe [ISLM]

HISTORY / RELIGION 325 / MIDEAST 375 / MEMS 325 / ASIAN 324: The History of Islam in South Asia [ISLM]

HISTORY 328: Humanities Topics in History, *sections titled "The Bible in the 19th Century" or "Ancient Judaism: Law, Religion, History"* [JUD]  
 HISTORY 350 / JUDAIC / HISTART 323 / MIDEAST 383 / RELIGION 324: History of Jewish Visual Culture: From Ancient Mosaics to Jew-Hop Videos [JUD]  
 HISTORY 357: Topics in African History, *section titled "Islam in Africa"* [ISLM]  
 HISTORY 381 / CLCIV / JUDAIC 380 / RELIGION 382: The Beginnings of Judaism: From Ethnicity to Religion [JUD]  
 HISTORY / JUDAIC / AMCULT 387: History of American Jews [JUD]  
 HISTORY 390: Topics in History, *section titled "Islam and the West"* [ISLM]  
 HISTORY / AAS / LACS / RELIGION 421: Religions of the African Diaspora [COMP]  
 HISTORY 427: Magic, Religion, and Science in Early Modern England (*only if elected FA17 or later*) [ISLM]  
 HISTORY 428 / MIDEAST 413: The Rise of Islam [ISLM]  
 HISTORY 442 / MIDEAST 417: The First Millennium of the Islamic Near East [ISLM]  
 HISTORY 445: Topics in History, *section titled "American Jews & Social Justice in the U.S."* [JUD] or *section titled "Ancient Greek Religion" (only if elected FA19 or later)* [COMP]  
 HISTORY 470 / ASIAN / RELIGION 464: From Mystic Saints to Holy Warriors: Islam in Southeast Asia [ISLM]  
 HISTORY 481: Topics in European History, *section titled "Spirituality & Madness: Religious Women"* [CHR]  
 HISTORY 487: Conversations and Christianities in the Early Modern World and Beyond [CHR]  
 HISTORY 489: Roman Catholicism and the Modern World [CHR]  
 HISTORY 497: History Colloquium, *section titled "Crusade and Jihad"* [COMP]

### **African and African American Studies**

AAS 206: Issues in African Studies: African Christianities [CHR]  
 AAS / HISTORY 245: Islam in Africa [ISLM]  
 AAS / HISTORY / AMCULT 267: Religion in the Making of African America [COMP]  
 AAS 358: Topics in Black World Studies, *section titled "Urban Religion in the African Diaspora"* [COMP]  
 AAS / HISTORY / LACS / RELIGION 421: Religions of the African Diaspora [COMP]

### **American Culture**

AMCULT / HISTORY / AAS 267: Religion in the Making of African America [COMP]  
 AMCULT / HISTORY 270: Religion in America [COMP]  
 AMCULT: Topics in American Culture, *section titled "Islam in America"* [ISLM] (F17)  
 AMCULT HISTORY / JUDAIC 387: History of American Jews [COMP]  
 ARABAM 301: Topics in Arab American Studies, *section titled "Islam in/and America"* [ISLM] (F17)

### **Anthropology**

ANTHRCUL 221 / HISTORY / RELIGION 271: Religions of Latin America [COMP]  
 ANTHRCUL / RELIGION 246: Anthropology of Religion [COMP]

## **Asian Languages and Cultures**

ASIAN 220 / RELIGION 202: Introduction to the Study of Asian Religions [COMP]  
ASIAN / RELIGION 223: Krishna Speaks: Bhagavad-Gita [HIN]  
ASIAN / RELIGION 225: Introduction to Hinduism [HIN]  
ASIAN / PHIL 230 / RELIGION 230: Introduction to Buddhism [BUD]  
ASIAN / RELIGION 231: Introduction to Tibetan Buddhism [BUD]  
ASIAN / RELIGION 234: Buddhism and Death [BUD]  
ASIAN / HISTORY / RELIGION 248: Jesus Comes to Asia [CHR]  
ASIAN / RELIGION 272: Introduction to the Study of Korean Religions [COMP]  
ASIAN / RELIGION 303: Religious Military Orders of the World [COMP]  
ASIAN / HISTART 304: The Art of Yoga [BUD]  
ASIAN / RELIGION 305: Religion and Violence in the Secular World [COMP]  
ASIAN / RELIGION 306: What is Religion? [COMP]  
ASIAN 307 / HISTORY 308: Eat, Pray, Love: Devotional Traditions in South Asia [COMP]  
ASIAN 324 / HISTORY / MIDEAST 375 / MEMS / RELIGION 325 /: The History of Islam in South Asia [ISLM]  
ASIAN 325 / RELIGION 323: Zen: History, Culture, and Critique [BUD]  
ASIAN 326: Introduction to Japanese Buddhism [BUD]  
ASIAN 329: Violence and Nonviolence in the Buddhist Traditions of Asia [BUD]  
ASIAN / PHIL / RELIGION 331: Introduction to Indian Philosophy [COMP]  
ASIAN 333: Sacred Collectives: Nation and Religion in South Asia [COMP]  
ASIAN 335/ HISTART 305: Himalayas: An Aesthetic Experience [COMP]  
ASIAN 350 / RELIGION 351. Gods, Ghosts, and Gangsters: Popular Religion [COMP]  
ASIAN 430: Philosophy of the Sikh Gurus [COMP]  
ASIAN / RELIGION / HISTORY 470: From Mystic Saints to Holy Warriors: Islam in Southeast Asia [ISLM]

## **Classical Studies**

CLCIV 303 / HISTORY 303 / WGS 303. Women in the Ancient Mediterranean[COMP]  
CLCIV 347 / RELIGION 347: Roman Religion from the Archaic Period to Late Antiquity [COMP]  
CLCIV 380 / HISTORY 381 / JUDAIC 380 / RELIGION 382: The Beginnings of Judaism: From Ethnicity to Religion [JUD]  
CLCIV 446. Greek Religion [COMP]  
GREEK 307 / ACABS 307: The Synoptic Gospels: Matthew, Mark and Luke (requires two terms of Greek) [CHR]

## **English**

\*ENGLISH 258 / RELIGION 258: The Bible as Literature [COMP]  
ENGLISH 398: Junior Seminar in English Studies, *section titled "New English Literature in the Age of Chaucer"* [CHR]  
ENGLISH 415 / WGS 414: Studies in Women and Literature: Early Women Writers

[CHR]

ENGLISH 469: Milton [CHR]

## **Germanic Languages and Literatures**

GERMAN 460: Europe's Islam: From Dante to Rushdie [ISLM]

## **Greek**

GREEK 307 / MELANG 307: The Synoptic Gospels: Matthew, Mark and Luke (requires two terms of Greek) [CHR]

## **History of Art**

HISTART 285 / MIDEAST 285: Visual Culture Islam [ISLM]

HISTART 304 / ASIAN 304: The Art of Yoga [BUD]

HISTART 305 / ASIAN 335: Himalayas: An Aesthetic Experience [COMP]

HISTART 323 / HISTORY 350 / JUDAIC 323 / MIDEAST 383 / RELIGION 324: History of Jewish Visual Culture: From Ancient Mosaics to Jew-Hop Videos [JUD]

HISTART 351: The Art and Poetry of Michelangelo [CHR]

HISTART 355 / MEMS 355: The Miraculous and the Diabolical in Late Medieval and Early Modern European Visual Culture [CHR]

## **International Studies**

INTLSTD / HISTORY / RELIGION 209: Death, Immortality, and Afterlife (*only if elected FA19 or later*) [COMP]

## **Judaic Studies**

JUDAIC 205 / MIDEAST 276: What is Judaism? [JUD]

JUDAIC / WGS 224 / HISTORY 222: Sex and Sexuality in Jewish History and Culture(F18)

JUDAIC 244 / HISTORY 244 / MIDEAST 284 / MENAS 244: The History of the Arab-Israeli Conflict [JUD]

JUDAIC 260 / HISTORY 269 / RELIGION 260: Introduction to the Talmud and the Rabbis [JUD]

JUDAIC 265/ HISTORY 256: Intro to Jewish Law [JUD]

JUDAIC 290 / HISTORY 290: Jews and Muslims [JUD]

JUDAIC 318. Humanities Topics in Judaism, *section titled "History and Religion of Ancient Judaism"* [JUD]

JUDAIC 323 / HISTORY 350 / HISTART 323 / MIDEAST 383 / RELIGION 324: History of Jewish Visual Culture: From Ancient Mosaics to Jew-Hop Videos [JUD]

JUDAIC 360: A Global History of the Jews of Spain [JUD]

JUDAIC 376 / WGS 376: Women and the Bible [JUD]

JUDAIC 380 / HISTORY 381 / CLCIV 380 / RELIGION 382: The Beginnings of Judaism:



From Ethnicity to Religion [JUD]

JUDAIC 387 / HISTORY 387 / AMCULT 387: History of American Jews [JUD]

JUDAIC 410 / SOC 410: Sociology of the American Jewish Community [JUD]

JUDAIC 451 / POLSCI 350: The Politics and Culture of Modern East European Jewry [JUD]

JUDAIC 468 / MIDEAST 456 / RELIGION 469: Jewish Mysticism [JUD]

### **Latin American and Caribbean Studies**

LACS 421 / HISTORY 421 / AAS 421 / RELIGION 421: Religions of the African Diaspora [COMP]

### **Medieval and Early Modern Studies**

MEMS 213 / HISTORY 213: The Reformation [CHR]

MEMS / HISTORY 253: Europe, 300-1648: The Rise and Fall of the Middle Ages (only if elected FA19 or later) [CHR]

MEMS 325 / ASIAN 324 / HISTORY 325 / MIDEAST 375 / RELIGION 325: The History of Islam in South Asia [ISLM]

MEMS 355 / HISTART 355: The Miraculous and the Diabolical in Late Medieval and Early Modern European Visual Culture [CHR]

### **Middle Eastern and North African Studies**

MENAS 243 / HISTORY 243: The Dawn of Islamic History [ISLM]

MENAS 244 / HISTORY 244 / MIDEAST 284 / JUDAIC 244: The History of the Arab-Israeli Conflict [COMP]

### **Middle Eastern Studies**

MIDEAST 202 / RELIGION 201: Introduction to World Religions: Near Eastern [COMP]

MIDEAST 216 / RELIGION 204: Introduction to Islam [ISLM]

MIDEAST 235 / RELIGION 121: Introduction to the Tanakh/Old Testament [JUD]

MIDEAST 236 / RELIGION 122: Introduction to the New Testament [CHR]

\*MIDEAST 238 / RELIGION 280: The Historical Jesus in Christianity, Judaism, and Islam [COMP]

MIDEAST 240: Ancient Egypt: Religion and Culture [COMP]

MIDEAST 242 / RELIGION 270: Introduction to Rabbinic Literature [JUD]

MIDEAST 276 / JUDAIC 205: What is Judaism? [JUD]

MIDEAST 284 / HISTORY 244 / JUDAIC 244 / MENAS 244: The History of the Arab-Israeli Conflict [COMP]

MIDEAST 285 / HISTART 285: Visual Culture Islam [ISLM]

MIDEAST 295. First Year Seminar in Near Eastern Studies, *section titled "The Dead Sea Scrolls for the 21st Century"* [JUD]

MIDEAST / ISLAM / MEMS / REEES / RELIGION 318: The Church of Armenia: Profile of a National Institution [CHR]

MIDEAST 321: Jihad in History [ISLM]

MIDEAST 322 / RELIGION 363: The Qur'an and its Interpretations [ISLM]  
 MIDEAST 323: The Prophet Muhammad in Islam [ISLM]  
 MIDEAST 335 / RELIGION 359: History and Religion of Ancient Judaism [JUD]  
 MIDEAST 336 / RELIGION 350: Early Christianity, 50-650 CE [CHR]  
 MIDEAST 339 / RELIGION 358: Israel Before the Exile (587 BCE): Its History & Religion [JUD]  
 MIDEAST 375 / MEMS 325 / HISTORY 325 / RELIGION 325 / ASIAN 324: The History of Islam in South Asia [ISLM]  
 MIDEAST 383 / HISTORY 350 / HISTART 323 / JUDAIC 323 / RELIGION 324: History of Jewish Visual Culture: From Ancient Mosaics to Jew-Hop Videos [JUD]  
 MIDEAST 413 / HISTORY 428: The Rise of Islam [ISLM]  
 MIDEAST 417 / HISTORY 442: The First Millennium of the Islamic Near East [ISLM]  
 MIDEAST 421 / RELIGION 465: Islamic Mysticism [ISLM]  
 MIDEAST 456 / JUDAIC 468 / RELIGION 469: Jewish Mysticism [JUD]  
 MIDEAST 520: Readings in Classical Islamic Texts (*requires 6th-term proficiency in Arabic*) [ISLM]  
 MELANG 307 / GREEK 307: The Synoptic Gospels: Matthew, Mark and Luke (requires two terms of Greek) [CHR]

### **Philosophy**

PHIL 230 / ASIAN 230 / RELIGION 230: Introduction to Buddhism [BUD]  
 PHIL 262 / RELIGION 262: Intro to the Philosophy of Religion [COMP]  
 PHIL 331 / ASIAN 331 / RELIGION 331: Introduction to Indian Philosophy [COMP]  
 PHIL 480: Philosophy of Religion [COMP]

### **Political Science**

POLSCI 350 / JUDAIC 451: The Politics and Culture of Modern East European Jewry [JUD]

### **Religion**

RELIGION 202 / ASIAN 220: Introduction to the Study of Asian Religions [COMP]  
 RELIGION 204 / MIDEAST 216: Introduction to Islam [ISLM]  
 RELIGION / HISTORY / INTLSTD 209: Death, Immortality, and Afterlife (*only if elected FA19 or later*) [COMP]  
 RELIGION 223 / ASIAN 223: Krishna Speaks: Bhagavad-Gita [HIN]  
 RELIGION 225 / ASIAN 225: Introduction to Hinduism [HIN]  
 RELIGION 230 / PHIL 230 / ASIAN 230: Introduction to Buddhism [BUD]  
 RELIGION 231 / ASIAN 231: Introduction to Tibetan Buddhism [BUD]  
 RELIGION 234 / ASIAN 234: Buddhism and Death [BUD]  
 RELIGION 235 / MIDEAST 235: Introduction to the Tanakh/Old Testament [JUD]  
 RELIGION 236 / MIDEAST 236: Introduction to the New Testament [CHR]  
 RELIGION 246 / ANTHRCUL 246: Anthropology of Religion [COMP]  
 RELIGION 248 / HISTORY 248 / ASIAN 248: Jesus Comes to Asia [CHR]  
 \*RELIGION 258 / ENGLISH 258 / JUDAIC 258: The Bible as Literature [COMP]

RELIGION 260 / JUDAIC 260 / HISTORY 269: Introduction to the Talmud and the Rabbis [JUD]  
 RELIGION 262 / PHIL 262: Intro to the Philosophy of Religion [COMP]  
 RELIGION 270 / MIDEAST 242: Introduction to Rabbinic Literature [JUD]  
 RELIGION 271 / HISTORY 271/ ANTHRCUL 221: Religions of Latin America [COMP]  
 RELIGION 272 / ASIAN 272: Introduction to the Study of Korean Religions [COMP]  
 \*RELIGION 280 / MIDEAST 238: The Historical Jesus in Christianity, Judaism and Islam [COMP]  
 RELIGION 286 / HISTORY 286: A History of Eastern Christianity from the 4th to the 18th Century [CHR]  
 RELIGION 303 / ASIAN 303: Religious Military Orders of the World [COMP]  
 RELIGION 305 / ASIAN 305: Religion and Violence in the Secular World [COMP]  
 RELIGION 306 / ASIAN 306: What is Religion? [COMP]  
 RELIGION 307 / ASIAN 307 / HISTORY 308: Eat, Pray, Love: Devotional Traditions in South Asia [COMP]  
 RELIGION 323 / ASIAN 325: Zen: History, Culture, and Critique [BUD]  
 RELIGION 324/ HISTORY 350 / HISTART 323 / JUDAIC 323 / MIDEAST 383: History of Jewish Visual Culture: From Ancient Mosaics to Jew-Hop Videos [JUD]  
 RELIGION 325 / HISTORY 325 / MIDEAST 375 / MEMS 325 / ASIAN 324: The History of Islam in South Asia [ISLM]  
 RELIGION 331 / ASIAN 331 / PHIL 331: Introduction to Indian Philosophy [COMP]  
 RELIGION 347 / CLCIV 347: Roman Religion from the Archaic Period to Late Antiquity [COMP]  
 RELIGION 350 / MIDEAST 336: Early Christianity, 50-650 CE [CHR]  
 RELIGION 351 / ASIAN 350. Gods, Ghosts, and Gangsters: Popular Religion in China [COMP]  
 RELIGION 358 / MIDEAST 339. Israel Before the Exile: Its History & Religion [JUD]  
 RELIGION 359 / MIDEAST 335 / JUDAIC 318: History and Religion of Ancient Judaism [JUD]  
 RELIGION 360 / RCHUMS 365: Experiences of Atheism: A History of Skepticism [COMP]  
 RELIGION 363 / MIDEAST 322: The Qur'an and its Interpretations [ISLM]  
 RELIGION 382 / HISTORY 381 / CLCIV 380 / JUDAIC 380: The Beginnings of Judaism: From Ethnicity to Religion [JUD]  
 RELIGION 421/ HISTORY 421 / AAS 421 / LACS 421: Religions of the African Diaspora [COMP]  
 RELIGION 455 / SOC 455: Religion and Society [COMP]  
 RELIGION 464 / ASIAN 464 / HISTORY 470: From Mystic Saints to Holy Warriors: Islam in Southeast Asia [ISLM]  
 RELIGION 465 / MIDEAST 421: Islamic Mysticism [ISLM]  
 RELIGION 368 / CLCIV 466: Greek Religion [COMP]  
 RELIGION 469 / MIDEAST 456 / JUDAIC 468: Jewish Mysticism [JUD]

## **Residential College**

RCHUMS 334: Special Topics in the Humanities, *section titled, "Death in the Western Imagination" (only if elected WN 20 or later)* [CHR]  
 RCHUMS 365 / RELIGION 360: Experiences of Atheism: A History of Skepticism [COMP]

## **Russian, Eastern European, and Eurasian Studies**

REEES 490 / SOC 490 / WGS 492: Women and Islam: A Sociological Perspective[ISLM]

## **Sociology**

SOC 410 / JUDAIC 410: Sociology of the American Jewish Community [JUD]

SOC 455 / RELIGION 455: Religion and Society [COMP]

SOC 490 / REEES 490 / WGS 492: Women and Islam: A Sociological Perspective[ISLM]

## **Women's Studies**

WGS / JUDAIC 224 / HISTORY 222: Sex and Sexuality in Jewish History and Culture(F18)

WGS 303 / HISTORY 303 / CLCIV 303: Women in the Ancient Mediterranean[COMP]

WGS 376 / JUDAIC 376: Women and the Bible [JUD]

WGS 414 / ENGLISH 415: Studies in Women and Literature: Early Women Writers[CHR]

WGS 492 / SOC 490 / REEES 490: Women and Islam: A Sociological Perspective[ISLM]

*\*change in tradition*

## Constraints

**AP credit:** AP credits may not be used to satisfy requirements of the minor.

## Residency

Four of the five courses must be taken in-residence at the University of Michigan—Ann Arbor, or must count as in-residence credit (i.e., relevant courses taken through UM-sponsored CGIS programs abroad).

# **Romance Languages and Literatures Major**

Majoring in Romance Languages and Literatures allows students to include more than one Romance language in a program of study that also encourages them to discover and to make connections between the Romance languages and cultures that they choose to pursue. All students should consult with a department advisor to develop a program of study that best corresponds to their interests and career plans.

*Effective Winter 2020*

## Advising

The Department offers majors in French, Italian, Romance Languages & Literatures, and Spanish. It offers minors in French, Italian, Portuguese, and Spanish.

Appointments are scheduled [online](#) or at the department office, 4108 Modern Languages Building, (734) 764-5344.

## Prerequisites

Same as those for majors in the individual languages:

- FRENCH 230 or 232 or RCLANG 290 or RCLANG 310 for students of French
- ITALIAN 230, 232, 233, or 410 for students of Italian
- PORTUG 232 or 280 for students of Portuguese
- SPANISH 277 or RCLANG 324 for students of Spanish

## Requirements

### **Minimum Credits: 39**

At least 39 credits consisting of the following:

I. A minimum of 33 credits of coursework from French, Italian, Portuguese, Spanish, or Catalan. All of these courses must be taught in the target language and must also be courses that would count toward the individual language majors and minors. Students will choose two principal Romance languages and take a minimum of 12 credits in each. They have the option of taking up to 9 credits in a third romance language, or of taking the remainder of the 33 credits in their principal languages. In each of the two principal languages, 6 credits in upper-level coursework are required ("upper-level" means: 300 or above in French and Italian, 400 or above in Portuguese, Spanish, and Catalan). Students can seek permission to advance more quickly to upper-level courses after completing:

- FRENCH 235 and one FRENCH 250-299 or the equivalent
- ITALIAN (any of the following) 230, 232, 233, or 410 or the equivalent
- PORTUG 287 or the equivalent
- SPANISH (two courses, six credits) at 279-399-level or the equivalent

II. One course (minimum 3 credits) in the linguistics of the Romance languages, preferably of a comparative nature.

III. ROMLANG 498, the upper-division Seminar in RLL.

The structure of requirement I enables students to choose between studying two or three languages, and between treating their languages more or less equally and having "primary" and

"secondary" (and perhaps "tertiary") languages. Requirement II grounds the major in Romance Languages and Literatures in an understanding of the linguistics of the Romance languages. All RLL majors need to enroll in the upper-division seminar, RomLang 498, during either their junior or senior year. This seminar explores topics for which crossing boundaries among the Romance languages can provide productive avenues of inquiry. A major component of the senior seminar involves individual research projects tailored to each student's linguistic competences.

#### Other Department Policies

### Study Abroad

Majors in Romance Languages and Literatures are encouraged to consider the possibility of [studying abroad](#) for at least one of their languages.

#### Residency

A minimum of 21 of the required 39 credits must be taken either in residence or through a study abroad program affiliated with the University of Michigan

#### Honors

### Romance Languages and Literatures

Qualified students may be admitted to a program of advanced study during their junior year (or at the beginning of the senior year following foreign study), leading to the degree of Bachelor of Arts with Honors in Romance Languages and Literatures. Admission to senior-level Honors work in Romance Languages and Literatures is by application only (forms are available on the department website at [www.lsa.umich.edu/rll](http://www.lsa.umich.edu/rll)). A grade point average of at least 3.5 in all courses, as well as in all courses taken for the major, is required for admission and for graduation with Honors in Romance Languages and Literatures. The Curriculum Committee in Romance Languages and Literatures expects applicants to present evidence of superior language skills and a serious interest in comparative research involving both of their languages and the cultures articulated through them.

Romance Languages and Literatures Honors majors are required to complete 42 credits of coursework and successfully defend a thesis:

### Course Requirements:

At least 42 credits consisting of the following:

I. A minimum of 30 credits of coursework in 2 languages (from French, Italian, Portuguese, Spanish, or Catalan) that meet the following qualifications:

- a minimum of 12 credits each in two Romance languages, including at least 6 credits each in upper-level courses ("upper-level" means: 300 or above in French and Italian, 400 or above in

Portuguese, Spanish, and Catalan), with an overall minimum of 15 credits from upper-level courses.

- All of these courses must be taught in the target language and must also be courses that would count toward the individual language majors.

II. One course (minimum 3 credits) in the linguistics of the Romance languages, preferably of a comparative nature.

III. ROMLANG 498, the upper-division Seminar in RLL.

IV. ROMLANG 491 and 492, Senior Honors Courses, normally taken in the fall and winter terms, respectively, of a student's senior year.

### **Thesis Requirement:**

Composition of a thesis incorporating the results of individual research and demonstrating a substantial piece of work; and

A presentation and discussion of the thesis and of an agreed upon set of related readings with the student's faculty advisor and one other faculty reader.

Working under the direction of a faculty member who serves as thesis director, the student will research the thesis, complete a bibliography and prospectus, and begin drafting the writing process while enrolled in ROMLANG 491. In the following academic term the student will enroll in ROMLANG 492 and complete the thesis and its presentation and discussion.

### Teaching Certificate

By taking a number of courses in each language beyond the requirements for the major in Romance Languages and Literatures, students may qualify for teaching certification in both a major and a minor language. The exact requirements for certification are available at the following School of Education website: [www.soe.umich.edu/file/tag/teacher+education/](http://www.soe.umich.edu/file/tag/teacher+education/)

Candidates for a secondary school teaching certificate should study the general information about teaching certificate requirements, which appears under the **Teacher Certification Program**, and contact the School of Education.

## **Russian Major**

The Russian major aims to combine, in the best traditions of a liberal arts degree, practical language learning with the study of culture broadly understood. It provides extensive language training and demanding courses in literary history and analysis. Moreover, the Department firmly believes that serious language study offers broad intellectual benefits in and of itself. In the upper-level Russian language courses, it aims to develop linguistic self-consciousness and a basis for the study of linguistics proper. In literary studies many undergraduates take not only the

required courses (both in translation and in Russian), but also elect more specialized courses such as "monograph" studies of Pushkin (RUSSIAN 461), Dostoevsky (RUSSIAN 462), Chekhov (RUSSIAN 463), and Tolstoy (RUSSIAN 464).

Russian is also an especially rewarding second major when combined with political science, history or another social-science discipline. Students who complete the intensive year-long language program in their first year are particularly well equipped to follow the dual-major path.

*Effective Winter 2019*

### Advising

Professor Michael Makin, the undergraduate department advisor, should be consulted by prospective majors before the end of the sophomore year. Appointments are scheduled online at [www.lsa.umich.edu/slavic/undergraduate/advising](http://www.lsa.umich.edu/slavic/undergraduate/advising).

### Prerequisites

Students have three possible ways to complete the Russian major program:

- a Russian Language and Literature track
- a Culture track
- a Heritage Speakers track

#### **Russian Language and Literature track Prerequisites:**

RUSSIAN 101, 102, 201, and 202, (or RUSSIAN 103 and 203 or RUSSIAN 123 and 223) or the equivalent. Interested students are advised to begin Russian during their first year.

#### **Culture track Prerequisites:**

RUSSIAN 101, 102, 201, and 202, (or RUSSIAN 103 and 203 or RUSSIAN 123 and 223) or the equivalent. Interested students are advised to begin Russian during their first year.

#### **Heritage Speakers track Prerequisites:**

RUSSIAN 225 or 202, or equivalent, or placement in an upper-level course; and RUSSIAN 231.

### Requirements

**Minimum Credits: 27**

#### **Russian Language and Literature track**

##### **1. Core Courses:**

- RUSSIAN 301 (or RCLANG 323) and 302, or 303
- RUSSIAN 401 and 402
- RUSSIAN 451 or 499



- RUSSIAN 347, plus 348 or 375
- 2. Russian literature/culture after 1900:**
  - at least one course (e.g. RUSSIAN 361, 450, 467, 468, 469, 470, 471, 472, 475, SLAVIC 313, 470).
- 3. Cognate Requirement for Russian Language and Literature: three or more credits in advanced courses (300-level or above)**
  - cognate courses studying some other aspect of Russia (special attention is called to the courses listed under *Russian, East European, and Eurasian Studies*), or;
  - another Slavic language (Czech, Bosnian, Croatian, and Serbian, Ukranian, or Polish), or;
  - another foreign language

## Culture track

- 1. Core Courses:**
  - RUSSIAN 231 or SLAVIC 270 or 240 or 281
  - RUSSIAN 301 (or RCLANG 323) and 302; or 303
  - RUSSIAN 401 and 402
  - RUSSIAN 451 or 499
- 2. Upper-Level Electives for Culture subplan:**
  - At least two of RUSSIAN 322, 333, 347 or 348, 352, 358, 361, 365, 375, 391, 450, 467, 471, 472, 474, 475, 477, SLAVIC 313, 470, 481.
- 3. Cognate Requirement for Russian Language and Literature: three or more credits in advanced courses (300-level or above)**
  - cognate courses studying some other aspect of Russia (special attention is called to the courses listed under *Russian, East European, and Eurasian Studies*), or;
  - another Slavic language (Czech, Bosnian, Croatian, and Serbian, Ukranian, or Polish), or;
  - another foreign language

## Heritage Speakers track

- 1. Core Courses:**
  - RUSSIAN 301 and 302, or equivalent
  - RUSSIAN 401 and 402
  - RUSSIAN 501 and 502
  - two of: RUSSIAN 451, RUSSIAN 499, RCLANG 323
- 2. Upper-Level Electives for Heritage Speakers subplan:**
  - At least two of RUSSIAN 322, 333, 347, 352, 348, 358, 361, 375, 391, 450, 467, 469, 471, 472, 473, 474, 475, 477, SLAVIC 313, or other literature courses with permission of advisor.
- 3. Cognate Requirement for Russian Language and Literature: three or more credits in advanced courses (300-level or above)**
  - cognate courses studying some other aspect of Russia (special attention is called to the courses listed under *Russian, East European, and Eurasian Studies*), or;
  - another Slavic language (Czech, Bosnian, Croatian, and Serbian, Ukranian, or Polish), or;
  - another foreign language

## Distribution Policy

No course used to fulfill a major requirement may be used toward the [LSA Distribution Requirement](#). In addition, courses in the RUSSIAN, BCS, CZECH, POLISH, SLAVIC, and UKR subject areas may not be used toward the Distribution Requirement.

## Honors

Undergraduate majors who have maintained a 3.5 grade point average in Russian courses and 3.4 overall GPA may apply for admission to the Honors major. In addition to regular requirements for the major, qualified Honors majors work on a major project during the senior year, and complete an Honors thesis based on their research.

# Russian Language, Literature, and Culture Minor

The minor in Russian Language, Literature, and Culture is designed to give students a fundamental competence in Russian language upon which they can build, as well as a knowledge of some of the major cultural achievements and individual masterpieces of Russian literature and cinema.

The intended audience comprises all undergraduates with substantial interest in Russian language, literature, and culture, but with insufficient time to pursue a concentration in this area. Such students might include those who envision doing professional work in Russia, those intending to pursue graduate work in areas related to Russian culture and society, as well as those who may wish to learn more about their own heritage.

*Effective Winter 2020*

### **Exclusions:**

*Not open to those who are electing a concentration in Russian, East European, and Eurasian Studies.*

*Students could concurrently pursue this academic minor with one in REES with the following restrictions:*

- (1). REES academic minors may not count any course for which Slavic is the home unit.*
- (2). Slavic academic minors may not count REEES 397 or any course for which REES is the home unit, which includes SLAVIC 395 and 396.*

## Advising

Students wishing to pursue an academic minor in the Department of Slavic Languages and Literatures must develop a specific plan for its completion in consultation with the department's designated advisor, Michael Makin. Appointments are scheduled online at [www.lsa.umich.edu/slavic/undergraduate/advising](http://www.lsa.umich.edu/slavic/undergraduate/advising)

## Prerequisites

RUSSIAN 201 or equivalent.

## Requirements

**Minimum Credits: 16**

1. RUSSIAN 202 or 203 or 223 or RCLANG 293, and
2. 12 additional credits in courses selected from among the following, with at least 6 credits elected at the upper level:
  - RUSSIAN 231, 301, 302, 303, 322, 346, 347, 348, 358, 361, 450, 451, 453, 462, 463, 464, 466, 469, 474, 478, 479, 480, 499
  - SLAVIC 240, 313, 315, and 316.

# Russian Studies Minor

The minors provide interdisciplinary surveys of three separate geographic sub-domains covered by the major in Russian, East European, and Eurasian Studies. Slavic Languages and Literatures offers interdisciplinary minors to students who wish to:

- better understand the history and culture of either Russia and the former Soviet Union or Eastern Europe or Central Eurasia (especially the countries of Transcaucasia, Central and Inner Asia)
- gain insight into the political, economic, and social transitions taking place in the region.

*Effective Fall 2019*

## Exclusions:

*Not open to those electing a major in Russian.*

## Advising

Undergraduate advisors in Slavic Languages and Literatures are available to meet with undeclared students who would like to learn more about the program, and also with current majors and minors who would like to discuss course selection, degree requirements, major/minor

releases, and other matters of concern. Appointments can be made through our online appointment calendar. Students may also contact [slavic@umich.edu](mailto:slavic@umich.edu) for any inquiries. The Slavic Department is currently located at 3040 Modern Languages Building, 812 E. Washington St. Ann Arbor, MI.

#### Prerequisites

None.

#### Requirements

##### **Minimum Credits: 15**

At least 15 credits of courses on Russian specific topics, selected in consultation with and approved by the Slavic undergraduate academic advisor.

A minimum of 3 courses that will be counted toward the academic minor must be upper-level (300- or 400-level).

1. REES 395: Survey of Russia: The Russian Empire, the Soviet Union, and the Successor States.
2. *Disciplinary distribution*: At least one 3-credit course in each sub-area (arts/culture, history\*, and social science).

\*In most cases, students who have taken REES 395 should not enroll in HISTORY 434.

#### Constraints

Russian language courses may not count toward the academic minor.

## Russian, East European, and Eurasian Studies Major

The undergraduate curriculum in Russian, East European, and Eurasian Studies offers broad, interdisciplinary training for students who wish to acquire extensive knowledge of countries of the former Soviet Union and East Central Europe. Proficiency in a language of the region is an important component of the Russian, East European, and Eurasian Studies major. The degree prepares majors for graduate study as well as professional opportunities in areas ranging from government to business to teaching.

*Effective Winter 2017*

#### Prerequisites

One of the following first-year language sequences or the equivalent:

- ARMENIAN 101 and 102
- BCS 131 and 132
- CZECH 141 and 142
- POLISH 121 and 122
- RUSSIAN 101 and 102
- RUSSIAN 103/RCLANG 193
- RUSSIAN 123
- UKR 151 and 152
- YIDDISH 101/JUDAIC 101/GERMAN 127 and YIDDISH 102/JUDAIC 102/GERMAN 128

One of the following strongly recommended:

- RUSSIAN 231 (Introduction to Russian Culture)
- SLAVIC 225 (Arts and Culture of Central Europe)
- SLAVIC 240 (Introduction to Slavic Folklore)

### Requirements

**Minimum Credits: 30**

20 of the minimum 30 credits must be at the 300-level or above.

1. **Geographic distribution** (8 credits):  
At least two of the following courses:
  - REEES 340 (Central Eurasia);
  - REEES 395 (Russia);
  - or REEES 396 or 397 (Eastern Europe).
2. **Disciplinary distribution** (9 credits):  
At least one 3-credit upper-level course in each sub-area:
  - Arts/Culture,
  - History,
  - and Social Science.
3. **Seminar** (3-4 credits):  
One 400-level course with an extensive writing or research component on a REEES-focused topic approved by the REEES program director.
4. **Electives:** Additional advisor approved electives to reach the 30 minimum credits. Electives may be drawn from advisor-approved courses related to REEES topics including language courses beyond the 4th term (up to 8 credits) and study abroad coursework.
5. **Language Requirement:** Students must show 6th term proficiency in Russian or Polish, or 4th term proficiency in another language of the region (excluding German).

### Other Department Policies

#### **Concurrent Undergraduate/Graduate Studies (CUGS) Program**

Majors who are advanced in their studies and have exhausted the undergraduate resources in Russian, East European, and Eurasian Studies are encouraged to talk with the REEES advisor

about applying for enrollment in LSA and the Rackham Graduate School through the Concurrent Undergraduate-Graduate Studies (CUGS) Program in LSA.

#### Distribution Policy

No course used to fulfill a major requirement may be used toward the [LSA Distribution Requirement](#). In addition, courses in the REEES subject area may not be used toward the Distribution Requirement.

#### Honors

Undergraduate majors who have maintained a 3.5 grade point average in the REEES major and a 3.4 overall GPA qualify for admission to the Honors plan. In addition to completing all College and REEES graduation requirements, Honors majors complete a Senior Thesis that is judged worthy of Honors designation by the thesis advisor and at least one other faculty reader. An Honors major is not limited to students who have been in the College Honors Program in the first and second year. Students with questions about the program are encouraged to schedule a meeting with an undergraduate academic advisor online at [www.ii.umich.edu/crees](http://www.ii.umich.edu/crees).

## Scandinavian Studies Minor

Scandinavian countries have made important contributions to Western civilization, from the Sagas of the medieval period to the pioneers of modern drama, Ibsen and Strindberg, the children's literature of Astrid Lindgren, cinema, design, and other art forms. Scandinavian thinkers have also made crucial contributions to the development of the social welfare state, biotechnology, and engineering. Scandinavian companies such as Nokia, IKEA, and ABB are a major presence in international business, and it is a little-known fact that Sweden invests a higher percentage of its GDP in research than any other country in the world, including the U.S. Sweden is the third-largest exporter of music. According to the United Nations, the Scandinavian countries rank highest in the world in quality of life, and they offer revealing comparisons with other industrial and post-industrial societies. The study of these contributions deserves to be strongly represented at a great research university such as the University of Michigan. We are proud to recall that the Swedish diplomat Raoul Wallenberg, who saved tens of thousands of Hungarian Jews during the Holocaust, was a University of Michigan alumnus. The Scandinavian program offers courses that take the pan-Scandinavian view in literature, history, culture, society, architecture, and the arts, plus courses that focus in depth on Swedish language and literature. Opportunities to study at the University of Uppsala, as well as Stockholm University, during a semester or year abroad program and to secure a summer internship in a Scandinavian country further enhance students' career options for graduate study, teaching, international business, or non-profit work. Students enrolled in the fourth-term Swedish course have the opportunity to travel to Sweden as a group on a study trip over Spring Break each year.

*Effective Winter 2014*

## Advising

Students wishing to pursue a minor in Scandinavian Studies must develop a specific plan for its completion in consultation with Johanna Eriksson, johanna@umich.edu.

## Grade Policies

Students must earn a grade of C- or better in all required courses. (*Effective Winter 2017*)

## Prerequisites

SCAND 234 or equivalent, as determined by the Departmental placement examination.

## Requirements

**Minimum Credits: 15**

At least 15 credits and five courses, to be chosen from the following categories as stated below.

1. **Required Scandinavian courses:** SCAND 325, 331, and 375.
2. **Electives:** Two courses chosen from among:
  - SCAND 351, 421, 430, 442, 460, 480.
  - Appropriate (Scandinavian topic) sections of: ENGLISH 407, FTVM/ENGLISH 330, and FTVM 441.
  - PHIL 371.

# Science, Technology, and Society (STS) Minor

Technology often precipitates the most drastic, most revolutionary changes in how societies and cultures engage one another. The Science, Technology, and Society (STS) minor helps students see beyond the veneer of policy issues to learn about the raw changes in our tools and methods. STS studies the ethical, environmental, and social implications of new tools and methods – and how these affect the developing world.

The minor helps students learn about such issues as:

- How science, technology, and medicine shape modern societies
- How social and political forces, choices, and values affect science, technology, and medicine
- How the social dynamics of science, technology, and medicine differ among world societies
- How issues of gender, race, and class appear in science, technology, and medicine

Students electing the STS minor learn multiple methods for studying and solving boundary-spanning problems, including not only those in traditional discipline-based approaches, but also in interdisciplinary and experimental ones.

*Effective Winter 2016*

**Exclusions:**

*Not open to students with a minor in [Medical Anthropology](#) or [History of Medicine and Health](#).*

[Advising](#)

Students wishing to pursue a minor in Science, Technology, and Society must develop a specific plan for its completion in consultation with the program's designated advisor. Please use our [LSA online advising system](#) to schedule an appointment with the STS Undergraduate Director.

[Prerequisites](#)

None for the minor *per se*, although individual courses elected to meet the requirements of the minor may have course prerequisites.

[Requirements](#)

**Minimum Credits: 15**

A minimum of 15 credits (and at least 5 courses), to be chosen from the list of approved STS courses. At least one course must be at the 300 level or above. Only one course at the 100 level is permitted.

**Core course:** RCSSCI 275 / HISTORY 285.

**Electives.** A minimum of 3 courses in a chosen focus track (Science; Technology; Medicine).

Courses on science, technology, and society are offered by many different departments and programs in LSA as well as in other colleges of the university. Only courses specifically approved by the STS Program may be counted toward the minor. There are presently no provisions for exceptions to this rule. An up-to-date list of currently approved courses is available at the STS Program [website](#).

[Constraints](#)

No course may be counted simultaneously toward both STS and any other minor.

Students may not declare the STS minor later than the first week of the first term of their senior year.



# Screenwriting Submajor

The department offers a submajor in Screenwriting to undergraduate students in the Film, Television, and Media major who demonstrate a special talent for writing for the screen.

If a student is not accepted into the Screenwriting submajor, he or she may continue with the Film, Television, and Media major. The courses required of the student to apply for the submajor will all satisfy requirements in the general Film, Television, and Media major, whether or not the student is successful in his/her application to the Screenwriting submajor. Students who receive notice of their acceptance into the Screenwriting submajor from the Screenwriting Coordinator should see the Associate Chair of Film, Television, and Media to complete a revised major declaration form to notify the college of their admission into the Screenwriting submajor.

Submajors are expected to complete all normal Film, Television, and Media requirements for the major in the studies-based part of the curriculum.

*Effective Fall 2018*

## Advising

Students who may be interested in a major in Film, Television, and Media are encouraged to consult with a department advisor. Appointments are scheduled online at:

[https://webapps.lsa.umich.edu/AdvAppts/AA\\_StuSelfSvc1.aspx?ctgy=SAC](https://webapps.lsa.umich.edu/AdvAppts/AA_StuSelfSvc1.aspx?ctgy=SAC)

## Grade Policies

The prerequisite for the FTVM major may be taken for a grade or may be taken P/F.

A minimum grade of C– or better must be achieved in any course taken to satisfy the FTVM Major requirements.

## Prerequisites

FTVM / RCHUMS 150 (FTVM / RCHUMS 236) - Introduction to Film, Television, and Media completed with a minimum grade of C–.

Students will apply for entry to the major after having completed the prerequisite. In accord with LSA policies, students who do not meet the minimum grade requirement but still hope to declare the Film, Television, and Media major may retake the prerequisite course. If they meet the criteria above with the new grade they earn in the re-taken course, they may declare Film, Television, and Media as their major.

## Requirements

**Minimum Credits: 32**

**1. Core Required Courses (25 credits).**

*A. Two history courses:*

FTVM 352 - Film History: Origins to the French New Wave, and one additional history course selected from among the following:

- FTVM 353 - Film History: Post New Wave
- FTVM 354 - New Media History
- FTVM 355 - Television History.

*B. Two theory courses:*

FTVM 272-Classical Film Theory, and one additional history course selected from among the following:

- FTVM 372 - Contemporary Film Theory
- FTVM 375 - Television Theory and Criticism
- FTVM 376 - New Media Theory
- FTVM 461 - Explorations in Feminist Film Theory

*C. Introduction to production course:* FTVM 290- Introduction to Media Production.

*D. Two production or writing courses selected from the following:*

- FTVM 300 - Movie/Serial Television Production I
- FTVM 301 - Documentary I
- FTVM 302 - Multi-Camera Television Production
- FTVM 304 - Topics in Media Production I
- FTVM 305 - The Experimental Screen
- FTVM 306 - Animation and Digital Media Practices I
- FTVM 309 - Shorts from Short Stories
- FTVM 310 - Screenwriting I: The Feature Script
- FTVM 311 - Writing for Television I: The Spec Script
- FTVM 317 - WOLV TV
- FTVM 391 - Editing Theory & Practice
- FTVM 392 - Cinematography
- FTVM 393 - Screendance (*only if elected FA 20 or later*)

*E. One studies course selected from among the following in National, Regional, or Transnational Cinema, or in a 300 or 400-level Television or Digital Media course:*

- FTVM 250 / JUDAIC 250 / MIDEAST 280 - Jewish Film: Race, Ethnicity, and Nationality
- FTVM / SLAVIC / RCHUMS 313 - Russian and Ukrainian Cinema
- FTVM / POLISH 314 - Polish Cinema
- FTVM / ITALIAN 316 - Screening Italian-Americans
- FTVM 332 / GERMAN 330 - German Cinema
- FTVM / GERMAN 333 - Fascist Cinema
- FTVM / AMCULT / COMM 334 - Race, Gender, Sexuality and U.S. Culture in Video Games
- FTVM / ASIAN 341 - Bollywood and Beyond: An Introduction to Popular Indian Cinema

- FTVM / GERMAN / AMCULT 346 - Media Matter: From Print to Screen Culture
- FTVM 358 - Italian Film: History, Art, Entertainment
- FTVM 365 - Race and Ethnicity in Contemporary American Television
- FTVM 368 - Topics in Digital Media Studies
- FTVM / HISTART / HISTORY / JUDAIC 379 - Jewish Photographers Picture the Modern World (*only if elected WN20 or later*)
- FTVM / AMCULT / LATINOAM 380 - Studies in Transnational Media
- FTVM / AMCULT / LATINOAM 381 - Latinas/Latinos and the Media
- FTVM / AAS 440 - African Cinema
- FTVM 441 - National Screens
- FTVM / AAS 442 - Third World Cinema
- FTVM / ASIAN 458 - Film Culture in Korea
- FTVM / AAS 470 - Cultural Cinema
- FTVM 485 - The Global Screen
- ITALIAN 358 - Italian Cinema
- or a similar course pre-approved by the advisor.

**2. Required Electives:** 7 credits of FTVM coursework at the 300 or 400 level. One of these courses must be a 3-credit studies course (see lists below).

### **Production Courses**

- FTVM 300 - Movie/Serial Television Production I
- FTVM 301 - Documentary I
- FTVM 302 - Multi-Camera Television Production
- FTVM 303 - Mini Course in Media Production II
- FTVM 304 - Topics in Media Production I
- FTVM 305 - The Experimental Screen
- FTVM 306 - Animation and Digital Media Practices I
- FTVM 309 - Shorts from Short Stories
- FTVM 310 - Screenwriting I: The Feature Script
- FTVM 311 - Writing for Television I: The Spec Script
- FTVM 317 - WOLV TV
- FTVM 391 - Editing Theory & Practice
- FTVM 392 - Cinematography
- FTVM 400 - Movie/Serial Television Production II
- FTVM 401 - Documentary II
- FTVM 402 - Topics in Television Production
- FTVM 403 - Television Sketch Comedy
- FTVM 404 - Topics in Media Production II
- FTVM 405 - Screendance
- FTVM 406 - Animation and Digital Media Practices II
- FTVM 410 - Screenwriting II: The Rewrite
- FTVM 411 - Writing for Television II: Pilots
- FTVM 421 - TV Pilots
- FTVM 423 - Practicum for the Screenwriter
- FTVM 427 - Screenwriting III

## **Studies Courses**

- o FTVM / SLAVIC 313 - Russian and Ukrainian Cinema
- o FTVM / POLISH 314 - Polish Cinema
- o FTVM / CZECH 315 - Czech Cinema
- o FTVM / ITALIAN 316 - Screening Italian-Americans
- o FTVM 320 - Documentary Film
- o FTVM 324 / COMM 251 - Understanding Media Industries
- o FTVM 325 - New Line and New Hollywood Cinema
- o FTVM / ENGLISH 330 - Major Director (rotating topics)
- o FTVM / ENGLISH 331 - Film Genres and Types (rotating topics)
- o FTVM 332 / GERMAN 330 - German Cinema
- o FTVM 333 - Fascist Cinema
- o FTVM / AMCULT 334 - Race, Gender, Sexuality, and U.S. Culture in Video Games
- o FTVM 340 - Writing Film Criticism
- o FTVM / ASIAN 341 - Intro to India Cinema
- o FTVM / AMCULT / GERMAN 346 - Media Matter: From Print to Screen Culture
- o FTVM 350 - The Silent Screen: Arts and Cultures
- o FTVM 353 - Film History: Post New Wave
- o FTVM 354 - New Media History
- o FTVM 355 - Television History
- o FTVM 358 - Italian Film: History, Art, Entertainment
- o FTVM / WGS 361 (WGS 361) - Women in Film
- o FTVM 365 - Race and Ethnicity in Contemporary American Television
- o FTVM 366 - Film, Television, and Popular Culture (rotating topics)
- o FTVM 367 - Introduction to Digital Media Studies
- o FTVM 368 - Topics in Digital Media Studies (rotating topics)
- o FTVM 372 - Contemporary Film Theory
- o FTVM 375 - Television Theory
- o FTVM 376 - Digital Media Theory
- o FTVM / AMCULT / LATINOAM 380 - Studies in Transnational Media
- o FTVM / AMCULT / LATINOAM 381 - Latinas(os) and the Media
- o FTVM 422 - Topics in Avant-Garde Film
- o FTVM 435 (335) – Authorship & the Archive: Exploring the Film, Theater, & TV Collections of the U of M Special Collections Library
- o FTVM 440 / AAS 440 - African Cinema
- o FTVM 441 - National Screens (rotating topics)
- o FTVM 442 / AAS 442 - Third World Cinema
- o FTVM 451 / AMCULT 490 - American Film Genres
- o FTVM 455 - Topics in Film (rotating topics)
- o FTVM / ASIAN 458 - Korean Film Culture
- o FTVM 460 - Technology and the Moving Image
- o FTVM / WGS 461 (WGS 461) - Explorations in Feminist Film Theory
- o FTVM 475 – Popular Film and TV Culture
- o FTVM 485 - The Global Screen

Optional Submajor: [Screenwriting](#)

[Other Department Policies](#)

## **Screenwriting Submajor of Film, Television, and Media Major**

The department offers a sub-major in Screenwriting to undergraduate students in the Film, Television, and Media major who demonstrate a special talent for writing for the screen.

[Honors](#)

The Honors plan in the Department of Film, Television, and Media offers qualified Film, Television, and Media majors a special opportunity. Upper-level students with strong academic records and a demonstrated ability to carry out the independent work required to complete an Honors thesis, screenplay, film, video or digital production are encouraged to apply. The Film, Television, and Media Honors major is not restricted to students who have been in the College Honors Program in their freshman and sophomore years.

Upon successful completion of the Honors plan, students may graduate with Honors, High Honors, or Highest Honors in Film, Television, and Media, depending on the evaluation of their thesis, screenplay, or project. These Honors designations appear on their diploma along with any College Honors designations they earn from their overall grade point.

Students accepted into the Honors plan also become members of the Honors Program of the College of Literature, Science, and the Arts. As members of the LSA Honors Program, they gain access to a variety of special services such as possible financial support for their Honors work. In addition, students may also apply for competitive scholarships administered by the Department of Film, Television, and Media to help with costs associated with Honors projects.

**Admission.** To be considered for the Honors major, students must have a grade point average of 3.5 or higher in the Film, Television, and Media major. Students must also identify a Film, Television, and Media faculty sponsor and file an application for admission to the Honors plan no later than three terms prior to the intended graduation date. For further information, contact the Film, Television, and Media Department at (734) 764-0147.

[Screenwriting \(Sub-Major\)](#)

*Effective Fall 2019*

[Advising](#)

Students who may be interested in a major in Film, Television, and Media are encouraged to consult with a department advisor. Appointments are scheduled online at:

[https://webapps.lsa.umich.edu/AdvAppts/AA\\_StuSelfSvc1.aspx?ctgy=SAC](https://webapps.lsa.umich.edu/AdvAppts/AA_StuSelfSvc1.aspx?ctgy=SAC)

## Prerequisites

**Additional Pre-requisites and/or requirements are listed on the Film, Television, and Media [Major page](#).**

FTVM 236 completed with a minimum grade of C-. The prerequisite for the Film, Television, and Media major may be taken for a grade or may be taken P/F.

Students interested in the submajor must take the same prerequisite course required of students wishing to declare the Film, Television, and Media major. Students with grade lower than C- in this course should meet with an advisor to declare his/her major in Film, Television, and Media.

Students must then take FTVM 290 and 210, followed by FTVM 310. After successful completion of FTVM 310, and acceptance and successful completion, B- or better, in FTVM 410, the student may apply for the Screenwriting submajor. The student should contact the Coordinator of Screenwriting to state their interest in applying to the submajor.

## Requirements

Final approval for the Screenwriting submajor is based on the student's acceptance and successful completion, B or better, of one of the following:

- FTVM 427, Screenwriting III  
OR  
FTVM 423, Practicum for the Screenwriter (only if the student is selected as one of the two screenwriters for the course)
- FTVM 311, Screenwriting for Television

Note: If a student is not accepted into the Screenwriting submajor, he or she may continue with the Film, Television, and Media major. The courses required of the student to apply for the submajor will all satisfy requirements in the general Film, Television, and Media major, whether or not the student is successful in his/her application to the Screenwriting submajor. Students who receive notice of their acceptance into the Screenwriting submajor from the Screenwriting Coordinator should see the Associate Chair of Film, Television, and Media to complete a revised major declaration form to notify the college of their admission into the Screenwriting submajor.

Submajors are expected to complete all normal Film, Television, and Media requirements for the major in the studies-based part of the curriculum.

## Distribution Policy

No course used to fulfill a major requirement may be used toward the [LSA Distribution Requirement](#). In addition, courses in the FTVM and SAC subject areas may not be used toward the Distribution Requirement.

## Honors

After successful completion of FTVM 410, students with a GPA of 3.5 or above in the Film, Television, and Media major and 3.4 GPA overall may wish to declare Honors in Screenwriting. Interested students should consult the Coordinator of Screenwriting.

# Secondary Mathematics Teaching Certificate Submajor

The Teaching Certificate program is designed to provide the broad training in mathematics necessary to be a successful teacher of mathematics at the secondary level, grades 6-12. The requirements for a secondary teaching certificate with a major in mathematics may be met while earning a degree from the College of Literature, Science, and the Arts (A.B. or B.S.) or from the School Education (A.B. Ed. or B.S. Ed.). Requirements for the major are identical for all of these degrees, although LSA and Education have somewhat differing language and distribution requirements. LSA degree candidates must earn at least 100 LSA credits and at least 30 Education credits. Please note that the LSA B.S. degree requires 60 credits in physical and natural science and mathematics; students with less than 60 credits may be eligible for an A.B. degree.

Appointments with the Mathematics Department teaching certificate advisor may be scheduled online at: [lsa.umich.edu/math/undergraduates](https://lsa.umich.edu/math/undergraduates).

For information specific to the School of Education, students should contact the SOE Teacher Education Office, 1228 SEB, 734-615-1528, [te.program@umich.edu](mailto:te.program@umich.edu), [www.soe.umich.edu/academics](https://www.soe.umich.edu/academics). It is essential that students planning to obtain a teaching certificate consult a teaching certificate advisor, either in Mathematics or Education, prior to the end of the 1st term of their sophomore year.

*Effective Winter 2021*

## Advising

Appointments are scheduled online at: [lsa.umich.edu/math/undergraduates](https://lsa.umich.edu/math/undergraduates). Students are strongly urged to consult with a department advisor each term before selecting courses for the following term.

## Grade Policies

All prerequisite courses must be satisfied with a grade of C– or above. Students with lower grades in prerequisite courses must receive special permission of the instructor to enroll in subsequent courses.

For purposes of calculating grade point average, the term "field of the major" means the following:

1. All MATH courses.

2. All courses used to meet requirements for the major.
3. All required cognate courses (if any).
4. All mandatory prerequisites.
5. EECS 183

## Prerequisites

### Prerequisites for all Mathematics Majors

Completion of one of the sequences ending with MATH 215-217, 256-217, 285-217, or 395-396. A working knowledge of a high-level computer language such as C++ or a computer algebra system (such as Maple or Mathematica), at a level equivalent to completion of a course of three or more credits, and eight credits of PHYSICS, preferably PHYSICS 140/141 and 240/241, are recommended for all programs and required for some. (A grade of C- or better is strongly suggested for MATH 217.)

### Additional prerequisites for the Secondary Mathematics Teaching Certificate Submajor

One of the pair of courses MATH 215&217, MATH 255&217, MATH 285&217, or MATH 295&296. Additionally, students must complete one term of computer programming, EECS 183 or equivalent.

## Requirements

Basic Courses = The basic courses for a candidate for a teaching certificate consist of one course from each of the following five groups (chosen with the approval of a teaching certificate advisor), completed with a grade of at least a C-:

1. Modern Algebra/Number Theory: MATH 487 or 475
2. Geometry: MATH 431 or 531
3. Probability: MATH 425 or 525
4. Analysis: MATH 351 or 451
5. Secondary Mathematics: MATH 486

Specific Courses (or core/cognate courses) = The program requires 10 specific Education courses, listed below, totaling 30 credits. These are elected in the junior and senior years in a specified order. Consult with the School of Education Office of Student Services for the order and timing of these courses.

- [Methods of Teaching Mathematics \(or minor field\)](#): EDUC 413 (3 credits)
- [Practicum in Teaching Methods](#): EDUC 307I and 307II (4 credits)
- [Educational Psychology](#): EDUC 391 (3 credits)
- [Reading and Writing](#): EDUC 402 (3 credits)
- [Education in a Multi-cultural Society](#): EDUC 392 (3 credits)
- [Directed Teaching](#): EDUC 302 (10 credits)
- [Problems and Principles of Secondary Education](#): EDUC 304 (2 credits)
- [Teaching with Digital Technologies 6-12](#): EDUC 446 (1 credit)
- [Teaching Students with Exceptionalities in the General Education Middle and High School Classroom](#): EDUC 445 (1 credit)

The last four of these are to be elected concurrently. **Students must apply for admission to the**



**certification program by January 15 of their sophomore year.** Application forms are available at the School of Education.

Additionally, every student must successfully complete:

- an introductory course in psychology (not PSYCH 112) that is to be taken before EDUC 391, and
- Michigan's licensure requirements (see [www.soe.umich.edu/licensure\\_in\\_michigan/](http://www.soe.umich.edu/licensure_in_michigan/)).

Every Teaching Certificate student must present a SOE major or SOE minor in another academic field. This normally requires 20-24 credits in a structured program in an area other than mathematics. Consult the *Bulletin* of the School of Education for acceptable programs.

### Residency

Minimum number of courses taken in residence for transfer students majoring in **Mathematics** (applies to all sub-plans) *Effective Fall 2015*: Students should take a minimum of 18 credits at the University of Michigan, Ann Arbor campus. Six of these credits must come from the basic courses and nine from the core courses and/or cognate courses. The 18 credits may include pre-requisites taken in Math.

### Distribution Policy

No course used to fulfill a major requirement may be used toward the [LSA Distribution Requirement](#). In addition, courses in the MATH subject area may not be used toward the Distribution Requirement.

## Social Class and Inequality Studies

The minor in Social Class and Inequality Studies brings together courses in Women's and Gender Studies and from across the LSA curriculum that address social class as an analytic category and explore the intersections of class with race, gender, and other dimensions of social structure. Required and elective courses taken together will provide a strong, interdisciplinary understanding of how social class has operated in past cultures as well as how it operates in the present in the U.S. and elsewhere.

*Effective Winter 2021*

### Grade Policies

All courses in the minor in Social Class and Inequality Studies must be completed with a C- or above

### Prerequisites

none

### Requirements

**Minimum Credits: 15**

Foundational Course: WGS (WGS) / SOC 216 — Thinking Class: Inequality in Media, Bodies,

Environment, and More or SOC 242 — The Experience of Social Class in College and the Community

Of the total 15 credits, at least six credits must be taken in Women's Studies.

Electives: Four electives (12 credits) from a list of approved courses. At least two courses must be at the 300 level or above, with at least one at the 400 level.

#### Courses in Women's Studies

- WGS (WGS) / SOC 216: Thinking Class
- WGS (WGS) / NURS 220: Perspectives in Women's Health
- WGS 250 (WGS 250): Race, Gender and Nation
- WGS (WGS) / PSYCH 297: Promoting Equity and Inclusion in the Academy and the Workplace
- WGS (WGS) / PSYCH 309: Psychology of Social Change: Gender and Global Feminism
- WGS (WGS) / ENGLISH 314: Gender and Sexuality Studies in Literature, *section titled "Narratives of Girlhood"*
- WGS (WGS) / ENGLISH 315: Women and Literature, *section titled, "Working-Class Women's Literature"*
- WGS 319 (WGS 319): Race, Class, and Women's Reproductive Health
- WGS 331 (WGS 331): Feminist Theoretical Perspectives in Gender and Health
- WGS 335 (WGS 335): Gender and Globalization
- WGS (WGS) / AAS / HISTORY 337: Black Women in the U.S., Part II: Contemporary Perspective in the 20th and 21st Centuries
- WGS (WGS) / AAS 365: Global Perspectives on Gender, Health, and Reproduction
- WGS 374 (WGS 374): Race, Gender and Incarceration
- WGS (WGS) / PSYCH 394: Sex, Sexuality and Public Policy
- WGS 410 (WGS 410): Reproductive Justice: Legal and Ethical Issues
- WGS (WGS) / AMCULT 411: Rednecks, Queers, and Country Music
- WGS 417 (WGS 417): Race, Gender, & Mental Health in the 19th Century
- WGS (WGS) / ANTHRO 428: Sex Panics in the UK and the US
- WGS (WGS) / ANTHRO 446: Sex and the City: Urban Geography and Sexual Locations
- WGS 443 (WGS 443): Pedagogy of Empowerment: Activism in Race, Gender, and Health

#### Courses in Other Departments

- AAS 347 / HISTORY 329 / RCSSCI 343 / SOC 335: Urban Inequality in America
- AAS 453: Culture, Class, and Conflict in Southern Africa
- ALA / PSYCH / SOC 218: Foundations of Intergroup Relations
- AMCULT / HISTORY 440: American Thought and Culture Since 1940
- AMCULT / SOC 221: Social Inequality
- ASIAN 383: Wealth and Poverty in Korea: What it means to be rich (or not) in Korea
- ECON 325: Economics of Education
- ECON 320: Survey of Labor Economics
- ENGLISH 290: Themes in Language and Literature, *section titled: "Working Class Literature"*
- ENGLISH 317: Literature and Culture, *section titled: "Rust Belt Literature" or "Inside-Out Prison Exchange"*
- ENGLISH 384: Caribbean Literature, *section titled "Caribbean Women Writers"*
- ENGLISH 390: Literature and Culture, *section titled "The Theory Mess"*
- ENGLISH 450: Studies in Medieval and Renaissance Literature, *section titled: "Medieval Rebels"*

- ENVIRON 222 - Introduction to Environmental Justice
- HISTORY 282: A History of the Economy
- HISTORY 445: Topics in History, *sections titled: "Capitalism and Socialism" or "What is Capitalism?"*
- MEMS 220: Knights, Peasants, and Bandits
- ORGSTUDY 495: Special Topics in Organizational Studies, *section titled: "Organizations and Inequality: Race, Class, and Gender in Education"*
- POLSCI 332: The Politics of America's Economic Inequality
- RCSSCI 360: Social Science Junior Seminar, *section titled "Labor Movements, Inequality and Democracy"*
- RCSSCI 365: Excellence, Equity, and the Politics of Education
- SOC 233: Social Problems
- SOC 242: The Experience of Social Class in College and the Community
- SOC 305: Sociological Theory
- SOC 315: Economic Sociology
- SOC 495: Topics in Sociology, *section titled: "Inequality in Education"*
- SOC 503: The Sociology of Race, Ethnicity, and Immigration
- SOC 595 - Topics in Sociology, *sections titled: "Social Stratification" or "Stable and Integrated Housing for America's Working Poor"*

### Residency

At least 9 credits in the minor must be elected in-residence: Courses elected on the Ann Arbor campus or at off-campus sites directed by Ann Arbor faculty. This includes STDABRD, Camp Davis, Biological Station, Michigan-in-Washington.

## Social Theory and Practice Major

The major in Social Theory and Practice supports students in developing the analytical and practical skills necessary for active engagement in the world and for building careers that promote equality and responsible citizenship. Students learn theories, methods, and strategies that enable them to understand and critique social structures and processes and to become effective actors in struggles for justice.

Students wishing to pursue a problem-centered interdisciplinary program in the social sciences must develop a plan for the major in consultation with department advisors. The STP major is an interdepartmental major that requires students to explicitly propose and pursue an individualized course of study that reflects broad social science perspectives. Through a curricular proposal created typically in the fall of the sophomore (or junior) year, STP students articulate a series of social issues and thematic threads which they will pursue through subsequent theoretical and experiential coursework. Consequently the STP major combines the freedom and responsibility of the Individualized Major Program within an institutional umbrella.

*Effective Fall 2015*

### Advising

1813 East Quadrangle

(734) 647-2745

[www.lsa.umich.edu/rc](http://www.lsa.umich.edu/rc)

The Residential College (RC) is a four-year undergraduate liberal arts program with about 900 students and 60 faculty, situated within LSA. All RC advisors are RC faculty members and are available to meet with students to discuss RC and LSA requirements, possible majors, graduation requirements, etc. The RC [Board on Academic Standing](#) considers petitions submitted by RC students relating to requirements, deadlines, and academic circumstances. Appointments with academic advisors can be scheduled by calling the RC Academic Services Office at (734) 647-2745 or by stopping by the offices at 1813 East Quadrangle.

### Prerequisites

RCSSCI 260: Understanding Power, Theorizing Knowledge and RCSSCI 290, a one credit course taken in the same academic term that helps develop a prospectus for the major.

One other “gateway” course, either an RCSSCI 200 level course or another course chosen in consultation with the STP department advisor. The aim of the gateway course is to introduce students to issues and approaches in the social sciences as well as to the ways questions are framed from different disciplinary perspectives.

### Requirements

**Minimum Credits:** 29

Complete the following non-overlapping groupings:

**1. Required Institutional Framework Courses:**

- A. **Core Course:** RCSSCI 301.
- B. **Quantitative Methods:** at least one, typically STATS 250 or 280, SOC 310 or 312, or ECON 251 ( or 404 elected prior to Winter 2015).
- C. **Research Seminar:** RCSSCI 460, in which the student completes a Senior Project or Senior Thesis.

**2. Thematic Courses.** A minimum of six courses (and at least 18 credits) at the upper level (300 and above). Students are directed to consider how to create a cohesive union of theory, practice, and other course work that reflects the unique set of social issues they are attempting to understand. The thematic coursework must be conceptualized and defended by the student, be chosen in consultation with the advisor, and be organized in the following manner:

- A. *Social Theory:* At least 3 additional social theory credits
- B. *Community Engagement:* At least 3 approved “practicum” credits. Acceptable practicum courses require some form of community engagement beyond the classroom, in addition to regular critical reflection on that engagement. Examples include Project Outreach courses, Practicum in Sociology courses, the RC Spanish Language Internship Program, The RC Telling It Program, the RC Semester in Detroit Program, the Prison Creative Arts Project, some sections of RCSSCI 360, RCSSCI 461, and RCIDIV 302.
- C. *Additional electives*

RCSSCI 460 does not count toward this requirement.

## Distribution Policy

No course used to fulfill a major requirement may be used toward the [LSA Distribution Requirement](#). In addition, courses in the RCSSCI subject area may not be used toward the Distribution Requirement.

# Sociology Major

A major in sociology allows for a wide range of possible course elections, enabling students to create a personalized curriculum that matches their intellectual and career interests. The requirements for the major offer students a foundation in fundamental sociological principles, practices, theories, and methodology. Flexible major electives allow students to study the discipline broadly or to focus on a specific area of the discipline that inspires them.

*Effective Fall 2019*

### Exclusions:

*Students may elect a subplan in Sociology and Social Work, Law, Justice, and Social Change, or the Sociology of Health and Medicine, but may only elect one subplan.*

*Students pursuing a major in Sociology with a LJSC subplan may not elect a minor in Crime & Justice.*

*Students who elect a Sociology major with a subplan in Social Work and Social Change may not elect the following programs:*

*Community Action and Social Change Minor (School of Social Work)*

*Social Theory and Practice Major (Residential College)*

## Advising

A department advisor is available to students for one-on-one appointments to discuss the choice of sociology as a major (or minor), assist in course selection, and advise on co-curricular opportunities and career preparation. Students can schedule an advising appointment by calling the department at (734) 764-6324 or using the online appointment scheduler at [www.lsa.umich.edu/soc](http://www.lsa.umich.edu/soc). Students can also email [socadvisor@umich.edu](mailto:socadvisor@umich.edu) with questions.

Students wishing to pursue a minor in Law, Justice, and Social change must develop a specific plan for its completion in consultation with the department advisors. Appointments are scheduled online at: [www.lsa.umich.edu/soc/undergraduate/advisingandprogrampolicies](http://www.lsa.umich.edu/soc/undergraduate/advisingandprogrampolicies).

Students wishing to pursue a subplan in Sociology and Social Work must develop a specific plan for its completion in consultation with the department advisors. Appointments are scheduled online at [www.lsa.umich.edu/soc/undergraduate/advisingandprogrampolicies](http://www.lsa.umich.edu/soc/undergraduate/advisingandprogrampolicies).

In addition, the Social Work staff will be available to advise students interested in the optional preferred admissions process into the accelerated MSW program and related coursework. Students should contact the Office of Student Services at (734) 936-0961 to schedule a phone or in-person appointment.

### Grade Policies

Students must earn at least a C– in the prerequisites for the major and in all courses they plan to include in the plan for the major. Courses elected as pass/fail may not be included in the plan for the major.

### Prerequisites

- Students planning to major in sociology must elect and complete with a C– or better one of the following introductory courses before declaring the major: SOC 100, 102, 195, 300, 302.
- Freshmen and Sophomores electing an introductory course should elect SOC 100, SOC 102, or SOC 195.
- SOC 195 is restricted to first and second-year students who are in the LSA Honors Program and/or have a GPA of 3.2 or higher.
- Juniors and seniors electing an introductory course should elect SOC 300 or SOC 302.
- The prerequisite course cannot be included in the 33 credits required for completion of the plan for the major.

### Requirements

#### **Minimum Credits: 33**

After electing one of the introductory prerequisite courses, majors are required to complete at least 33 credits of SOC coursework at the 200 level or above, including:

1. *Statistics*: SOC 210, STATS 250, or STATS 280 (or their equivalent)
2. *Research Methods*: SOC 310. Must be taken on UM—Ann Arbor campus
3. *Sociological Theory*: SOC 305. Must be taken on UM—Ann Arbor campus

The remaining credits must come from SOC courses at the 200 level and above.

A minimum of fourteen elective credits must be elected at the 300-level or above. Students who wish to focus their elective coursework on a particular area of sociology are encouraged to consult with the department advisor.

### Course Planning

The research methods and statistics courses facilitate the understanding of sociological themes and concepts explored in upper-division courses. Students are strongly encouraged to complete the statistics course in the sophomore year, the research methods course before the end of the junior year, and complete all three of the required courses before the final academic term of the senior year. Students intending to write an honors thesis in sociology must take statistics before

the first term of the junior year and the methods course no later than the second term of the junior year.

**Optional Sub-Majors:**

[Law, Justice, and Social Change](#)

[Sociology of Health and Medicine](#)

[Sociology and Social Work](#)

Constraints

- **Credit Limits and Exclusions.** A combined total of eight INDEPENDENT or EXPERIENTIAL credits may be included in the plan for the major. This includes but is not limited to SOC 225 (and 389), 321, 324, 394, 395, 396, and 488. There is an additional limit on SOC 225 (or 389) credits; only four credits of SOC 225 (or 389) may be included in the plan for the major.
- The department will allow up to two courses with significant sociological content from other LSA departments or transfer institutions to be included in the plan for the major. Students interested in petitioning to include a non-SOC transfer course in their major should complete the petition process which includes submitting a petition form and the course syllabus.

Residency

The department expects that at least 18 of the 33 credits required for a sociology major be completed with Department of Sociology faculty on the UM–Ann Arbor campus. The research methods and sociological theory courses must be taken in residence on the UM–Ann Arbor campus.

Distribution Policy

No course used to fulfill a major requirement may be used toward the [LSA Distribution Requirement](#). In addition, courses in the SOC subject area may not be used toward the Distribution Requirement.

Honors

*Effective Fall 2019*

The Program begins with SOC 497 (3 credits) in the second term of the junior year and continues through the senior year with SOC 498 (3 credits) and 499 (3 credits). During SOC 498 and 499, students work with the supervision of their faculty mentors, while continuing to meet individually with the faculty Honors coordinator. SOC 497 is offered in the Winter Term only. These three courses may be used toward the general electives in the major but may not be used as sub-major electives.

*Honors Application Prerequisites and Course Planning*

Applicants to the [Honors Program in Sociology](#) have at least a 3.5 GPA within their sociology courses and at least a 3.4 cumulative GPA in their LS&A courses. In addition, they already will have demonstrated originality in their own course work, shown a serious interest in scholarly research, and given evidence of their ability to work independently on a thesis. Students should plan on completing SOC 210 or STATS 250 (or 350) prior to enrolling in SOC 497 and should take SOC 310 or 312 prior to or concurrently with it. The Honors Program in Sociology is a three-semester sequence of course and thesis work. Students typically apply as first-semester juniors and begin with the first course, SOC 497, the following semester.

To graduate with Honors, students must meet all requirements for the major; complete SOC 497, 498, and 499; write an acceptable Honors thesis; and maintain a 3.4 overall GPA. Upon completion of this course work and dependent upon the evaluation of the thesis, the academic record and diploma will designate the degree awarded "with Honors," "with High Honors," or "with Highest Honors."

Interested students should call (734) 764-6324 or visit the website to make an appointment with the department's department advisor.

## Sociology and Social Work Submajor

The Sociology and Social Work subplan is intended for students who have an interest in pursuing a career in social work or related helping professions. Much of the content in Sociology—particularly its emphasis on social and economic inequality, processes of social change, and community engagement—serves as an important basis for future studies in social work.

Students in the Sociology and Social Work subplan may enter an accelerated MSW program at the University of Michigan School of Social Work if they take 12 additional Social Work credits during their senior year. Completion of the Sociology and Social Work subplan and these 12 credits with a B average or better will place them into the School of Social Work's existing 45-credit accelerated program instead of the more traditional 60-credit MSW program.

*Effective Fall 2019*

### **Exclusions:**

*Students may elect a subplan in Sociology and Social Work, Law, Justice, and Social Change, or the Sociology of Health and Medicine, but may only elect one subplan.*

*Students pursuing a major in Sociology with a LJSC subplan may not elect a minor in Crime & Justice.*

*Students who elect a Sociology major with a subplan in Social Work and Social Change may not elect the following programs:*

*Community Action and Social Change Minor (School of Social Work)*

*Social Theory and Practice Major (Residential College)*



## Advising

A department advisor is available to students for one-on-one appointments to discuss the choice of sociology as a major (or minor), assist in course selection, and advise on co-curricular opportunities and career preparation. Students can schedule an advising appointment by calling the department at (734) 764-6324 or using the online appointment scheduler at [www.lsa.umich.edu/soc](http://www.lsa.umich.edu/soc). Students can also email [socadvisor@umich.edu](mailto:socadvisor@umich.edu) with questions.

Students wishing to pursue a minor in Law, Justice, and Social change must develop a specific plan for its completion in consultation with the department advisors. Appointments are scheduled online at: [www.lsa.umich.edu/soc/undergraduate/advisingandprogrampolicies](http://www.lsa.umich.edu/soc/undergraduate/advisingandprogrampolicies).

Students wishing to pursue a subplan in Sociology and Social Work must develop a specific plan for its completion in consultation with the department advisors. Appointments are scheduled online at [www.lsa.umich.edu/soc/undergraduate/advisingandprogrampolicies](http://www.lsa.umich.edu/soc/undergraduate/advisingandprogrampolicies).

In addition, the Social Work staff will be available to advise students interested in the optional preferred admissions process into the accelerated MSW program and related coursework. Students should contact the Office of Student Services at (734) 936-0961 to schedule a phone or in-person appointment.

## Grade Policies

Students must earn at least a C– in the prerequisites for the major and in all courses they plan to include in the plan for the major. Courses elected as pass/fail may not be included in the plan for the major.

## Prerequisites

- Students planning to major in sociology must elect and complete with a C- or better one of the following introductory courses before declaring the major: SOC 100, 102, 195, 300, 302.
- Freshmen and Sophomores electing an introductory course should elect SOC 100, SOC 102, or SOC 195.
- SOC 195 is restricted to first and second-year students who are in the LSA Honors Program and/or have a GPA of 3.2 or higher.
- Juniors and seniors electing an introductory course should elect SOC 300 or SOC 302.
- The prerequisite course cannot be included in the 33 credits required for completion of the plan for the major.

## Requirements

### **Minimum Credits: 33**

After electing one of the introductory prerequisite courses, majors are required to complete at least 33 credits of SOC coursework at the 200 level or above, including:

1. *Statistics*: SOC 210, STATS 250, or STATS 280 (or their equivalent)

2. *Research Methods*: SOC 310. Must be taken on UM—Ann Arbor campus
3. *Sociological Theory*: SOC 305. Must be taken on UM—Ann Arbor campus

The remaining credits must come from SOC courses at the 200 level and above.

A minimum of fourteen elective credits must be elected at the 300-level or above. Students who wish to focus their elective coursework on a particular area of sociology are encouraged to consult with the department advisor.

## Course Planning

The research methods and statistics courses facilitate the understanding of sociological themes and concepts explored in upper-division courses. Students are strongly encouraged to complete the statistics course in the sophomore year, the research methods course before the end of the junior year, and complete all three of the required courses before the final academic term of the senior year. Students intending to write an honors thesis in sociology must take statistics before the first term of the junior year and the methods course no later than the second term of the junior year.

### Optional Sub-Majors:

[Law, Justice, and Social Change](#)

[Sociology of Health and Medicine](#)

[Sociology and Social Work](#)

## Constraints

- **Credit Limits and Exclusions.** A combined total of eight INDEPENDENT or EXPERIENTIAL credits may be included in the plan for the major. This includes but is not limited to SOC 225 (and 389), 321, 324, 394, 395, 396, and 488. There is an additional limit on SOC 225 (or 389) credits; only four credits of SOC 225 (or 389) may be included in the plan for the major.
- The department will allow up to two courses with significant sociological content from other LSA departments or transfer institutions to be included in the plan for the major. Students interested in petitioning to include a non-SOC transfer course in their major should complete the petition process which includes submitting a petition form and the course syllabus.

## Residency

The department expects that at least 18 of the 33 credits required for a sociology major be completed with Department of Sociology faculty on the UM—Ann Arbor campus. The research methods and sociological theory courses must be taken in residence on the UM—Ann Arbor campus.

## Honors

*Effective Fall 2019*

The Program begins with SOC 497 (3 credits) in the second term of the junior year and continues through the senior year with SOC 498 (3 credits) and 499 (3 credits). During SOC 498 and 499, students work with the supervision of their faculty mentors, while continuing to meet individually with the faculty Honors coordinator. SOC 497 is offered in the Winter Term only. These three courses may be used toward the general electives in the major but may not be used as sub-major electives.

### *Honors Application Prerequisites and Course Planning*

Applicants to the [Honors Program in Sociology](#) have at least a 3.5 GPA within their sociology courses and at least a 3.4 cumulative GPA in their LS&A courses. In addition, they already will have demonstrated originality in their own course work, shown a serious interest in scholarly research, and given evidence of their ability to work independently on a thesis. Students should plan on completing SOC 210 or STATS 250 (or 350) prior to enrolling in SOC 497 and should take SOC 310 or 312 prior to or concurrently with it. The Honors Program in Sociology is a three-semester sequence of course and thesis work. Students typically apply as first-semester juniors and begin with the first course, SOC 497, the following semester.

To graduate with Honors, students must meet all requirements for the major; complete SOC 497, 498, and 499; write an acceptable Honors thesis; and maintain a 3.4 overall GPA. Upon completion of this course work and dependent upon the evaluation of the thesis, the academic record and diploma will designate the degree awarded "with Honors," "with High Honors," or "with Highest Honors."

Interested students should call (734) 764-6324 or visit the website to make an appointment with the department's department advisor. \

## Sociology of Health and Medicine Submajor

Students have the option of adding a subplan in "Sociology of Health and Medicine" to their Sociology major. Courses in this subplan emphasize the socio-demographic, cultural, political, and ethical contexts that underlie health behavior and health policy. A wide variety of courses will explore the sociology of sexuality, sex, and the body, national and global health inequalities, and specialized topics in such areas as bioethics, the sociology of HIV/AIDS, and the sociology of death & dying.

*Effective Fall 2019*

### **Exclusions:**

*Students may elect a subplan in Sociology and Social Work, Law, Justice, and Social Change, or the Sociology of Health and Medicine, but may only elect one subplan.*

*Students pursuing a major in Sociology with a LJSC subplan may not elect a minor in Crime & Justice.*

*Students who elect a Sociology major with a subplan in Social Work and Social Change may not elect the following programs:*

*Community Action and Social Change Minor (School of Social Work)*

*Social Theory and Practice Major (Residential College)*

### Advising

A department advisor is available to students for one-on-one appointments to discuss the choice of sociology as a major (or minor), assist in course selection, and advise on co-curricular opportunities and career preparation. Students can schedule an advising appointment by calling the department at (734) 764-6324 or using the online appointment scheduler at [www.lsa.umich.edu/soc](http://www.lsa.umich.edu/soc). Students can also email [socadvisor@umich.edu](mailto:socadvisor@umich.edu) with questions.

Students wishing to pursue a minor in Law, Justice, and Social change must develop a specific plan for its completion in consultation with the department advisors. Appointments are scheduled online at: [www.lsa.umich.edu/soc/undergraduate/advisingandprogrampolicies](http://www.lsa.umich.edu/soc/undergraduate/advisingandprogrampolicies).

Students wishing to pursue a subplan in Sociology and Social Work must develop a specific plan for its completion in consultation with the department advisors. Appointments are scheduled online at [www.lsa.umich.edu/soc/undergraduate/advisingandprogrampolicies](http://www.lsa.umich.edu/soc/undergraduate/advisingandprogrampolicies).

In addition, the Social Work staff will be available to advise students interested in the optional preferred admissions process into the accelerated MSW program and related coursework. Students should contact the Office of Student Services at (734) 936-0961 to schedule a phone or in-person appointment.

### Grade Policies

Students must earn at least a C– in the prerequisites for the major and in all courses they plan to include in the plan for the major. Courses elected as pass/fail may not be included in the plan for the major.

### Prerequisites

- Students planning to major in sociology must elect and complete with a C- or better one of the following introductory courses before declaring the major: SOC 100, 102, 195, 300, 302.
- Freshmen and Sophomores electing an introductory course should elect SOC 100, SOC 102, or SOC 195.
- SOC 195 is restricted to first and second-year students who are in the LSA Honors Program and/or have a GPA of 3.2 or higher.
- Juniors and seniors electing an introductory course should elect SOC 300 or SOC 302.
- The prerequisite course cannot be included in the 33 credits required for completion of the plan for the major.

## Requirements

### Minimum Credits: 33

After electing one of the introductory prerequisite courses, majors are required to complete at least 33 credits of SOC coursework at the 200 level or above, including:

1. *Statistics*: SOC 210, STATS 250, or STATS 280 (or their equivalent)
2. *Research Methods*: SOC 310. Must be taken on UM—Ann Arbor campus
3. *Sociological Theory*: SOC 305. Must be taken on UM—Ann Arbor campus

The remaining credits must come from SOC courses at the 200 level and above.

A minimum of fourteen elective credits must be elected at the 300-level or above. Students who wish to focus their elective coursework on a particular area of sociology are encouraged to consult with the department advisor.

### Course Planning

The research methods and statistics courses facilitate the understanding of sociological themes and concepts explored in upper-division courses. Students are strongly encouraged to complete the statistics course in the sophomore year, the research methods course before the end of the junior year, and complete all three of the required courses before the final academic term of the senior year. Students intending to write an honors thesis in sociology must take statistics before the first term of the junior year and the methods course no later than the second term of the junior year.

### Optional Sub-Majors:

[Law, Justice, and Social Change](#)  
[Sociology of Health and Medicine](#)  
[Sociology and Social Work](#)

## Constraints

- **Credit Limits and Exclusions.** A combined total of eight INDEPENDENT or EXPERIENTIAL credits may be included in the plan for the major. This includes but is not limited to SOC 225 (and 389), 321, 324, 394, 395, 396, and 488. There is an additional limit on SOC 225 (or 389) credits; only four credits of SOC 225 (or 389) may be included in the plan for the major.
- The department will allow up to two courses with significant sociological content from other LSA departments or transfer institutions to be included in the plan for the major. Students interested in petitioning to include a non-SOC transfer course in their major should complete the petition process which includes submitting a petition form and the course syllabus.

## Residency

The department expects that at least 18 of the 33 credits required for a sociology major be completed with Department of Sociology faculty on the UM–Ann Arbor campus. The research methods and sociological theory courses must be taken in residence on the UM–Ann Arbor campus.

## Honors

### *Effective Fall 2019*

The Program begins with SOC 497 (3 credits) in the second term of the junior year and continues through the senior year with SOC 498 (3 credits) and 499 (3 credits). During SOC 498 and 499, students work with the supervision of their faculty mentors, while continuing to meet individually with the faculty Honors coordinator. SOC 497 is offered in the Winter Term only. These three courses may be used toward the general electives in the major but may not be used as sub-major electives.

### *Honors Application Prerequisites and Course Planning*

Applicants to the [Honors Program in Sociology](#) have at least a 3.5 GPA within their sociology courses and at least a 3.4 cumulative GPA in their LS&A courses. In addition, they already will have demonstrated originality in their own course work, shown a serious interest in scholarly research, and given evidence of their ability to work independently on a thesis. Students should plan on completing SOC 210 or STATS 250 (or 350) prior to enrolling in SOC 497 and should take SOC 310 or 312 prior to or concurrently with it. The Honors Program in Sociology is a three-semester sequence of course and thesis work. Students typically apply as first-semester juniors and begin with the first course, SOC 497, the following semester.

To graduate with Honors, students must meet all requirements for the major; complete SOC 497, 498, and 499; write an acceptable Honors thesis; and maintain a 3.4 overall GPA. Upon completion of this course work and dependent upon the evaluation of the thesis, the academic record and diploma will designate the degree awarded "with Honors," "with High Honors," or "with Highest Honors."

Interested students should call (734) 764-6324 or visit the website to make an appointment with the department's department advisor.

## Sociology of Health & Medicine (Sub-Major)

### *Effective Winter 2017*

## Requirements

To have a notation of the submajor appear on your transcript, you must successfully complete a minimum of 12 credits from the following list:

- SOC 230, 207, 330, 345, 346, 430, 445, 475, 476, 474, 477
- appropriate topics in SOC 295, 495
- approved undergraduate research in SOC 394
- approved independent studies in SOC 395
- approved internships in SOC 396
- public health setting of SOC 225 (or 389)

A minimum of eight credits must be elected in the subplan at the 300-level or above (not including prerequisite)

### Constraints

A maximum of 6 credits for the subplan may come from Experiential Learning or Independent Study style courses.

### Distribution Policy

No course used to fulfill a major requirement may be used toward the [LSA Distribution Requirement](#). In addition, courses in the SOC subject area may not be used toward the Distribution Requirement.

## Spanish Major

A major in Spanish allows students considerable flexibility in developing a program of study leading to competence in the language and a broad knowledge of Hispanic cultures and literatures. Course offerings are grouped into four clusters from which students will select a program of study based on their interests and career plans:

- **Hispanic Communities:** For students interested in acquiring a broad knowledge of the diverse societies and cultures in the Spanish-speaking world. Included in this cluster are courses on culture, literature, and cinema throughout Spain and Latin America, as well as community service and internship courses.
- **Communication and Thought:** For students who wish to focus on language, linguistics, translation, communication in literature and other media, as well as the relationships between language, religion, society, and politics.
- **Power, Politics, and Cultural Production:** For students interested in political and economic issues in the Spanish-speaking world, as expressed in film, literature, and music, historically and in the present-day.
- **Race and Gender:** For students who wish to explore issues of gender and race among the diverse cultures of the Spanish-speaking world.

In selecting courses for a given area of specialization, students should refer to the RLL website and discuss their interests with a department advisor. No specific courses are required, nor is it necessary to declare an area of specialization.

*Effective Fall 2017*

### Advising

The Department offers majors in French, Italian, Romance Languages & Literatures, and Spanish. It offers minors in French, Italian, Portuguese, and Spanish.

Appointments are scheduled [online](#) or at the department office, 4108 Modern Languages Building, (734) 764-5344.

### Prerequisites

SPANISH 277 (or 275 & 276). The prerequisite will be waived for Residential College students who complete one RCLANG 324 readings course in Spanish. Students who complete a second and/or a third RCLANG 324 course will receive major credit for a Spanish elective at the 300 level. For eligible students, SPANISH 278, Spanish for Heritage Language Learners, can be substituted for SPANISH 277.

### Requirements

**Minimum Credits: 30**

A minimum of 10 courses (30 approved credits), of at least 3 credits each, beyond the prerequisite.

### Required Courses in SPANISH:

- 4-5 courses of at least 3 credits each from SPANISH courses numbered 279 to 399
- 5-6 courses of at least 3 credits each from SPANISH courses at the 400-level

### Electives/Cognates.

- Approved courses in other fields, if taught in Spanish, may also count as electives in Spanish.
- Students may count only one of ITALIAN 410 or PORT 280 toward the Spanish major.
- One approved optional cognate course (3 credits), taught in English in the area of Hispanic studies, is allowed.
- Students are encouraged to develop a balanced program of study that addresses the cultural production of various countries and historical periods.

### Constraints

- SPANISH 308 does not count toward the major.
- No more than one Independent Study and one internship course (6 credits) can be included in the major/minor.
- Each course counted toward the major must be at least 3 credits.



## Residency

A minimum of 5 courses of at least 3 credits each for the major must be taken either in residence or through a study- abroad program affiliated with the University of Michigan.

## Distribution Policy

No course used to fulfill a major requirement may be used toward the [LSA Distribution Requirement](#). In addition, courses in the CATALAN, FRENCH, ITALIAN, PORTUG, ROMLANG, ROMLING, and SPANISH subject areas may not be used toward the Distribution Requirement.

## Honors

Qualified students may be admitted to a program of advanced study during their junior year (or at the beginning of the senior year following foreign study), leading to the degree of Bachelor of Arts with Honors in Spanish. Admission to senior-level Honors work in Spanish is by application only (forms are available on the department website at [www.lsa.umich.edu/rll](http://www.lsa.umich.edu/rll)). A grade point average of at least 3.5 in all courses, and of 3.5 in Spanish major courses, is required for admission and for graduation with Honors in Spanish. The Honors Committee expects applicants to demonstrate superior ability for their level in both oral and written Spanish, and to present evidence of serious interest in research.

Spanish Honors majors are required to complete 33 credits of coursework and successfully defend a thesis:

### Course Requirements:

- 11 courses (33 credits total): all regular Spanish major requirements must be completed (30 credits) with an additional 3-credit Spanish course at the 400-level. 6 of the required 33 credits (and of the required 18 credits at the 400 level) will consist of Spanish 491 and 492, Senior Honors Courses, normally taken in the fall and winter terms, respectively, of a student's senior year.

### Thesis Requirement:

- Composition of a thesis, in Spanish, incorporating the results of individual research, demonstrating a substantial piece of work ; and
- A presentation and discussion of the thesis and of an agreed upon set of related readings with the student's faculty advisor and one other faculty reader.

Working under the direction of a faculty member who serves as thesis director, the student will research the thesis, complete a bibliography and prospectus, and begin drafting the writing process while enrolled in SPANISH 491.

In the following academic term the student will enroll in SPANISH 492 and complete the thesis and its presentation and discussion.

## Teaching Certificate

Students interested in obtaining a secondary teaching certificate should study the general requirements for professional preparation, which appear under the "**Teacher Certification Program**" on this website. Specific subject- area requirements for a teaching certificate can be found on the School of Education website at:

[soe.umich.edu/academics/bachelors\\_degree\\_programs/uste](http://soe.umich.edu/academics/bachelors_degree_programs/uste)

# Spanish Language, Literature, and Culture Minor

If you are majoring in another field, the Spanish Language, Literature, and Culture minor offers you an opportunity to complement the knowledge gained in your principal field, while adding a cultural and linguistic dimension to your academic experience.

When combined with study in another field, knowledge of a Romance language will open doors to a wide variety of career and educational opportunities. Today, learning of other languages, peoples, and cultures is not only useful, it is imperative.

*Effective Fall 2020*

### Exclusions:

*A minor in Spanish Language, Literature, and Culture is not open to students with a major in Spanish or any other minor in Romance Languages and Literatures. The Department offers majors in French, Italian, Romance Languages & Literatures, and Spanish. It offers minors in French, Italian, Portuguese, and Spanish.*

## Advising

Appointments are scheduled [online](#) or at the department office, 4108 Modern Languages Building, (734) 764-5344.

## Prerequisites

SPANISH 277 (or 275 & 276). The prerequisite will be waived for Residential College students who complete one RCLANG 324 readings course in Spanish.

Students who complete a second and/or a third RCLANG 324 course will receive major credit for a Spanish elective at the 300 level.

For eligible students, SPANISH 278, Spanish for Heritage Language Learners, can be substituted for SPANISH 277.

## Requirements

### Minimum Credits: 21

A minimum of 7 courses (21 credits) of at least 3 credits each, beyond the prerequisite, including:

- 4 courses of at least 3 credits each from SPANISH courses numbered 279 to 399
- 3 courses of at least 3 credits each from SPANISH courses at the 400-level

Students should consult a department advisor and develop a balanced program of study that includes the cultural production of various countries and historical periods.

## Constraints

- Specific course selections must include three literature courses.
- Other courses, or "electives in Spanish," may be selected in Hispanic culture, linguistics, and film.
- Each course to be counted toward the minor must be at least 3 credits.
- No more than one Independent Study and one internship course (6 credits) can be included in the major/minor.
- Students may count only one of ITALIAN 410 or PORTUG 280 toward the Spanish minor.
- SPANISH 308 does not count toward the minor.

## Residency

A minimum of 4 courses of at least 3 credits each for the minor must be taken either in residence or through a study- abroad program affiliated with the University of Michigan.

# Statistics Major

The Statistics major prepares students for careers in industry and government as well as for graduate programs in statistics and quantitative fields. It emphasizes critical thinking and problem solving skills in data analysis and empirical research. The major includes a core set of courses in applied statistics, statistical theory, and computational statistics. Elective courses cover specific classes of statistical techniques, or focus on research areas where statistical analysis plays a major role. Statistics majors learn to apply the skills they learn to diverse application areas including medicine, finance, public policy, and information technology. Students can tailor their electives to prepare themselves for appropriate graduate programs.

*Effective Winter 2019*

## Advising

Most statistics courses are elected after taking an introductory course (STATS 250, STATS 280 or STATS 412) and completing an introductory mathematics sequence or after consulting a

department department advisor. Students wishing to pursue a major in Statistics must develop a specific plan for its completion in consultation with a Statistics Department undergraduate department advisor.

### Prerequisites

- MATH 215 and 217 (MATH 214 and MATH 417 may not be substituted for MATH 217)
- EECS 183
- STATS 250, 280, or 412

### Requirements

#### Minimum Credits: 26

1. **Core applied statistics course:** STATS 413
2. **Core theoretical statistics courses:** STATS 425, 426.
3. **Core statistical computing course:** STATS 306.
4. **Additional advanced statistics courses:** At least two of STATS 406, 415, 430, 451, 470, 480, or MATH/STATS 526 (*only if elected WN18 or later*).
5. **Capstone course:** STATS 485
6. **Elective courses in Statistics, Mathematics, or EECS.** These are advisor approved electives. These approved courses include:
  - STATS 404, 408, 449
  - any 500+ level Statistics courses
  - any additional courses from #4 above
  - 400+ level *advisor-approved* MATH courses (except MATH 417 and 419)
  - 300+ level *advisor-approved* EECS course.

Students interested in the application of statistics to various disciplines such as economics, biological sciences, and psychology are also encouraged to take courses in these areas.

### Distribution Policy

No course used to fulfill a major requirement may be used toward the [LSA Distribution Requirement](#). In addition, courses in the STATS subject area may not be used toward the Distribution Requirement.

### Honors

Any student with a current overall grade point average of at least 3.4 may apply for admission to the Honors major program. Such application is made through a Statistics Department undergraduate advisor. Students in the Honors program must complete the regular major program above with the following modifications: MATH 451 and an overall GPA of at least 3.5. In addition, Honors majors must elect the Senior Honors Seminar (STATS 499) and complete a project or a thesis under the direction of a member of the Statistics Department faculty.

# Statistics Minor

The Statistics minor program is designed to equip students with a general introduction to probability and statistics. It allows a broad selection of classes to suit both general and specific interests.

*Effective Winter 2018*

## Exclusions:

*Academic minors in Statistics are not open to students with a Statistics major, a Data Science major or any other minor in Statistics.*

## Advising

Most statistics courses are elected after taking an introductory course (STATS 250, STATS 280 or STATS 412) and completing an introductory mathematics sequence. Student wishing to pursue a minor in Statistics must develop a specific plan for its completion in consultation with a Statistics Department undergraduate advisor. See department website for contact information: [lsa.umich.edu/stats/undergraduate-students/advising](https://lsa.umich.edu/stats/undergraduate-students/advising).

## Prerequisites

- MATH 215.

## Requirements

**Minimum Credits:** 15

1. **Core courses:** (STATS 250 or STATS 280 or STATS 412), and STATS 306 and STATS 425.
2. **Elective statistics courses:** At least two statistics advanced electives approved by a Statistics Department undergraduate department advisor.

## Constraints

- One elective may be a quantitative methods course with advanced statistical content offered by another department, with approval from a Statistics Department undergraduate department advisor.
- The following courses may not be used as electives for the Statistics minor: STATS 400, 404, 489, 499.
- STATS 412 may be used as a core course, but not as an elective.

## Residency

At least four of the five courses used to meet the minor requirements must be taken within the University of Michigan's Statistics Department.

# Structural Biology Sub-Major

The Structural Biology Track is intended to educate students on the applications of Biophysics to fully understand the recent advances in biological and biomedical sciences, and to prepare them for careers that integrate the physical principles that govern biology with the modern methods and techniques that represent the forefront of structurally directed biophysical research. Students who pursue the Structural Biology track will be well equipped for graduate studies in biophysics, biochemistry, chemical biology, biomedical engineering, and also in other disciplines of life sciences. This track also will provide excellent preparation for students intending to pursue professional careers in the Biotechnology industry as well as the Health Sciences.

*Effective Winter 2020*

## Advising

The Program in Biophysics currently offers a **B.S. degree in Biophysics** and a [minor in Biophysics](#). Students interested in either option are strongly encouraged to schedule an advising appointment by contacting Student Services at [biophysics@umich.edu](mailto:biophysics@umich.edu).

## Grade Policies

The Biophysics department strongly recommends that a student earn a grade of at least C– in all BIOPHYS courses and mathematics, chemistry, physics, and biology courses that are prerequisite for subsequent elections. A major program grade point average of at least 2.0 is required; this includes biophysics courses, chemistry, mathematics, physics, and biology prerequisites, and advanced electives that are part of a major plan.

## Prerequisites

See specific prerequisites listed under Biological Physics Track or Structural Biology Track.

## Requirements

**Minimum Credits: 26**

The Biophysics Major consists of two tracks:

- [Biological Physics Track](#)
- [Structural Biology Track](#)

## Honors

In addition to completing all the Biophysics requirements for the major, a GPA in the major of at least 3.4 and the completion of an Honors thesis (BIOPHYS 499) with a grade of B or better, and a second Biophysics elective are required.

Approved Honors electives are all biophysics and cognate electives above, and BIOPHYS 440 or CHEM 440, CHEM 453, MCDB 422, MCDB 428, PHYSICS 402, and PHYSICS 453. Students

double majoring in Biophysics and any major in the Department of Physics cannot use PHYSICS 402, 406, or 453 to satisfy the Biophysics cognate or Honors elective requirement.

### Structural Biology Track (Sub-Major)

*Effective Winter 2020*

#### Prerequisites

- MATH 115 and 116
- CHEM 262
- CHEM 210 / 211, 215;
- PHYSICS 135 / 136 and 235 / 236 (*or* 140/141 and 240/241);
- BIOLOGY 172 *or* 174 *or* 191 *or* 192 *or* 195.

#### Requirements

**Minimum Credits: 26**

#### Core:

1. BIOPHYS / CHEM / PHYSICS 370: Physical and Chemical Principles behind Biology and Medicine
2. BIOPHYS / MCDB 420: Structural Biology I
3. BIOPHYS 421: Structural Biology II
4. BIOPHYS / PHYSICS 450: Biophysics Laboratory
5. BIOPHYS 495: Senior Seminar in Biophysics

#### Outside Core:

- CHEM / BIOLCHEM 351: Fundamentals of Biochemistry *or*
- MCDB 310: Introductory Biochemistry *or*
- BIOLCHEM 415: Introductory Biochemistry

#### Electives:

One of the following:

- BIOPHYS / CHEM / PHYSICS 417: Dynamical Processes
- BIOPHYS / CHEM 422: Exp Methods in Structural Biology
- BIOPHYS / PHYSICS 430: Medical Physics
- BIOPHYS 435: Biophysical Modeling
- BIOPHYS / CHEM 440: Biophysics of Diseases
- BIOPHYS / CMPLXSYS / PHYSICS 445: Introduction to Information Theory for the Natural Sciences (*only if taken FA20 or later*)
- BIOPHYS / CHEM 454: Biophysical Chemistry II
- BIOPHYS / MATH / BIOINF 463: Mathematical Modeling in Biology
- BIOPHYS / CHEM 520: Theory & Methods of Biological Chemistry

- BIOPHYS / CHEM 521: Techniques in Biophysical Chemistry

Note: Other 400-level Physics, Chemistry, or Biology courses may be accepted, per approval of the Undergraduate Chair

### **Cognate:**

One of the following:

- CHEM / BIOLCHEM 451: Biochemistry I
- MCDB 427: Molecular Biology
- MCDB 428: Cell Biology
- BIOLCHEM / CHEMBIO 530: Protein Protein or Protein-Ligand Interactions by NMR
- BIOLCHEM 550: Macromolecular Structure and Function

Note: Other 400-level Physics, Chemistry, or Biology courses may be accepted, per approval of the Undergraduate Chair

### **Research:**

At least two credits of BIOPHYS 399. Students wishing to conduct research in a laboratory outside of the Program must identify a Biophysics co-sponsor.

### **Honors**

In addition to completing all the Biophysics requirements for the major, a GPA in the major of at least 3.4 and the completion of an Honors thesis (BIOPHYS 499) with a grade of B or better, and a second Biophysics elective are required. **Approved Honors electives are all Biophysics and cognate electives above, plus CHEM 453, MCDB 422, PHYSICS 402 and PHYSICS 453.** Other courses may be accepted per approval of the Undergraduate Chair.

## **Sustainability Minor**

Sustainability, although dealing directly and intimately with environmental issues, has as its core goal the development of systems of human behavior to enable both current and future generations to maintain a quality of life that is both productive and pleasing. To achieve such a goal requires an interdisciplinary approach to answer a variety of questions such that human needs and desires can best be met:

- How do groups and individuals compete or cooperate in the distribution of scarce resources? How can open, fair and effective governance structures be better developed and implemented to promote sustainable consumption?
- How can economies be modified to incorporate the value of ecosystem services critical for human well-being? What future business models can be developed that more quickly



identify and respond to human needs while simultaneously minimizing consumption and maximizing wealth generation?

- How do various environments at different length scales (local, regional, continental, and global) respond to anthropogenic alterations due to resource consumption and waste generation? What is the time scale for such alterations to become visible, and perhaps irreversible? How can human societies best adapt to such changes?
- How do natural systems respond to changing anthropogenic inputs? What are the determinants of sustainable yield? What feedback cycles between natural and human systems determine health and welfare of humans and their domesticated biota?
- What is the role of technology and design in meeting sustainability goals, particularly in urban environments where the majority of the human population currently lives? How can goods and services best be provided such that a high standard of living can be achieved while minimizing resource use and waste generation?

The objectives of the sustainability minor are to:

1. educate students from across campus on interdisciplinary approaches of historic and emergent sustainability problems
2. engage students in team projects examining real-world problems both on and off-campus
3. provide students practical experiences/leadership experiences that enable them to integrate their skills to address complex sustainability problems.

As part of the minor activities, the challenges of crafting a suitable definition of sustainability will be highlighted. This will be part of developing understanding of the need for clear and effective communication across disciplines, which will be stressed to ensure effective teamwork is pursued such that the interdisciplinary whole is greater than the sum of individual disciplinary efforts.

*Effective Winter 2012*

**Exclusions:**

*Students can either pursue an Academic Minor in the Environment or the Academic Minor in Sustainability, but not both.*

*A minor in Sustainability is not open to students in the School of Natural Resources and Environment, nor to those pursuing a minor in the Environment.*

*Students who are electing a minor in Sustainability are excluded from earning the Sustainability Scholars Certificate (i.e. Supplemental Studies in Sustainability).*

Advising

Students interested in declaring either a major or a minor must attend an information session. Information sessions are held throughout the Fall and Winter terms. Appointments may be scheduled with Program advisors on-line at: [www.lsa.umich.edu/pite/academics/advising](http://www.lsa.umich.edu/pite/academics/advising)

Students wishing to pursue a minor in the Program in the Environment must develop a specific plan for its completion in consultation with the program's academic advisor.

### Prerequisites

None for the minor *per se*, although individual courses elected to meet the requirements of the minor may have course prerequisites.

### Requirements

#### Minimum Credits: 18

*At least 9 of the 18 credits must be at the 300-level or above.*

1. **Introductory Sustainability Course:** ENVIRON 207: Sustainability and Society.
2. **Practical/Field Experience Course:** Students pursuing the Academic Minor in Sustainability are required to spend time off-campus participating in a pre-approved Internship or Field Experience/Study Abroad Course. This provides students with an opportunity to have greater exposure to sustainability issue(s) and develop greater skills in identifying and helping to resolve current and emerging sustainability issue(s).

The following courses have been pre-approved, but students may petition other courses to meet this requirement prior to enrollment, with approval granted by PitE if the course is deemed to have suitably focused on sustainability issues. *Any petitions must be received and approved before enrolling in these courses.* Courses with emphasis on basic aspects of environmental, social, and natural sciences and humanities are not acceptable to meet this requirement.

- EARTH 344 / ENVIRON 344: Sustainable and Fossil Energy: Options and Consequences
  - ENVIRON 302: Topics in Environmental Social Science, *section titled "Sustainable Neighborhoods: Experiential Learning and Active Engagement in Detroit"*
  - ENVIRON 398: Environment Internship Program
  - ENVIRON 344 / EARTH 344: Sustainable and Fossil Energy: Options and Consequences
  - STDABRD 303: UM at Institute for Central American Development Studies, San Jose, Costa Rica
  - STDABRD 308: UM at EcoQuest New Zealand
  - STDABRD 358 UM/CIC Political Science Internships in British Government and Politics, London, England
  - STDABRD 452: UM at St. Peter's College, Oxford, England
  - STDABRD 471: UM at Middle East Technical University, Ankara, Turkey
3. **Capstone Course /Design Experience.** At least one upper-division course addressing major sustainability issues in settings with small sections emphasizing discussion and drawing on interdisciplinary experiences of students.
    - CEE 307 / ENVIRON 407: Sustainable Cities
    - ENVIRON 302: Topics in Environmental Social Science, *section titled "Sustainable Neighborhoods: Experiential Learning and Active Engagement in Detroit"*
    - ENVIRON 391 / RCIDIV 391: Sustainable Campus
    - ENVIRON 401: Modeling Human-Natural Systems
    - ENVIRON 404: Cars, Energy, and Chemistry

- ENVIRON 407 / CEE 307: Sustainable Cities
- RCIDIV 391 / ENVIRON 391: Sustainable Campus
- 4. **Distribution Requirement:** Students must take courses from a pre-approved in at least three of five areas (see below). Courses with emphasis on basic aspects of environmental social and natural sciences and humanities are not acceptable to meet these requirements.

*Distribution Courses:*

**A. Society, Culture, Justice and Citizenship**

- AMCULT 496: Social Science Approaches to American Culture, *section titled "American Values and Sustainability"*
- ANTHRCUL 256 / ENVIRON 256: Culture, Adaptation and Environment
- ANTHRCUL 439: Economic Anthropology and Development
- EDCURINS 382 / ENVIRON 382: Intro to Environmental Education and Sustainable Development
- ENGLISH 320: Literature and the Environment, or ENVIRON 377: Literature and the Environment
- ENVIRON 211: Social Sciences and Environmental Problems
- ENVIRON 222: Introduction to Environmental Justice
- ENVIRON 256 / ANTHRCUL 256: Culture, Adaptation and Environment
- ENVIRON 304: Topics in Culture and Environment
- ENVIRON 320: Environmental Journalism: Reporting about Science, Policy and Public Health
- ENVIRON 360 / PSYCH 384: Behavior and Environment
- ENVIRON 361 / PSYCH 385: The Psychology of Environmental Stewardship, or NRE 561: The Psychology of Environmental Stewardship
- ENVIRON 376: Environmental Ethics
- ENVIRON 377: Literature and the Environment, or ENGLISH 320: Literature and the Environment
- ENVIRON 382 / EDCURINS 382: Intro to Environmental Education and Sustainable Development
- NRE 501: Grad Experimental, *section titled "Justice Issues in Conservation and Sustainability"*
- NRE 561: The Psychology of Environmental Stewardship, or
- ENVIRON 361 / PSYCH 385: The Psychology of Environmental Stewardship
- PHIL 240: Environmental Ethics
- PHIL 355: Contemporary Moral Problems
- PSYCH 384 / ENVIRON 360: Behavior and Environment
- PSYCH 385 / ENVIRON 361: The Psychology of Environmental Stewardship, or NRE 561: The Psychology of Environmental Stewardship
- SOC 415: Culture and Consumption

**B. Business and Economics**

- BIT 445 / STRATEGY 445: Base of the Pyramid: Business Innovation for Solving Society's Problems
- EARTH 380 / ENVIRON 380: Mineral Resources, Economics, and the Environment
- ENGR 390: Special Topics, *section titled "Social Entrepreneurship"*
- ENGR 521: Clean Tech Entrepreneurship
- ENVIRON 380 / EARTH 380: Mineral Resources, Economics, and the Environment

- SOC 315: Economic Sociology
- STRATEGY 310: World Economy
- STRATEGY 411: The Corporation in Society
- STRATEGY 445 / BIT 445: Base of the Pyramid: Business Innovation for Solving Society's Problems

### **C. Public Policy, Urban Planning, and Law**

- AAS 426: Urban Redevelopment and Social Justice
- AOSS 480 / NRE 480: Climate Change: The Move to Action
- ARCH 423 / ENVIRON 370 / UP 423: Introduction to Urban and Environmental Planning
- CMPLXSYS 391 / POLSCI 391: Applied Complex Systems: Emergent Challenges
- EEB 318 / ENVIRON 318 / RCIDIV 318: Food, Land and Society
- EHS 588 / ENVIRON 475 / NRE 475: Environmental Law
- ENVIRON 270: Our Common Future - The Ecology, Economics and Ethics of Sustainable Development
- ENVIRON 306: Global Water
- ENVIRON 312 / POLSCI 380: Environmental Politics and Policy
- ENVIRON 318 / EEB 318 / RCIDIV 318: Food, Land, and Society
- ENVIRON 350: The Built Environment: Introduction to Landscape Change
- ENVIRON 365: International Environmental Policy
- ENVIRON 370 / ARCH 423 / UP 423: Introduction to Urban and Environmental Planning
- ENVIRON 405: Urban Sprawl: Policy and Politics
- ENVIRON 412: Environmental Values in Public Policy
- ENVIRON 449 / NRE 449: Organizational Theory and Change
- ENVIRON 475 / EHS 588 / NRE 475: Environmental Law
- NRE 449 / ENVIRON 449: Organizational Theory and Change
- NRE 475 / ENVIRON 475 / EHS 588: Environmental Law
- NRE 480 / AOSS 480: Climate Change: The Move to Action
- NRE 501: Grad Experimental, *section titled "Urban Agriculture"*
- PHYSICS 481 / PUBPOL 481: Science, Technology, and Public Policy
- POLSCI 380 / ENVIRON 312: Environmental Politics and Policy
- POLSCI 391 / CMPLXSYS 391: Applied Complex Systems: Emergent Challenges
- PUBPOL 201: Systematic Thinking About Problems of the Day
- PUBPOL 481 / PHYSICS 481: Science, Technology, and Public Policy
- RCIDIV 302: Advanced Issues in Science, Technology, Medicine, and Society, *section titled "Environmental Literature/Social Justice"*
- RCIDIV 318 / ENVIRON 318 / EEB 318: Food, Land, and Society
- UP 423 / ARCH 423 / ENVIRON 370: Introduction to Urban and Environmental Planning
- UP 425: Urban Systems

### **D. Natural Sciences & Public Health**

- AAS 409 / ANTHRCUL 408: Maternal/Child Health and Environmental Pollution in Africa
- ANTHRCUL 408 / AAS 409: Maternal/Child Health and Environmental Pollution in Africa
- EARTH 380 / ENVIRON 380: Mineral Resources, Economics, and the Environment
- EHS 500: Principles of Environmental Health Science
- ENVIRON 310: Toxicology: The Study of Environmental Chemicals and Disease
- ENVIRON 317: Conservation of Biological Diversity
- ENVIRON 380 / EARTH 380: Mineral Resources, Economics, and the Environment
- HMP 200 / PUBHLTH 200 / PUBPOL 210: Health and Society: Introduction to Public Health

- PUBHLTH 200 / HMP 200 / PUBPOL 210: Health and Society: Introduction to Public Health
- PUBPOL 210 / PUBHLTH 200 / HMP 200: Health and Society: Introduction to Public Health

**E. Technology, Engineering, and Design**

- ARCH 357 / UP 357: Architecture, Sustainability, and the City: Ideas, Forces, and People
- ARTDES 250: Art-Design Perspectives III: Technology and the Environment
- AUTO 533 / MECHENG 433: Advanced Energy Solutions
- CEE 265: Sustainable Engineering Principles
- CEE 567 / ESENG 567: Energy Infrastructure Systems
- CMPLXSYS 250 / PUBPOL 250: Social Systems, Energy, and Public Policy
- ESENG 567 / CEE 567: Energy Infrastructure Systems
- ENVIRON 309: GIS Explorations of the Past, Present, and Future
- ENVIRON 367: Global Enterprise and Sustainable Development
- MECHENG 433 / AUTO 533: Advanced Energy Solutions
- NRE 574 / PUBPOL 519 / RCNSCI 419: Sustainable Energy Systems
- PUBPOL 250 / CMPLXSYS 250: Social Systems, Energy, and Public Policy
- PUBPOL 519 / NRE 574 / RCNSCI 419: Sustainable Energy Systems
- RCNSCI 419 / NRE 574 / PUBPOL 519: Sustainable Energy Systems
- UP 357 / ARCH 357: Architecture, Sustainability and the City: Ideas, Forces, and People

## **Sustainability Scholars Program (Supplemental Study Program)**

The USSP accepts up to 30 high-performing sophomores each year to pursue an 11-credit course sequence and related co-curricular activities during their junior and senior years. The program uses a cohort model emphasizing leadership development and skill building for professional development and organizational change across traditional disciplinary boundaries. It provides a dimension in sustainability that can be added to majors and minors in any School or College. The USSP teaches leadership and social change skills to a small, high-performing group of students, providing professional development and mentorship opportunities to help launch their careers. The USSP's strong cohort model is designed to create engagement across majors and programs and develop a base of social support and a strong network for aspiring sustainability leaders.

The USSP is designed to prepare future leaders to help solve the "wicked" problems that comprise the grand challenge of sustainability. The major environmental and interrelated social sustainability challenges facing society are so complex that solutions will not result from traditional disciplinary approaches. The underlying premise is that solutions to global unsustainability require a new generation of leaders who embrace complexity, interconnectedness, uncertainty, and change. To develop these skills, the program features leadership training combined with organizational change theory and practice. The strong cohort model focuses on interdisciplinary thinking and action for sustainability. Scholars are challenged and encouraged to see issues from multiple perspectives through exploring natural, social, economic, political, and technological aspects of complex sustainability issues. Students apply the knowledge they gain to real-life sustainability challenges, harnessing advanced critical

thinking and problem solving skills. In an interconnected world of rapidly increasing population, resource scarcity and massive information flows, addressing sustainability will require extraordinary new leadership that responds to the imperatives of declining natural and social capital with a rethinking of people and organizations. This rethinking will be based in systems, values, adaptation, resilience, collaboration and complexity. The USSP is designed specifically to provide training in this critical area.

Students must have a minimum G.P.A. of 3.3 at the time of application. To apply, students submit a personal statement (500 words or less), two references (at least one from a U-M instructor), a resume/c.v., and a transcript. An ad hoc committee formed with the advice of the Graham Institute Executive Committee reviews applicants based on their academic qualifications, previous experience related to sustainability, strength of their personal statement, and reference letters. Desire for diversity and interdisciplinary balance within the cohort is a significant consideration. The USSP accepts up to 30 students per year for the two year program.

### Eligibility

Undergraduate sophomores in all U-M academic units on the Ann Arbor campus are eligible to apply. Students must:

- Have a minimum cumulative grade point average (GPA) of at least 3.0, including Fall semester grades.
- Be either in their second year, having completed three (3) full semesters at U-M by January. (Transfer or non-traditional/junior student applicants must be on track to graduate no earlier than December of their senior year.)
- Reside on the Ann Arbor campus and be in good standing during the full two-years of the Program, with the exception of their field-based experience.
- Students must successfully complete all program elements (including passing grades in all courses) to be eligible to receive funding for field-based experiences, and a certificate acknowledging completion of the Program.

### Program Requirements

All Scholars participate in a variety of cohort and skill-building activities and complete sustainability-related courses including a field-based course and a project-based experiential course (e.g., 391 Sustainability & the Campus) designed to enhance academic efforts.

**Requirements for Scholars:** Fall Retreat, Monthly Co-curricular Seminar Series, Senior Interdisciplinary Team Project, and the courses described below.

- **The Fall Retreat is a critical program requirement:** Engage in discussions about sustainability, outdoor activities, and team-building.
- **Monthly Seminar Series:** Thursdays from 4:00-5:30 p.m. (Graham North Seminar Room). These seminars will continue monthly through the winter semester, with the schedule to be determined. As participants move into the second year of the program, the focus will be on

interdisciplinary team-based projects and engaging clients external to the university for both fall and winter terms.

- **Interdisciplinary Team Project** (Senior Year): Teams of 5 Scholars will work on a sustainability project with a partner external to the university.
- **Participation:** Full student attendance at required events is critical to program success. Toward this end, the Graham Institute sets and communicates program activity dates in advance to allow adequate time to schedule other activities and courses. The Graham Institute has reduced the number of requirements overall and is allowing for much greater flexibility in scheduling to reduce student conflicts with program engagement. Please be advised that students who choose not to participate consistently in required events run the risk of losing support for the field-based course experience and may not be able to continue with the program.

*Note:* Fall 2019 is the final UC 427, Leadership Development for Sustainability seminar, and will not be offered/required in future years.

### **Courses:**

- ENVIRON/RCIDIV 391 Sustainability and the Campus, offered winter semester only (four-credits). May be taken in Junior or Senior year. See [Sustainability and the Campus](#).
- Field-based Sustainability Course or an approved alternative, which may include an appropriate course within or outside of U-M, or an independent study experience (three-credits). Program leaders strongly suggest that Juniors complete their field-based course the spring-summer of their Junior year. Support for this course is available for current students, not alumni.

**Note:** Alternatives to pre-approved courses require approval from the Program Manager.

### [Financial Support for Field-based Course Experience](#)

Participating students can petition to access up to \$3,500 for direct expenses related to field-based sustainability courses in the U.S. or abroad. Support includes assistance with course fees, and related direct travel expenses (e.g., food, lodging, airfare, ground transportation, lab fees).

- Indirect expenses (e.g., gear/equipment/supplies and anything involving individual preferences not directly attributable to the course/experience) are ineligible for funding.
- If all Scholars Program requirements are not completed, students must return funds disbursed for field-based courses to the Graham Institute.

### **Request Funds:**

- To request funds and receive course approval, complete the [Graham Scholars Funding Request Form](#)
- Please include details for a field-based course, including the title of the course, number of credits (must be a minimum of 3), and a link to additional course details, name of the instructor, course location, and timeframe for travel.

## Field-course Requirements & Options

- The course or experience must generate three (3) credits that appear on your transcript at U-M (independent study and internship credits can count); provide an opportunity to investigate natural, social, economic, political, and technological aspects of a sustainability problem in a site-specific context; and engender an in-depth analysis of potential approaches to the resolution of the sustainability problem.
- A syllabus or the equivalent information that provides the full details about the proposed course or experience.
- Official approval (if required and appropriate) for entry into the course or experience, signed by the faculty member or appropriate authority.
- If studying abroad, additional requirements include your agreement to purchase UM travel abroad health insurance and register with the U-M Travel Registry (<http://global.umich.edu/going-abroad/planning/registry/>). This is a requirement of field-based travel and we cannot approve your course or funding if you have not first registered your travel with U-M.

## Seeking Approval

- Complete and submit the [Graham Scholars Funding Request Form](#), including course details, a budget with details, the location, and dates of travel (see Financial Support above).
- If you are interested in a field-course option not previously approved, including proposing an independent study, you must seek approval from the Graham Institute and discuss this with your academic advisor.
- The Graham Institute Education Program Manager approves field-based course requests that are aligned to the sustainability program goals. However, schools and colleges approve the credit for the course.

**After Completing Your Field-based Course:** Complete the [Graham Undergraduate Scholars - Field-based Experience Form](#) within 30 days of finishing your field-based course.

## Seniors

Review of transcripts for graduation releases will be completed throughout the year. To ensure you have met all the program requirements, please submit the [Graham Scholars Requirements Submission Form](#) at least three (3) months prior to your graduation date.

## Supplemental Studies Program

**Note:** The undergraduate supplemental studies program will be discontinued after the graduation of the Senior cohort in April 2020. All Scholars will continue to receive a certificate signed by the Graham Institute Program Director confirming they have completed the program. Scholars are encouraged to add a notation about this achievement on their resumes (noting transferrable skills such as team-based project experience, and interdisciplinary interaction), on social media platforms, and discuss their experiences and skills development into talking points during interviews.



*For Current LS&A Seniors:*

- LS&A students who complete a Sustainability Minor through the Program in the Environment may NOT have both the Sustainability Minor and the Sustainability Scholars Program listed on their transcripts.
- Per LS&A policy, students who want the program designation to appear on their transcripts may not share any courses used toward the program with any other LS&A major or minor.
- Per LS&A policy, students receiving approval for substitutions or exceptions to program requirements cannot receive transcript notation for completion.
- Students who complete all requirements will be considered Scholars Program alumni in good standing by the Graham Institute.

## Theatre Design and Production Minor

Creating theatre is about people working together. In all of our endeavors, we continually strive toward the highest standards of excellence. Work in the Theatre Department requires enormous energy and dedication. Programs are structured to help each student realize his or her unique potential. Development of skills is systematic and disciplined, and opportunities to explore individual creativity are enormous. The Design & Production faculty are working professionals with extensive theater credits. It is the expectation of the faculty that all students should excel in their course work.

D&P core courses cover all facets of design and production, including aesthetics, theory, history, literature, graphics, technology and crafts. **NOTE: Permission of Instructor is necessary for all courses.** In addition to classroom study, you'll work on shop and crew assignments to hone your skills.

The School of Music, Theatre, & Dance produces 10 main stage productions each year. These productions are realized by the staff of University Productions, which is organized on the model of a professional theatre company. By working on productions, students gain valuable experience which serves as a foundation for a resume and portfolio. Through work in the shops, students benefit from “in the field” experience with our professional staff, who teach within this shop setting, as well as in the classroom.

All university productions are built by the staff and students in our shops. Through a series of structured practicum assignments, our students are intimately involved in all levels of this production work. Practicum assignments are made individually for each student by the D&P faculty and staff. Selection of assignments is based on consideration of the student's skills and abilities, interests and needs, and class performance, as well as on the needs of each production and workshop. We strongly encourage that students register for only one practicum per semester. The number of credit hours per practicum varies, based on practicum level. The student should expect to work between 45-60 hours per credit hour, although a practicum course is generally assigned on a per-project basis. For shop assignments, the hours are generally concentrated into a 4- to 6-week build schedule. For design assignments, the time commitment is similarly concentrated.

Applying and Advising: Students interested in the Theatre Design and Production minor should contact [Professor Christianne Myers](#). Students enrolled in the Theatre Department's current degree programs (Performance, Directing, and the BTA) are not eligible for this minor, nor are the students majoring in the BFA in Interarts Performance degree program.

Requirements: **Students will choose one of the five Design and Production tracks listed below, and confine their studies to that area.** Students interested in this program must take two classes listed in their area of interest to become eligible for this program. At that point, the student would interview with the Design and Production faculty. Students must secure written approval from their home school/college to pursue a Design and Production minor and must develop a plan for the minor in consultation with an advisor in the Design and Production program.

#### Scenic Design

THEATRE 260: Scene Design I (3 credits)  
THEATRE 360: Scene Design II (3 credits)  
THEATRE 462: Drafting (3 credits)  
THEATRE 463: Intro to CAD (3 credits)  
THEATRE 464: Scene Painting (3 credits)

#### **Minimum three additional credits elected from the following Practicum courses:**

THEATRE 251: Practicum I (1 credit)  
THEATRE 252: Practicum II (1 credit)  
THEATRE 261: Practicum III (1 credit)  
THEATRE 262: Practicum IV (1 credit)

#### Costume Design

THEATRE 263: Rendering (3 credits)  
THEATRE 277 or 478: History of Dress or History of 20th Century Dress (3 credits)  
THEATRE 270: Costume Design I (3 credits)  
THEATRE 370: Costume Design II (3 credits)

#### **Minimum six additional credits to be chosen from the following:**

THEATRE 470: Costume Design III (3 credits)  
THEATRE 476: Costume Crafts (3 credits)  
THEATRE 452: Costume Construction (3 credits)  
THEATRE 471: Women's Pattern Drafting (3 credits)  
THEATRE 571: Men's Pattern Drafting (3 credits)  
THEATRE 162: Introduction to Stage Make-up (1 credit)  
THEATRE 251, 252: Production Practicum (1 credit)

### Lighting Design

THEATRE 245: Introduction to Stage Management (3 credits)  
THEATRE 256: Introduction to Stage Lighting (3 credits)  
THEATRE 356: Lighting Design II (3 credits)  
THEATRE 456: Lighting Design III (3 credits)

#### **Minimum five additional credits elected from the following Practicum courses:**

THEATRE 251: Practicum I (1 credit)  
THEATRE 252: Practicum II (1 credit)  
THEATRE 261: Practicum III (1 credit)  
THEATRE 262: Practicum IV (1 credit)  
THEATRE 351: Practicum V (1-3 credits)  
THEATRE 352: Practicum VI (1-3 credits)  
THEATRE 451: Practicum VII (2-3 credits)  
THEATRE 452: Practicum VIII (2-3 credits)

### Stage Management

THEATRE 245: Introduction to Stage Management (3 credits)  
THEATRE 250: Introduction to Technical Theatre Practices (3 credits)  
THEATRE 321 or 322: History of Theatre I or History of Theatre II (3 credits)  
THEATRE 351: Practicum V; 1st ASM (3 credits)

#### **Minimum six additional credits to be chosen from the following:**

THEATRE 101: Introduction to Acting (3 credits)  
THEATRE 240: Introduction to Design (3 credits)  
THEATRE 345: Stage Managing Plays (3 credits)  
THEATRE 385: Performing Arts Management (3 credits)  
THEATRE 435: Producing in American Theatre (3 credits)  
THEATRE 446: Advanced Stage Management (3 credits)  
THEATRE 462: Drafting (3 credits)

### Production

THEATRE 245: Introduction to Stage Management (3 credits)  
THEATRE 250: Introduction to Technical Theatre Practices (3 credits)  
THEATRE 251: Practicum I (1 credit)  
THEATRE 252: Practicum II (1 credit)  
THEATRE 261: Practicum III (1 credit)

#### **Minimum nine additional credits to be chosen from the following:**

THEATRE 256: Introduction to Stage Lighting (3 credits)  
THEATRE 262: Practicum IV (1 credit)  
THEATRE 350: Scenic Construction (3 credits)  
THEATRE 445: Stage Management for Operas and Musicals (2-6 credits)

THEATRE 450: Scenic Construction II (3 credits)  
THEATRE 452: Costume Construction (3 credits)  
THEATRE 462: Drafting (3 credits)  
THEATRE 463: Intro to CAD (3 credits)  
THEATRE 464: Scene Painting (3 credits)  
THEATRE 471: Women's Pattern Drafting (3 credits)  
THEATRE 476: Costume Crafts (3 credits)

## Translation Studies Minor

The Minor in Translation Studies gives students an opportunity to learn about diverse histories, theories, and practices of translation, through a flexible sequence of courses selected from different departments, including at least one translation course in the Department of Comparative Literature.

The minor is intended for students who would like to build on LSA's language requirement to explore translation between languages; it is also designed with flexibility for students who would like to explore the concept of translation more broadly as an interaction between cultures, media, discourses, and disciplines. The minor can therefore be integrated into diverse programs of study.

The goals of the minor are:

1. to make translation more visible to students in their courses, their communities, and in the world at large;
2. to promote critical and creative reflection on translation, and encourage students to pursue various translation activities;
3. to introduce students to a wide range of academic, creative, and career opportunities related to translation.

While the Minor in Translation Studies is not intended to certify students as professional translators or interpreters, the minor may prepare students to pursue certification or other professional credentials in translation after graduation.

*Effective Winter 2014*

### Advising

The Chair of the Department of Comparative Literature will designate a faculty member to serve as Translation Studies advisor.

During their first meeting, the student and the Translation Studies advisor will devise a plan to satisfy the requirements. Any changes to the plan must be approved by the Translation Studies

Adviser, who will provide ongoing advising regarding course selection and planning for the capstone project.

The role of the advisor will be:

1. to provide information for students who are interested in applying for the minor
2. to meet at least once a term with students who are accepted to the minor to discuss progress on their approved course plan
3. to review changes and petitions for approval in individual course plans
4. to help coordinate plans for capstone translation projects.

### Grade Policies

No course will count towards the academic minor in translation studies unless the student receives a grade of C- or better.

### Prerequisites

None.

### Requirements

#### Minimum Credits: 15

During their first meeting, the student and the Translation Studies advisor will devise a plan to satisfy the requirements. Any changes to the plan must be approved by the Translation Studies advisor, who will provide ongoing advising regarding course selection and planning for the capstone project.

The Minor in Translation Studies requires

A minimum of 15 credits of courses, at least two courses in Comparative Literature, and a minimum of 12 credits in upper-level courses.

- **3 credits:** either *COMPLIT 200: Translation Across Disciplines* or *COMPLIT 322: Translating World Literatures*.
- **3 credits:** An upper-level course (taught at the University of Michigan or taken for credit during Study Abroad) that develops skills in a language that the student will use for the capstone translation project. As a rule, an approved course plan for the Minor in Translation Studies will include at least one upper-level course in a second language. However, students interested in translating across different media, technologies, or disciplines may petition for exception to the language rule, by proposing an upper-level course that develops other skills relevant to the capstone translation project.
- **6 credits:** two upper-level courses with a central component on translation (taught in any department at the University of Michigan, or taken for credit during Study Abroad). Students may select courses from a pre-approved list, or propose courses for approval (with an explanation of the translation component and its relevance to their course plan for the Minor).

- **3 credits:** A capstone translation project, completed either while taking *COMPLIT 495: Senior Seminar* (offered every fall) or as a 3-credit Independent Study (in exceptional cases, with prior approval).

## Ukrainian Language, Literature, and Culture Minor

An academic minor in Ukrainian Language, Literature, and Culture would provide to students already engaged with the language an opportunity to expand their knowledge and understanding of Ukrainian culture in the broader context of European society as a whole.

The academic minor in Ukrainian is a vibrant and multi-faceted program that integrates Ukrainian studies into broader intellectual and policy agendas, while promoting research and scholarly work on contemporary Ukraine in the United States. Its curriculum will educate students on the history, language, literature, and politics of Ukraine. In addition, study of Ukraine brings an important comparative perspective to international and interdisciplinary studies at the University of Michigan, as the Ukraine has historically been viewed as a meeting place of several major cultures: East Slavic, Jewish, Austro-Hungarian, and others.

This program could be of particular interest to undergraduate students in concentrations like Judaic Studies, History, the Program in the Environment, Political Science, and Sociology.

Ukraine's highly educated population (seventh in Europe), natural wealth, size (second largest state in Europe), and location in the borderland between Europe and Asia and in between Poland and Russia, make it an important country both regionally and globally. With Ukraine's recent independence, it is an important time to introduce a broader audience the rich legacy of Ukrainian literature, history and culture. Ukraine now occupies a vital but often ambiguous strategic position as an independent country important to the security and stability of all of Europe. Ukraine's changing boundaries over the centuries gives us a completely different view of the culture of the post-Soviet years, and now in the expansion of the EU.

The latest achievements of inner freedom and the recognition of a diversity of cultures in Ukraine have become the main means for fostering research and academic contacts between Ukraine and the U.S. Ukraine is engaged in the global processes of state building, creation of a market economy, and social changes. Ukraine's democratic "Orange Revolution" has led to closer cooperation and more open dialogue between Ukraine and the United States.

The EU is seeking an increasingly close relationship with Ukraine, going beyond co-operation, to gradual economic integration and a deepening of political co-operation. NATO and the Ukraine actively cooperate in international peace-support operations and have developed practical cooperation in a wide range of other areas. In May 2008 Ukraine became a member of the World Trade Organization and has since engaged in negotiations for the establishment of a deep and comprehensive Free Trade Area.

*Effective Fall 2012*

**Exclusions:**

*Academic minors in Slavic Languages and Literatures are not open to those electing a concentration or any other academic minor in the department of Slavic Languages and Literatures, nor to those who are electing a concentration in Russian, East European, and Eurasian Studies.*

*Students could concurrently pursue this academic minor with one in REES with the following restrictions:*

- (1). REES academic minors may not count any course for which Slavic is the home unit.*
- (2). Slavic academic minors may not count REES 397 or any course for which REES is the home unit, which includes SLAVIC 395 and 396.*

Advising

Students wishing to pursue an academic minor in the Department of Slavic Languages and Literatures must develop a specific plan for its completion in consultation with Svitlana Rogovyk (Language Coordinator)

Appointments are scheduled online at [www.lsa.umich.edu/slavic/undergraduate/advising](http://www.lsa.umich.edu/slavic/undergraduate/advising)

Prerequisites

UKR 251: Second-Year Ukrainian (with a grade of "C" or better) or equivalent as determined by the Departmental placement examination.

Requirements

**Minimum Credits: 16**

1. UKR 252: Second-Year Ukrainian
2. 12 credits in courses selected from the following two categories, with at least 6 credits from Category A.
  - A. **Category A:** Ukrainian Language, Literature, and Culture
    - UKR 351: 3rd Year Ukrainian I
    - UKR 352: 3rd Year Ukrainian II
    - UKR 421: Directed Readings in Ukrainian Literature
    - SLAVIC 490: Issues in the Cultures of Eastern Europe, *section titled: "Introduction to Ukrainian Culture"*
    - UKR 320: Introduction to Ukrainian Poetry
  - B. **Category B:** Eastern European Slavic Culture (*No more than 6 credits from this category*)

- HISTORY 432: Medieval and Early Modern Russia
- RUSSIAN 435: Cultural History of Russian Jews
- SLAVIC 240: Slavic Folklore
- SLAVIC 270 / JUDAIC 271: Contact and Conflict: Jewish Experience in Eastern Europe
- SLAVIC 313: Russian and Ukrainian Cinema
- HISTORY 332 / POLSCI 395 / REEES 395 / SLAVIC 395 / SOC 392: Russia and the Soviet Union *section titled "Survey of Russia"*
- SLAVIC 490: Issues in the Cultures of Eastern Europe, *section titled: "Rock Kills Communism" or "Revolution in the Attic"*

**(Up to 3 Credits) Study Abroad, Summer Internships in Ukraine and/or Field Work in Ukrainian Communities of Metro Detroit.**

The Department offers help in negotiating summer internships with companies in Ukraine or within local Ukrainian communities.

## Urban Studies Minor

Urban Studies is an interdisciplinary minor that allows students to explore varied and multiple dimensions of urban life through differing theoretical approaches. A central goal of the Urban Studies minor is to facilitate students' active engagement with urban environments while fostering integration of practical experience with classroom instruction. In addition to coursework in the social sciences and humanities, the minor combines theoretical and analytical concepts from African American Studies, social work, urban planning, and other fields to help students understand the challenges of urban life and to expand their capacity for civic engagement and work in urban settings.

*Effective Winter 2019*

Advising

1813 East Quadrangle

(734) 647-2745

[www.lsa.umich.edu/rc](http://www.lsa.umich.edu/rc)

The Residential College (RC) is a four-year undergraduate liberal arts program with about 900 students and 60 faculty, situated within LSA. All RC advisors are RC faculty members and are available to meet with students to discuss RC and LSA requirements, possible majors, graduation requirements, etc. The RC [Board on Academic Standing](#) considers petitions submitted by RC students relating to requirements, deadlines, and academic circumstances. Appointments with



academic advisors can be scheduled by calling the RC Academic Services Office at (734) 647-2745 or by stopping by the offices at 1813 East Quadrangle.

### **RC academic minors are open to all LSA students**

Students wishing to pursue an academic minor must develop a specific plan for its completion in consultation with the program's designated advisor.

#### Prerequisites

None for the minor *per se*, although individual courses elected to meet the requirements of the minor may have course prerequisites.

#### Requirements

##### **Minimum Credits: 15**

A minimum of 5 courses (at least 15 credits), to be elected from categories as stated:

1. **Core Course:** One of the following:
  - RCSSCI 330: Urban and Community Studies I, *section titled "Historical and Theoretical Perspectives."*
  - URP 423 Introduction to Urban and Environmental Planning
2. **Electives.** Each student will select four electives (no more than one course below the 300 level) from three Categories of courses: **Group A** (Theory / Perspectives), **Group B** (Policy / Technique) and **Group C** (Applications / Practice). No more than two electives may be selected from any one group.
3. **Semester in Detroit:** Students who participate in the semester in Detroit Program (SiD) during the fall semester will complete the minor if they also complete the core course. Those who complete the spring SiD Program will fulfill the minor after completing two courses, one of which must be the core course and the other from approved courses for the minor

***Group A Theory/Perspectives*** - Courses that present intellectual background for the study of urban communities. Drawn from African American Studies, Sociology, American Culture, and other disciplines, these courses introduce students to disciplinary and theoretical perspectives on community formation and urban life, and they provide opportunities for students to think through differing and at times competing analytical approaches.

- AAS 358: Topics in Black World Studies, *section subtitled "Asians and Blacks in Detroit"*
- AAS 426: Urban Redevelopment and Social Justice
- AAS / WGS 443 (WGS 443): The Pedagogy of Empowerment: Activism in Race, Gender, and Health
- AAS 495: Senior Seminar, *section titled "Race and the City in American Culture"*

- AMCULT 301: Topics in American Culture, *section titled "Detroit Politics and Community Organizing"*
- AMCULT 305: Asian Pacific American Community Service and Learning, *section titled "Asians and Blacks in Detroit"*
- AMCULT 399: Race, Racism, and Ethnicity
- ANTHRCUL / WGS 446 (WGS 446): Sex and the City: Urban Geography and Sexual Locations
- ENVIRON 336 / AAS 332 / NRE 336: Environment and Inequality
- HISTORY / RCSSCI 344: History of Detroit in the 20th Century
- NRE 336 / AAS 332 / ENVIRON 336: Environment and Inequality
- RCSSCI / HISTORY 344: History of Detroit in the 20th Century
- SOC / AAS 434: Social Organization of Black Communities
- SOC 435: Urban Inequality and Conflict
- UP / ARCH 443: History of Urban Form
- UP / ARCH 519: Theories of Urban Design
- UP / NRE 573: Urban and Regional Theory
- WGS (WGS) / AAS 443: The Pedagogy of Empowerment: Activism in Race, Gender, and Health
- ANTHRCUL / WGS 446 (WGS 446): Sex and the City: Urban Geography and Sexual Locations
- 
- \*Note: RCSSCI 330: Urban and Community Studies: Historical and Theoretical Perspectives, may be included as an elective under Category A, provided a student has taken URP 423: Introduction to Environmental Urban Planning, to meet the core course requirement.

***Group B Policy/Technique*** - Courses that provide an introduction to urban planning and policy making as it bears upon urban communities, including issues of the environment, land management, economic development, transportation, and sustainability.

- ARCH / URP: Architecture, Sustainability & the City
- ENVIRON / EARTH 309: GIS Explorations of the Past, Present, & Future
- ENVIRON 405: Urban Sprawl: Policy & Politics
- ENVIRON / CEE 407: Sustainable Cities
- ENVIRON 408: Land Use Policy, Law, & the Environment
- UP / GEOG 406: Introduction to Geographic Information Systems
- UP 502 / NRE 592: Environmental Planning: Issues and Concepts
- UP / PUBPOL 652: Strategic Thinking for Affordable Housing
- UP / SW 655: Neighborhood Planning
- URP 427: Foundations of Sustainable Food Systems
- URP 500: Planning Theory & History (Policy Planning Emphasis)
- URP 501: Planning Theory & History (Physical Planning & Design Emphasis)
- URP 520: Introduction to Geographic Information Systems
- URP 542 / EAS 592: Environmental Planning: Issues and Concepts
- URP 543: State and Local Land Management
- URP 552: Healthy Cities: Planning & Design
- URP 573: Infrastructure Planning in the US & Developing Countries
- URP 580: Metropolitan Structure
- URP 581: Housing Policy & Economics

- URP 584: Introduction to Economic Development Planning
- URP 585: Economic Development Planning Methods
- URP 586 / SW 684: Concepts & Techniques of Community Participation

\*Note: URP 423 / ARCH 423 / ENVIRON 370: Introduction to Urban and Environmental Planning, may be included as an elective under Category B, provided a student has taken RCSSCI 330: Urban and Community Studies: Historical and Theoretical Perspectives, to meet the core course requirement.

**Group C Applications/Practice** — Courses that give students direct exposure to community settings and foster the integration of theoretical and policy planning knowledge and practical experience. Through specific engagements with urban and community issues, students experience and examine how theoretical and academic frameworks get applied to in urban contexts. Prominent among these will be "field work" or "field study" courses — that is, courses in which students work in community settings.

- *requires instructor approval for undergraduates*
- AMCULT 306 / PSYCH 317: Community-Based Research
- AMCULT / PSYCH 319: Empowering Families and Communities
- AMCULT 321 / PSYCH 325: Practicum in the Multicultural Community
- PSYCH 317 / AMCULT 306: Community-Based Research
- PSYCH / AMCULT 319: Empowering Families and Communities
- PSYCH 325 / AMCULT 321: Practicum in the Multicultural Community
- RCCORE 301: Internships with Semester in Detroit
- RCCORE 309: Study Off-Campus, *section titled: "Spanish Language Internship Program"*
- RCHUMS 334: Special Topics in the Humanities, *sections titled: "Writing in Detroit;" "Empowering our Communities through Creative Expression;" or "Telling it: Community-Based Arts and Literature"*
- \* RCSSCI 360: Social Science Junior Seminar, *section titled "Urban and Community Studies II"*
- SOC / AAS 634: The Urban Ethnographic Tradition: Theory, Method, Standpoint (*requires instructor approval for undergraduates*)
- WGS 350 (WGS 350): Women and the Community
- WGS 351 (WGS 351): Women and the Community II

\* SOC 225 and RCSSCI 360 are topics courses, therefore not all offerings under these numbers will be approved. Students will be allowed to count toward the minor only the particular offerings with the subtitles listed above (or others that are relevant to urban and community studies).

## Water and the Environment Minor

Virtually all academic disciplines connect to water in some way. The study of water occurs on nearly every spatial scale: from molecular to planetary.

While 70% of the surface of our planet is covered in water, less than 1% of the water on the Earth's surface is fresh water and only 0.08% of this is available for human use. Currently, 600

million people face water scarcity, and 2.7 to 3.2 billion people will face water shortages by 2025. The decline in water quantity and quality is affecting myriad and complex interactions at multiple levels and scales, creating conflicts between governments and peoples, impacting local and global economies, and affecting human health and well-being.

This minor will offer students particularly interested in water issues a place where they can pursue in an organized fashion an environmentally oriented course of study of the topic.

*Effective Fall 2016*

#### Advising

PitE staff and faculty advisors will help students navigate the "Water and the Environment Minor".

#### Prerequisites

None.

#### Requirements

**Minimum Credits: 18**

The minor consists of no fewer than 6 classes for a total of at least 18 credits.

1. **Introductory Course:** The Water Cycle, an Interdisciplinary Approach
2. **Second Water-Centered Course.** Select one from the list below.
3. **Three Topics Courses.** Select three courses from the list below. Two courses must be 300 level or above. Students will be required to take at least two courses from different sub-topics listed below.
4. **Practical Experience.** Student choose a practical experience synthesizing approaches and knowledge bases relevant to the issue. The practical experience can take the form of an independent study course, internship, field-oriented course or study abroad course. Students either work with a faculty advisor to complete an independent study course or internship, or they will consult with a PitE Advisor or faculty to choose a field-oriented course or study abroad experience synthesizing approaches and knowledge bases relevant to the student's interest in water.

**Second Water-Centered Course.** (Select one from the following list):

- AOSS 171 / ENVIRON 110 / BIOLOGY 110 / EARTH 171 / ENSCEN 171 / RCNSCI 110: Introduction to Global Change: The Science Behind Sustainability
- AOSS 172 / ENVIRON 111 / EARTH 172 / ENSCEN 172 / GEOG 111: Global Change: The Sustainability Challenge
- BIOLOGY 109: Ecological Knowledge and Environmental Problem Solving

- BIOLOGY 110 / AOSS 171 / ENVIRON 110 / EARTH 171 / ENSCEN 171 / RCNSCI 110: Introduction to Global Change: The Science Behind Sustainability
- EARTH 110: Evolving Oceans
- EARTH 171 / AOSS 171 / ENVIRON 110 / BIOLOGY 110 / ENSCEN 171 / RCNSCI 110: Introduction to Global Change: The Science Behind Sustainability
- EARTH 172 / AOSS 172 / ENVIRON 111 / ENSCEN 172 / GEOG 111: Global Change: The Sustainability Challenge
- EARTH 206 / ENVIRON 206: How the Earth Works: The Water Cycle and Environment
- EARTH 222 / ENVIRON 232: Introductory Oceanography
- EARTH 277: Water in the 21st Century
- ENSCEN 171 / AOSS 171 / ENVIRON 110 / BIOLOGY 110 / EARTH 171 / RCNSCI 110: Introduction to Global Change: The Science Behind Sustainability
- ENSCEN 172 / AOSS 172 / ENVIRON 111 / EARTH 172 / GEOG 111: Global Change: The Sustainability Challenge
- ENVIRON 110 / AOSS 171 / BIOLOGY 110 / EARTH 171 / ENSCEN 171 / RCNSCI 110: Introduction to Global Change: The Science Behind Sustainability
- ENVIRON 111 / AOSS 172 / EARTH 172 / ENSCEN 172 / GEOG 111: Global Change: The Sustainability Challenge
- ENVIRON 206 / EARTH 206: How the Earth Works: The Water Cycle and Environment
- ENVIRON 232 / EARTH 222: Introductory Oceanography
- GEOG 111 / AOSS 172 / ENVIRON 111 / EARTH 172 / ENSCEN 172: Global Change: The Sustainability Challenge
- HISTORY 240: The World Since 1492, *section titled "Oceans in World History"*
- RCNSCI 110 / AOSS 171 / ENVIRON 110 / BIOLOGY 110 / EARTH 171 / ENSCEN 171: Introduction to Global Change: The Science Behind Sustainability

**Three Topics Courses.** (Select three courses from the list below. Two courses must be 300 level or above. Students will be required to take at least two courses from different sub-topics listed below.):

### *Culture*

- AMCULT 301: Topics in American Culture, *section titled "Green Indigeneity"*
- ASIAN 371: Natural Disasters in East Asia
- CEE 307 / ENVIRON 407: Sustainable Cities
- CLCIV 277 / ENVIRON 277 / HISTORY 277: Environmental History of the Ancient Mediterranean
- ENGLISH 317: Literature and Culture, *sections titled "Green Indigeneities" and "Growing Up Near the Great Lakes"*
- ENGLISH 320: Literature and the Environment, *sections titled "Ecocriticism" and "Southern Natures: Race and Environment in the U.S. South"*
- ENGLISH 398: Junior Seminar in English Studies, *sections titled "American Literature and the Sea" and "Moby Dick: Allusion and Intertextuality"*
- ENVIRON 277 / CLCIV 277 / HISTORY 277: Environmental History of the Ancient Mediterranean
- ENVIRON 304: Topics in Culture and Environment, *sections titled "Growing Up Near the Great Lakes" and "Ecocriticism"*
- ENVIRON 324: Introduction to Water Law and Policy

- ENVIRON 407 / CEE 307: Sustainable Cities
- ENVIRON 410: American Environmentalism and the Frontier West
- HISTORY 240: The World Since 1492, *section titled "Oceans in World History"*
- HISTORY 277 / CLCIV 277 / ENVIRON 277: Environmental History of the Ancient Mediterranean
- RCHUMS 334: Special Topics in the Humanities, *section titled "Growing Up Near the Great Lakes"*
- WRITING 410: Quantitative Analysis and Writing in the Disciplines, *section titled "Demystifying Water Data"*

### ***Economics, Policy & Planning***

- ARCH 357 / UP 357: Architecture, Sustainability and the City: Ideas, Forces and People Shaping the Built Environment
- ECON 370 / ENVIRON 375: Environmental and Resource Economics
- EHS 588 / ENVIRON 475 / NRE 475: Environmental Law
- ENVIRON 208 / ORGSTUDY 208: Business and the Natural Environment
- ENVIRON 235: Economics of Natural Resources and Environment
- ENVIRON 306: Global Water
- ENVIRON 365: International Environmental Policy
- ENVIRON 375 / ECON 370: Environmental and Resource Economics
- ENVIRON 408: Land Use Policy, Law, and the Environment
- ENVIRON 412 / PUBPOL 412: Environmental Values in Public Policy
- ENVIRON 475 / EHS 588 / NRE 475: Environmental Law
- NRE 475 / ENVIRON 475 / EHS 588: Environmental Law
- ORGSTUDY 208 / ENVIRON 208: Business and the Natural Environment
- PUBPOL 412 / ENVIRON 412: Environmental Values in Public Policy
- UP 357 / ARCH 357: Architecture, Sustainability and the City: Ideas, Forces and People Shaping the Built Environment

### ***Natural Sciences & Resource Management***

- AOSS 350 / EARTH 350: Atmospheric Thermodynamics
- AOSS 411 / EARTH 411: Cloud and Precipitation Processes
- AOSS 420 / NAVARCH 420 / ENSCEN 420: Environmental Ocean Dynamics
- AOSS 467 / CHEM 467 / EARTH 465 / ENSCEN 467 / ENVIRON 467: Biogeochemical Cycles
- AOSS 474 / EARTH 474: Ice Sheets, Glaciers and Climate Change
- CHEM 467 / AOSS 467 / EARTH 465 / ENSCEN 467 / ENVIRON 467: Biogeochemical Cycles
- ENVIRON 426 / CLIMATE 421 / EARTH 421: Introduction of Physical Oceanography
- EARTH 222 / ENVIRON 232: Introductory Oceanography
- EARTH 223 / ENVIRON 233: Introductory Oceanography, Laboratory
- EARTH 333 / ENVIRON 333: The Inexhaustible Seas? Marine Resources and Environmental Issues
- EARTH 350 / AOSS 350: Atmospheric Thermodynamics
- EARTH 411 / AOSS 411: Cloud and Precipitation Processes
- EARTH 417: Geology of the Great Lakes
- EARTH 421 / CLIMATE 421 / ENVIRON 426: Introduction of Physical Oceanography
- EARTH 449: Marine Geology
- EARTH 452: Paleoceanography
- EARTH 465 / AOSS 467 / CHEM 467 / ENSCEN 467 / ENVIRON 467: Biogeochemical Cycles

- EARTH 474 / AOSS 474: Ice Sheets, Glaciers and Climate Change
- EARTH 478: Geochemistry of Natural Waters
- EEB 320 / ENVIRON 311: Rivers, Lakes, and Wetlands: Introduction to Aquatic Ecosystems
- EEB 380: Oceanography: Marine Ecology
- EEB 440 / ENVIRON 422 / NRE 422: Biology of Fishes
- EEB 450: Biology of Amphibians and Reptiles
- EEB 455: Ethnobotany
- EEB 457: Algae in Freshwater Ecosystems
- EEB 476 / ENVIRON 476 / NRE 476: Ecosystem Ecology
- EEB 483: Freshwater Ecosystems: Limnology
- EEB 486: Biology and Ecology of Fish
- EEB 487 / ENVIRON 409 / NRE 409: Ecology of Fishes
- EEB 489 / ENVIRON 430 / NRE 430: Soil Ecology
- ENSCEN 420 / AOSS 420 / NAVARCH 420: Environmental Ocean Dynamics
- ENSCEN 467 / AOSS 467 / CHEM 467 / EARTH 465 / ENVIRON 467: Biogeochemical Cycles
- ENVIRON 201 / RCNSCI 202: Ecological Issues
- ENVIRON 232 / EARTH 222: Introductory Oceanography
- ENVIRON 233 / EARTH 223: Introductory Oceanography, Laboratory
- ENVIRON 311 / EEB 320: Rivers, Lakes, and Wetlands: Introduction to Aquatic Ecosystems
- ENVIRON 333 / EARTH 333: The Inexhaustible Seas? Marine Resources and Environmental Issues
- ENVIRON 409 / NRE 409 / EEB 487: Ecology of Fishes
- ENVIRON 421: Restoration Ecology
- ENVIRON 422 / NRE 422 / EEB 440: Biology of Fishes
- ENVIRON 426 / CLIMATE 421 / EARTH 421: Introduction of Physical Oceanography
- ENVIRON 430 / NRE 430 / EEB 489: Soil Ecology
- ENVIRON 463: Topics in Environmental Natural Science, *section titled "Stream Restoration"*
- ENVIRON 467 / AOSS 467 / CHEM 467 / EARTH 465 / ENSCEN 467: Biogeochemical Cycles
- ENVIRON 476 / EEB 476 / NRE 476: Ecosystem Ecology
- NAVARCH 420 / AOSS 420 / ENSCEN 420: Environmental Ocean Dynamics
- NRE 409 / ENVIRON 409 / EEB 487: Ecology of Fishes
- NRE 422 / ENVIRON 422 / EEB 440: Biology of Fishes
- NRE 430 / ENVIRON 430 / EEB 489: Soil Ecology
- NRE 476 / ENVIRON 476 / EEB 476: Ecosystem Ecology
- PHYSICS 210: Energy for our Future
- RCNSCI 202 / ENVIRON 201 / RCNSCI 202: Ecological Issues

### ***Public Health***

- AAS 409 / ANTHRCUL 408: Maternal/Child Health and Environmental Pollution in Africa
- AAS 458: Issues in Black World Studies, *section titled "Business and Politics in Developing Countries"*
- ANTHRCUL 408 / AAS 409: Maternal/Child Health and Environmental Pollution in Africa
- ENVIRON 310: Toxicology: The Study of Environmental Chemicals and Disease
- PUBHLTH 305: The Environment and Human Health
- PUBHLTH 350: Global Public Health: Challenges and Transformation

### ***Technology***

- ARTDES 250: Art, Design, and the Environment
- CEE 265: Sustainable Engineering Principles
- CEE 307 / ENVIRON 407: Sustainable Cities
- CEE 365: Environmental Engineering Principles
- CEE 480: Design of Environmental Engineering Systems
- CEE 481: Aquatic Chemistry
- EARTH 477 / ENVIRON 479: Hydrogeology
- ENVIRON 321: Climate Change and Adaptation
- ENVIRON 407 / CEE 307: Sustainable Cities
- ENVIRON 479 / EARTH 477: Hydrogeology
- UP 425: Urban Systems

# Women's and Gender Studies Major

## Goals of the Major:

1. To provide majors with an understanding of the interdisciplinary scholarship on women, gender, and sexuality, and to train them in interdisciplinary methods.
2. To offer theoretical and practical approaches to feminist thinking across the disciplines.
3. To encourage comparative thinking about coursework that explores the multicultural and global nature of feminist scholarship.
4. To train majors to think analytically by teaching them to read and write critically.
5. To provide supporting skills and context for the study of women through the cognate requirement.
6. To encourage intellectual and academic breadth through the cognate requirement.

## Areas of the Women's and Gender Studies major:

LGBTQ (Lesbian, Gay, Bisexual, Transgender, and Queer) and Sexuality Studies offers an interdisciplinary approach to sexuality that includes topics such as religious beliefs, legal codes, medical constructions, and social movements, and recognizes them as historically variable and culturally specific. With the contributions of empirical research, feminist scholarship, and queer theory, courses in this area acquaint students with history of sexuality and understanding the formation of sexual identities and sexuality.

*Gender, Race, and Ethnicity in the U.S.* examines the intersection of gender, race, and ethnicity in order to consider differences among women and men, as well as the impact of multiple categories of identity on experience and on the formation and contestation of gender itself. Interracial and interethnic relations, the mutual influence of social movements, and racialized genders are also explored. Although the U.S. is the primary focus, consideration of various diasporas encourages analysis of the links between communities across national borders.

*Gender, Culture and Representation* explores ways in which ideas and meanings about women and gender are produced culturally and historically. It positions students as readers, viewers, and interpreters of cultures and cultural artifacts, especially in the domains of literature, philosophy, the visual and performing arts, mass media (including film), and their histories. Courses might



explore a particular historical topic from a feminist perspective. Others might introduce students to feminist analyses of past and/or contemporary cultural forms and encourage them to consider processes of viewing, writing, and producing knowledge.

*Gender in the Global Context* offers a comparative cross-cultural perspective on the construction and meaning of gender, race, class, and sexuality. It examines current forces of globalization and empire, the histories of imperialism and colonialism, and postcolonial resistance and theory. Courses decenter the U.S. while placing it in a geopolitical context, including global and transnational feminisms.

*Effective Fall 2020*

#### **Exclusions:**

*Gender and Health majors may not major in Women's and Gender Studies.*

#### Advising

[Advising](#) appointments are made online. To make an advising appointment, please see the Women's and Gender Studies website main page: [www.lsa.umich.edu/women](http://www.lsa.umich.edu/women).

#### Grade Policies

All courses in the Women's and Gender Studies major must be completed with a C- or above, including the prereq, WGS 240 (WGS 240): Introduction to Women's and Gender Studies.

#### Prerequisites

WGS 240 (WGS 240), completed with a minimum grade of C- or above.

#### Requirements

##### **Minimum Credits: 33**

33 credits (at least 25 must be at the 300-level or above) distributed as follows:

1. **Courses in Women's and Gender Studies:** Majors must complete areas A through D below.
  - A. **Feminist Theory:** WGS 330 (WGS 330): Feminist Thought.
  - B. **Thematic Areas.** One course from each of the following four areas (only one course may be double-counted to meet these four thematic area course requirements):
    1. Lesbian, Gay, Bisexual, Transgender, Queer and Sexuality Studies
    2. Gender, Race, and Ethnicity in the U.S.
    3. Gender in a Global Context
    4. Gender, Culture, and Representation

- C. **Practice Course.** One course chosen from:
1. WGS 350 (WGS 350): Nonprofit Management, Community Engagement, and Feminist Practice
  2. WGS 351 (WGS 351): Leading Feminism
  3. WGS / HS 404 (WGS / HS 404) : Gender Based Violence: From Theory to Action
  4. WGS 425 (WGS 425): Feminist Practice of Oral History.
  5. SOC 225: Project Community: *various specifically approved topics - see department advisor*
- D. **Electives:** Additional WGS or WGS credits to bring the total major credits up to 27 (excluding prerequisites and cognates).
2. **Cognates:** Two upper-level courses (for a total of six credits), neither in WGS (WGS) nor cross-listed, are required. In order to ensure that the interdisciplinary Women's and Gender Studies major is complemented by training in a single discipline, these courses will normally be in the same department. Cognate courses should not be courses on women and gender but should provide supporting skills or contexts for the study of women and gender.

### Constraints

A maximum of six Women's and Gender Studies independent study credits may be taken, excluding credits for the practicum.

### Residency

At least 14 credits of Women's and Gender Studies courses must be taken in residence-- and not including cognates.

In-residence: Courses elected on the Ann Arbor campus or at off-campus sites directed by Ann Arbor faculty. This includes STDABRD, Camp Davis, Biological Station, Michigan-in-Washington.

### Honors

The Women's and Gender Studies Honors Subplan provides an opportunity for majors to complete a comprehensive, original independent project under the guidance of a faculty mentor as the culmination to their undergraduate studies. Students should choose topics on which they have already done some academic study. Those interested in pursuing Honors should begin to consider it in their sophomore year and discuss their interests with a department advisor. Students learn methodology in WGS 389 (the Junior Honors Seminar) during the winter term of their junior year. The thesis is researched and written in the second term of the student's junior year and in their senior year. The Director of Undergraduate Studies (DUS) serves as the Honors SubPlan Advisor in Women's and Gender Studies. Honors applications are due in mid-November of the student's junior year.

For more information, please see: [www.lsa.umich.edu/women/undergraduate/honorsprogram](http://www.lsa.umich.edu/women/undergraduate/honorsprogram)

**Eligibility.** Women's and Gender Studies majors who have maintained an overall GPA of at least 3.4 and a 3.5 GPA in Women's and Gender Studies (including the pre-requisite) may apply for an honors major. Applicants must have completed or plan to complete WGS 240 (WGS240): Introduction to Women's Studies and WGS 330 (WGS 330): Feminist Thought, by the end of their junior year and applicants must demonstrate both the interest and capacity to carry out the comprehensive independent work required to complete an Honors thesis.

## Writing Minor

The Minor in Writing is designed for all UM undergraduates who are interested in developing their disciplinary and professional writing abilities while pursuing concentrations across the liberal arts and sciences.

*Effective Winter 2018*

### Advising

Students must apply to and be accepted by the Sweetland Center for Writing in order to declare the Minor in Writing. Applications are accepted twice a year, in March and October.

General questions about the minor should be sent to [sweetlandwritingminor@umich.edu](mailto:sweetlandwritingminor@umich.edu). To meet with an advisor regarding course selections, progress-to-degree and your minor release, schedule an appointment online by selecting Minor in Wrtg from the drop down menu in [Sweetland's scheduling system](#).

### Sweetland Center for Writing Departmental Information

Learn more about this center's undergraduate course offerings and the various types of writing support available to all student writers at the University of Michigan.

### Grade Policies

- Students must have completed their First-Year Writing Requirement with a grade of C or higher.
- Engineering students must have completed Engineering 100 with a grade of C or higher.
- Students must complete the courses applied toward the minor with an average minimum GPA of 3.3.

### Prerequisites

- Students must have completed their First-Year Writing Requirement with a grade of C or higher. Engineering students must have completed Engineering 100 with a grade of C or higher. Transfer students can complete the FYWR with a transfer course approved by Sweetland.
- Students must have at least three full terms remaining in their academic program.

- Students must be able to enroll in WRITING 220: Introduction to the Minor in their first semester in the Minor.

Applications will be considered twice a year, in March and October. Students must apply to and be accepted by the Sweetland Center for Writing in order to declare the Minor in Writing.

## Requirements

### Minimum Credits: 15

1. WRITING 220: Intro to the Minor in Writing – gateway course, which must be taken in the student's first full semester after being accepted into the minor.
2. One of the following courses:
  - DIGITAL / WRITING 200: New Media Writing
  - ENGLISH 225: Academic Argumentation
  - ENGLISH 229: Professional Writing
  - ENGLISH 325: Art of the Essay
  - LHSP 230: Writing and the Arts II
3. Two Upper-Level Writing Requirement courses, one of which may be shared with a major
4. WRITING 420: Minor in Writing Capstone – capstone course

# Yiddish Studies Minor

The University of Michigan is an internationally recognized hub of experts in Yiddish studies and a pre-eminent center for Yiddish studies scholarship. The Yiddish Studies minor offers undergraduates a unique opportunity to focus on the study of the Yiddish language and explore its culture from the perspective of a variety of disciplines. Students of Yiddish gain access to entire worlds of Jewish culture that are otherwise obscure, from folk songs and memoirs to literary criticism, mystical literature, and historiography. As a diasporic language that flourished without the aid of a nation state or even homeland, Yiddish models alternative modes of Jewish cultural production in the medieval and modern eras. Not having its own nation-state borders, Yiddish has been traveling in the mouths of Ashkenazi Jews within and beyond Europe, to the Americas, Israel, Australia, and South Africa. In the 20th century, Yiddish was marginalized as a Jewish language in favor of Hebrew, abandoned as a daily language in favor of local state languages like English, Russian, and Polish, and devastated by the Nazi and Stalinist regimes. And yet the vibrancy of Yiddish culture and literature continues to reverberate throughout the world in diverse forms of cultural production, including music and theater and secular and sacred literatures.

Students interested in particular places, such as Eastern Europe or the Americas, or engaged with international studies, which is explicitly comparative, will find that a minor in Yiddish studies will complement and enrich their understanding of these subjects by encouraging them to view the world from the point of view of a minority community deeply engaged with majority society.

This minor is intended for undergraduates who are captivated by Yiddish language as a window into a unique Jewish world. These students want to study a Jewish language but are not drawn to

Hebrew; they prefer to follow a less well-trodden path that illuminates Jewish culture produced in Europe, the Americas, and wherever Ashkenazi immigrants settled. The prerequisite language study is necessary to give students basic competence in reading and speaking, grammar and simple writing assignments. The second year language sequence introduces Yiddish culture along with more advanced grammar as well as speaking that extends beyond simple sentences. It gives students a solid grounding in selected elements of Yiddish literature (poems, songs, short stories, newspaper articles). YIDDISH 201-202 often focuses on a particular theme to give coherence to the items studied.

*Effective Fall 2016*

#### **Exclusions:**

*A minor in Yiddish Studies is not open to students with a major in Judaic Studies.*

#### Advising

A student who is interested in a major in Judaic Studies should meet with the major advisor as early as possible to plan a coherent course of study. Please email [JudaicStudies@umich.edu](mailto:JudaicStudies@umich.edu) or call 734-615-6097 to schedule an appointment.

#### Prerequisites

Elementary Yiddish [Students must either take YIDDISH 101-102 at U-M or take an intensive summer course elsewhere (there are several that exist; at YIVO in conjunction with Bard College, at the National Yiddish Book Center, at Tel Aviv University, at Oxford University) that will qualify a student to take YIDDISH 201-202.]

#### Requirements

##### **Minimum Credits: 15**

A minimum of 15 credits, to be chosen from the following categories as stated below, with at least three courses at the 300- level or above:

1. **Core Language:** YIDDISH 201 and 202 (or JUDAIC 201 and 202), Intermediate Yiddish.
2. **Electives:** A minimum of 9 credits selected from the list of approved electives, below.
  - A. *Language*
    - YIDDISH / JUDAIC 301: Advanced Yiddish I
    - YIDDISH / JUDAIC 302: Advanced Yiddish II
    - JUDAIC 401: Readings in Yiddish Texts, *section titled "Yiddish Culture Between Tradition and Modernity"*
  - B. *Literature*
    - YIDDISH / JUDAIC 332: Yiddish Classics and Modernity
    - YIDDISH / JUDAIC 433: Yiddish Classics and Modernity

- JUDAIC 205 / MIDEAST 276: What is Judaism?
- JUDAIC 218: Humanities Topics in Judaism, *sections titled "Jewish American Short Stories", and "Urban Cafes and Modern Jewish Culture"*
- JUDAIC 271 / SLAVIC 270: Contact and Conflict: Jewish Experience in Eastern Europe through Art, Film & Literature
- JUDAIC / MIDEAST / SLAVIC 281: Jews in the Modern World: Texts, Images, Ideas
- JUDAIC 316: Topics in Jewish Literature, *section titled "Jewish Folk Literature"*
- JUDAIC 317: Topics in Judaic Studies: *sections titled "Lost in Transit: Literature of Jewish Mobility", and "Yiddish Classics and Modernity"*
- JUDAIC 318: Humanities Topics in Judaism, *sections titled "Jewish Literature", and "Literature of the Holocaust"*
- JUDAIC / YIDDISH 332: Yiddish Classics and Modernity
- JUDAIC / HISTORY 384: Modern Jewish History 1880-1948
- JUDAIC 386 / HISTORY 386 / GERMAN 391: The Holocaust
- JUDAIC / HISTORY / AMCULT 387: History of American Jews
- JUDAIC 417: Topics in Judaic Studies, *sections titled "Ethnicity in Israel Literature and Culture", "Exile & Homecoming in Hebrew & Jewish Literature", "Literature of the Holocaust", "Shtetl: Image & Reality", and "Yiddish in New York"*
- JUDAIC / YIDDISH 433: Yiddish Classics and Modernity
- JUDAIC / AMCULT 437: Yiddish in New York: The First 150 Years
- JUDAIC 467 / RELIGION 471 / MIDEAST 476: Seminar: Topics in the Study of Judaism, *sections titled "The Thought of Abraham Joshua Heschel", and "Hasidism as Mysticism: Nahman Breslov"*
- JUDAIC / SLAVIC 481: Desire, Destiny, & Death: Jews and Modernism in Eastern / Central Europe
- AMCULT / JUDAIC 437: Yiddish in New York: The First 150 Years
- AMCULT / HISTORY / JUDAIC 387: History of American Jews
- AMCULT 405: Topics in American Culture, *section titled "Yiddish in New York: First 150 Years, 1870-2012"*
- COMPLIT 490: Comparative Cultural Studies, *section titled "Jews and Modernism"*
- ENGLISH 317: Literature and Culture, *section titled "Yiddish Classics and Modernity"*
- ENGLISH 383: Jewish Literature
- ENGLISH 407: Topics in English Language & Literature, *section titled "Literature of the Holocaust"*
- GERMAN 391 / HISTORY 386 / JUDAIC 386: The Holocaust
- HISTORY / JUDAIC 384: Modern Jewish History 1880-1948
- HISTORY / JUDAIC 386 / GERMAN 391: The Holocaust
- HISTORY / JUDAIC 387 / AMCULT 387: History of American Jews
- MIDEAST 276 / JUDAIC 205: What is Judaism?
- MIDEAST / JUDAIC / SLAVIC 281: Jews in the Modern World: Texts, Images, Ideas
- MIDEAST 476 / JUDAIC 467 / RELIGION 471: Seminar: Topics in the Study of Judaism, *sections titled "The Thought of Abraham Joshua Heschel", and "Hasidism as Mysticism: Nahman Breslov"*

- RELIGION 471 / JUDAIC 467 / MIDEAST 476: Seminar: Topics in the Study of Judaism, *sections titled "The Thought of Abraham Joshua Heschel", and "Hasidism as Mysticism: Nahman Breslov"*
- SLAVIC 270 / JUDAIC 271: Contact and Conflict: Jewish Experience in Eastern Europe through Art, Film & Literature
- SLAVIC / JUDAIC 281 / NEAREAST 281: Jews in the Modern World: Texts, Images, Ideas
- SLAVIC / JUDAIC 481: Desire, Destiny, & Death: Jews and Modernism in Eastern / Central Europe

# LSA Course Catalog

This document is an unofficial representation of the information available on the LSA Undergraduate Course Catalog. For official and updated information, please view the LSA Course Catalog:

[https://webapps.lsa.umich.edu/CrsMaint/Public/CB\\_PublicBulletin.aspx?crselevel=ug](https://webapps.lsa.umich.edu/CrsMaint/Public/CB_PublicBulletin.aspx?crselevel=ug)



## Courses in LSA Afroamerican and African Studies

The Department of Afroamerican and African Studies (DAAS) provides students an opportunity to examine the histories, social organizations, cultures, and arts of people of African descent, particularly those of Africa, the United States, and the Caribbean. The department fosters a comprehensive program of study that enables students to focus within and across these areas, as well as to work within and across various disciplines, including history, literature, linguistics, anthropology, sociology, psychology, political science, economics, music, art, film, communications, and religion. While encouraging comparative analysis of the diverse cultural and social traditions derived from Africa, courses also bring attention to current theories, methodologies, and research on race, cultural identity, socioeconomic class, gender, and sexuality in relation to African, African American, and Afro-Caribbean experiences. In addition to exploring the historical cultures of Africa and its Diaspora, students also have opportunities to study contemporary issues treated in such professional fields as public policy, urban planning, education, environmental studies, information technology, and health sciences.

### African Language Courses

The Department of Afroamerican and African Studies offers elementary and intermediate language instruction in the following languages: Akan, Bambara, Swahili, Wolof, and Zulu. Akan, Bambara, Wolof, and Zulu are offered under AAS 125, 126, 225, 226, Swahili is offered under AAS 115, 116, 117, 215, 216, 316.

*Akan/Twi.* Twi is a dialect of Akan, the principle language of Ghana. About 9 million people speak Twi, most of whom live in the Ashanti Region. Twi is also spoken in Cte d'Ivoire. The Ashanti people take great pride in their language, since it reflects not only their culture but also the history of their great nation.

*Bambara/Bamana.* Bambara, also known as Bamanankan, is part of the Manding language family. Bambara is one of the most widely spoken languages in West Africa and is used by more than 26 million people, primarily in Mali, but also in Burkina Faso, Gambia, Guinea-Conakry, Mauritania, Northern Cte d'Ivoire, and Senegal. Bambara is the lingua franca of many parts of West Africa and is used in some Malian schools, radio, and government offices.

*Swahili.* Swahili is spoken in Kenya, Tanzania, Burundi, Rwanda, Congo and the Comoros Islands. The sequence provides students with a solid knowledge of Swahili morphology and syntax, functional vocabulary, and practice in speaking and writing. It covers many facets of the East African cultures in which it is spoken.

*Wolof.* Wolof is spoken by over 3 million people in Senegal and by millions of people in the Gambia, and Mauritania. It is the lingua franca in Senegal and belongs to the Atlantic branch of the Niger-Congo language family. Besides the Wolof people, the Wolof language is spoken by the Fulani, Serer, Toucouleur, Diola, and Mandingo people as a second language. There are opportunities for studying abroad.

*Zulu/IsiZulu.* IsiZulu, or Zulu, is spoken by about 10 million people in many parts of Africa. It is a Nguni language, related to IsiXhosa, IsiNdebele, and IsiSwati. A major

language of South Africa, it is also the lingua franca of Zimbabwe, Malawi, Namibia, Mozambique, Swaziland, and Lesotho.

#### Course Credit

Many 400- and 500-level courses are elected by undergraduate and, often for less credit, by graduate students. The *Undergraduate Course Catalogue* lists credits earned by undergraduates.

#### Roster of CAAS Area and Cross-Area Courses:

- **African Studies Courses:**  
200, 206, 208, 224, 246, 247, 260, 346, 355, 359, 362, 366, 368, 373, 385, 403, 407, 408, 409, 422, 427, 432, 436, 440, 453, 460, 462, 595
- **Afroamerican Studies Courses:**  
201, 230, 231, 248, 254, 263, 268, 271, 274, 303, 323, 330, 333, 334, 336, 337, 338, 340, 341, 342, 344, 360, 361, 381, 383, 413, 417, 418, 450, 451, 454, 459, 463, 471, 476, 487, 489, 491, 519
- **Caribbean Studies Courses:**  
202, 384, 444, 464, 473, 564
- **Cross-Area Courses:**  
211, 304, 322, 328 (appropriate sections), 331, 348, 354 (appropriate sections), 365, 390 (appropriate sections), 394, 410, 411, 420, 421, 426, 495 (appropriate sections), 596 (appropriate sections)

#### Afroamerican & African Studies (AAS)

##### **AAS 103. First Year Social Science Seminar**

*Enrollment restricted to first-year students, including those with sophomore standing. (3). (SS). May not be repeated for credit. (Cross-Area Courses). May not be included in a major.*

This seminar introduces first-year students to the intellectual community of social

scientists working in the field of Afroamerican and African studies. The topic of the seminar varies from year to year.

##### **AAS 104. First Year Humanities Seminar**

*Enrollment restricted to first-year students, including those with sophomore standing. (3). (HU). May not be repeated for credit. (Cross-Area Courses). May not be included in a major.*

This seminar introduces first-year students to the intellectual community of humanities scholars working in the field of Afroamerican and African studies. The topic of the seminar varies from year to year.

##### **AAS 111. Introduction to Africa and Its Diaspora**

*(4). (HU). (R&E). May not be repeated for credit. May not be included in a DAAS major. F.*

Introduces basic concepts and methods involved in the study of Africa and its Diaspora. This team-taught course takes a multimedia, interdisciplinary approach using maps, cultural artifacts, films, art, music, archival documents, literary texts, and key scholarly readings from both the humanities and social sciences. Prerequisite to the AAS concentration and minor.

##### **AAS 115. Elementary Swahili**

*(4). May not be repeated for credit. Students with credit for AAS 115 may only elect AAS 117 for 4 credits.*

This introductory-level course is designed for students with little or no previous study of Swahili (Kiswahili). Students develop their ability to communicate satisfactorily in Swahili in everyday practical situations as well as acquire some of the skills necessary for effective reading and writing. Using a variety of written and oral materials, the course focuses on the development of the four language skills necessary for

interpersonal communication in Swahili: listening, writing, reading, and speaking.

**AAS 116. Elementary Swahili II: Language and Culture**

*AAS 115. (4). May not be repeated for credit.  
No credit granted to those who have completed or are enrolled in AAS 117.*

This introductory-level course is designed for students who have successfully completed Swahili I or have permission of the instructor. Students continue to develop their ability to communicate satisfactorily in Swahili in everyday practical situations while acquiring the additional skills necessary for effective reading and writing. Using a variety of written and oral materials, the course focuses on the development of the four language skills necessary for interpersonal communication in Swahili: listening, writing, reading, and speaking.

**AAS 125. Elementary African Languages I**  
*(4). May not be repeated for credit. May not repeat the same language at the same level.*

This course develops students' ability to speak, listen, read and write at the Elementary level in the sub-Saharan African language of their choice.

**AAS 200. Introduction to African Studies**  
*(3). (SS). May not be repeated for credit.*

An interdisciplinary introduction to the history and cultures of Africa. The course surveys Africa's prehistoric past, the rise and development of early African states, and African achievements from the medieval period to the present. Throughout, attention is given to changing perspectives and approaches in the field of African Studies.

**AAS 201. Introduction to Afro-American Studies**

*(3). (SS). May not be repeated for credit.*

This course provides an interdisciplinary overview and introduction to the area of Afro-American Studies. Historical, political, sociocultural, and behavioral perspectives are brought to bear on the analysis of the Black American experience.

**AAS 202. Introduction to Afro-Caribbean Studies**

*(3). (HU). May not be repeated for credit.*

An introductory course focusing on key issues in Afro-Caribbean studies. The specific topic is determined by the instructor.

**AAS 203. Issues in Afro-American Development**

*AAS 111. (3). (SS). May not be repeated for credit. (African-American Studies). Sp.*

An interdisciplinary course concerned with issues currently critical to the development of the Black community along various dimensions, including the economic, political, social and educational aspects.

**AAS 206. Issues in African Studies**

*AAS 111. (3). May not be repeated for credit. (African Studies).*

**AAS 208 / HISTART 208. Introduction to African Art**

*(4). (HU). (R&E). May not be repeated for credit.*

This class investigates several pivotal issues and lie behind the surfaces of some extraordinary objects and practices of a selected group of African and African Diaspora cultures. Students learn how to see and understand a wide range of African visual practices. Topics include architecture, textiles, body adornment,

painting, graphic communication systems, photography, dance, ritual performance and sculpture. Such practices continue to unfold on the African continent as people are transformed and endure in the African Diaspora.

**AAS 211. Dynamics of the Black Diaspora**  
(3). (HU). May not be repeated for credit.

Examines issues related to the diverse experiences and representations of "Black" as a multicultural identity bearing broad national, regional, and international influences. The course explores the diversity of historical and contemporary cultural and artistic expressions within the U.S., the Caribbean, and across a range of global sites.

**AAS 215. Intermediate Swahili I**  
AAS 116 or 117. (4). May not be repeated for credit.

This course is designed for students who have completed the Elementary Swahili sequence or those with the permission of the instructor. It broadens speaking, reading and writing skills as students engage in discussions and writing on more complex topics.

**AAS 216. Intermediate Swahili II**  
AAS 215. (4). (Lang Req). May not be repeated for credit.

This course is designed for students who have completed the Intermediate Swahili I sequence or with permission of the instructor. It broadens speaking, reading, and writing skills as students engage in discussions and writing on more complex topics.

**AAS 224 / HISTART 224. African Visual Cultures: Akan/Kongo/Yoruba**  
(3). May not be repeated for credit.

This course introduces a broad range of perspectives on African visual cultures by focusing on three cultural groups: the Akan, the Yoruba and the Kongo. Lecture and discussion topics are thematic and cross-cultural, examining the visual image in contexts before, during, and after European colonialism as well as in Diasporic transformations.

**AAS 230 / HISTORY 274. Survey of Afro-American History I**  
AAS 111. (3). (SS). May not be repeated for credit. (African-American Studies).

**AAS 231 / HISTORY 275. Survey of Afro-American History, II**  
AAS 111. (3). (SS). May not be repeated for credit. (African-American Studies).

**AAS 236 / AMCULT 226 / HISTORY 226 / LACS 226 / LATINOAM 226. The Latin Tinge: Latin Music in Social Context in Latin America and the U.S.**  
(4; 3 in the half-term). (HU). (R&E). May not be repeated for credit.

This course introduces key Latin musical styles, recordings, and musicians. It requires extensive listening and musical analysis, and develops these historical themes: 1) the origins and development of Afro-diasporic musical styles; 2) the interplay between nationalism and popular music; and 3) international musical flows shaped by Atlantic colonialism, commercial markets, and labor migration.

**AAS 245 / HISTORY 245 / ISLAM 245. Islam in Africa**  
*Students will receive no credit if previously taken as HISTORY 357, Topic 3 "Islam in Africa". (Prerequisites enforced at registration.)* (3 - 4; 3 in the half-term). (HU). May not be repeated for credit.

It is well known that Islam is the majority religion in Africa north of the Sahara. It is much less well known that today Islam may be the most widely professed faith south of the desert, in what westerners have often called 'Black Africa', as well. Roughly 1/6th of the world's Muslim population can be found in sub Saharan Africa. This course will examine African Islamic history beginning with the earliest Muslim migrants from Arabia to Ethiopia in the early 7th century CE until the dawn of the 21st century.

**AAS 246 / HISTORY 246. Africa to 1850**

*(4; 3 in the half-term). (SS). May not be repeated for credit.*

The course is an introduction to the peoples and cultures of Sub-Saharan Africa. It begins with a survey of the origins of man and early African civilizations and concludes with the Trans-Atlantic slave trade.

**AAS 247 / HISTORY 247. Modern Africa**

*(4; 3 in the half-term). (SS). (R&E). May not be repeated for credit.*

This is the second part of a two-course introduction to central themes in Sub-Saharan African history. It deals with the abolition of the slave trade, European imperialism, underdevelopment, nationalism, and decolonization.

**AAS 248. Crime, Race, and the Law**

*(3). May not be repeated for credit.*

This course focuses on both the historical origins, and the ongoing impact, of the racial crisis in the present-day American criminal justice system and its momentous public policy implications for U.S. society in the 21st century.

**AAS 254. The History and Evolution of Hip Hop Culture**

*(4). (HU). May not be repeated for credit.*

This course explores the rise of Hip Hop as a global phenomenon and the social controversies that it has engendered. Drawing on documentaries, films, and music, we address issues of violence, misogyny, use of the "b-work" and "n-word," and glorification of "ghetto culture" in exploring Hip Hop's evolution.

**AAS 260. The Political Economy of African Development**

*(3). (SS). May not be repeated for credit.*

The course introduces students to the confluence of political and economic forces at the local, national, regional and global levels that have helped shape the trajectory of African development. The course is divided into two parts: the first examines the meaning and evolution of the political economy of development in the context of Africa's unfolding history, while the second applies an understanding of political economy to topical development issues and case studies.

**AAS 262 / HISTORY 272. The Civil Rights Movement in the United States, 1941-1975**

*(4; 3 in the half-term). (R&E). May not be repeated for credit.*

This course traces the history of the Civil Rights Movement in the United States from its origins in the early 20th century through the 1960's and beyond. It focuses on the organizations that emerged to press for racial equality and the strategies they pursued to achieve their goals, from litigation and legislation to mass protest, economic self-help and racial separatism. Finally, the course examines debates over the role of race in public policy in the post-civil rights-era.

**AAS 267 / AMCULT 267 / HISTORY 267.**  
**Religion in the Making of African America**  
(3). *May not be repeated for credit.*

This undergraduate course studies the historical development of African American religion. The course begins with discussion of the faith systems created and adapted in transatlantic slavery. The lectures and interdisciplinary reading assignments examine the multiple evolutions of religious thought and practice among African descended communities in the 19th and 20th centuries. The course examines the U.S. contexts of African American religious culture in their historical relationships with the Caribbean, South America and Africa. The course pays especial attention to the influence of religion in the overlapping affiliations of nation and diaspora.

**AAS 268. Community Collaborations: Race, Social Justice, and Engaged Learning**  
(3). (SS). *May not be repeated for credit.*

This course explores community engaged learning through theoretical, historical, and practical lenses. You'll learn to critically analyze structural inequalities; reflect on your identities and experiences in exploring issues of power, privilege, and social change; develop practical skills for interviewing and collaborating; and explore possibilities for future engagement with community members.

**AAS 271 / ENGLISH 274. Introduction to Afro-American Literature**  
*AAS 111 (CAAS 111). (3; 2 in the half-term). (HU). (R&E). May not be repeated for credit.*

This course surveys poetry, fictive and autobiographical narratives, prose essays, and drama produced by black writers over the course of their presence in America. The goal is to investigate responses to Afro-American peoples' situation in a society

simultaneously both hostile to and keenly dependent upon their presence.

**AAS 273 / AMCULT 273. The Southern Novel in Historical Context**  
(3). (R&E). *May not be repeated for credit.*

Focusing on five classic southern novels, this course will examine how history and literature can illuminate each other, particularly in matters of race and race relations. Readings will include works by Harper Lee, Zora Neale Hurston, William Faulkner, Dames Dickey, and Alice Walker, while in-class lectures will address Southern literary history and the history of the South during the turbulent decades of the 1930s through the 1970s. We will also focus on the authors' lives and the ways in which they created works of lasting significance out of the raw materials of their experiences.

**AAS 290. Selected Topics in Black World Studies**  
(2). *May not be repeated for credit.*

A mini-course seminar on specialized topics in Afroamerican, African, and/or Caribbean studies.

**AAS 303 / SOC 303. Race and Ethnic Relations**  
*An introductory course in Sociology or AAS 201. (3 - 4; 3 in the half-term). (SS). (R&E). May not be repeated for credit. (African-American Studies).*

This course examines the tensions underlying American race and ethnic relations. Students use theoretical debates, historical, social and political meanings of race and ethnicity, and the study of how various racial and ethnic groups construct and use their social identities to examine the processes that facilitate or impede intergroup relations.

**AAS 304 / WGS 304. Gender and Immigration: Identity, Race, and Place**  
(3). (SS). *May not be repeated for credit.*

This course examines crucial questions related to how mobility, border-crossing, dislocation, and displacement are gendered and are given cultural and political meanings in the era of globalization and transnationalism. We carefully examine the embedded meanings and histories of the terms, "diasporas," "transnationalism," and "globalization," and their usefulness in analyzing social constructions of gendered-identities, race, caste, and ethnicity, and reproduction, socialization, and health.

**AAS 309. Global Health in African Contexts**  
(3). *May not be repeated for credit.*

This course examines "global health" in African contexts. We shall explore African understandings of illness and health; traditions of non-medical healing; the history of Western medicine in Africa; the current state of medical systems; and the challenges of major infectious epidemics such as AIDS, Malaria, and Tuberculosis and well as everyday health challenges arising from changing lifestyles and poverty.

**AAS 315. Advanced Swahili I**  
AAS 216. (3). *May not be repeated for credit.*

This course enables students to gain a deeper understanding of the Swahili language through reading, analyzing and interpreting complex thoughts, issues and ideas in literature written in Swahili by African writers. In addition, students perform other linguistically advanced tasks, such as expressing their feelings, seeking the opinion of others, giving advice and describing their health. As with beginning and intermediate Swahili, culture is

introduced and incorporated through lectures, field exercises and interactions.

**AAS 316. Advanced Swahili II**  
AAS 315. (3). *May not be repeated for credit.*

This course enables students to gain a deeper understanding of the Swahili language through reading, analyzing and interpreting complex thoughts, issues and ideas in literature written in Swahili by African writers. In addition, students perform other linguistically advanced tasks, such as: expressing their feelings, seeking the opinion of others, giving advice and describing their health condition. As with the earlier courses, culture is built into the course and is introduced through lectures, field exercises and interactions.

**AAS 322 / ENVIRON 335. Introduction to Environment Politics: Race, Class, and Gender**  
(4; 3 in the half-term). (SS). (R&E). *May not be repeated for credit. (Cross-Area Courses).*

This course analyzes the development of political action from the 1860s to the present. It will analyze the role of race, gender, and class in defining environmental issues and environmental action.

**AAS 324. Dealing with the Past and Doing Justice in Africa: South Africa, Rwanda, Sierra Leone**

AAS 111 and AAS 200, prior coursework in comparative politics, international relations, or permission of instructor. (3). *May not be repeated for credit.*

This course focuses on three transitional societies in Africa emerging from national nightmares and confronting their past: South Africa, Rwanda and Sierra Leone. Considering the political realities in each country, this course explores the opportunities and limitations of the different forums, and the dilemmas they present for enforcement, sovereignty, and justice. The

course finally looks at the structure and functions of the controversial International Criminal Court and its potential to be an instrument for ensuring global accountability for the most serious crimes.

**AAS 328 / WGS 328. Women, Agency and Sexual Safety**

*One course in WGS or AAS. (3). May not be repeated for credit.*

This course takes a transnational perspective on the purpose, development, and utilization of different kinds of reproductive technologies. Feminist critiques and analyses of the role of reproductive technologies in Africa, U.S., and global contexts are central to the course.

**AAS 330 / RCSSCI 330. Urban and Community Studies I**

*(4). May not be repeated for credit.*

An interdisciplinary course using faculty and community resources to provide a broad exposure to urban settings and the forces at work within them.

**AAS 331 / PSYCH 316. The World of the Black Child**

*One course in Psychology or Afro-American and African Studies. (3). May not be repeated for credit. (Cross-Area Courses).*

**AAS 333. Perspectives in Afro-American History**

*AAS 201. (4; 3 in the half-term). May not be repeated for credit. (African-American Studies). Sp.*

A seminar-like course emphasizing a theoretical approach to Black historical inquiry. An attempt is made to group the meaning and implications of various developments in Black history.

**AAS 336 / HISTORY 336 / WGS 336.**

**Black Women in the United States, Part I:**

**From the American Revolution through the Women's Era**

*AAS 201 (CAAS 201). (3). May not be repeated for credit. No credit granted to those who completed AAS 337 prior to Winter 2012.*

This course explores the history of African-American women from the American Revolution through the passage of the nineteenth amendment in 1920. Through the secondary work of historians and readings of primary sources, students will examine a variety of topics including work, the family, the construction of race and gender, politics, the law and sexuality. The course will also consider the various ways in which historians have theorized about black women's pasts and ask how those theories may help to inform our approaches to the telling of history.

**AAS 338 / ENGLISH 379. Literature in Afro-American Culture**

*AAS 201. (3). (HU). May not be repeated for credit.*

**AAS 340 / AMCULT 340. A History of Blacks in American Film**

*AAS 201. (3). May not be repeated for credit. (African-American Studies). Sp.*

**AAS 345 / ASIAN 345 / RCSSCI 346. Genocide and Trauma in Southeast Asia, Africa, and Europe in the Twentieth Century**

*(3). (HU). May not be repeated for credit.*

This course begins with an introduction to the study of memory, history, and trauma that draws primarily on materials that concern cases of mass violence and its remembrance during the Holocaust before turning to modern examples of genocide in Southeast Asia and Africa.

**AAS 346 / ENGLISH 389 / HISTORY 362. Literature in African History**



(3). (HU). (R&E). May not be repeated for credit.

This course explores the intersection of African history and literature, of imagination and politics. We study how African writers participated in the political and moral arguments of their time. In epic dramas, in novels, in poetry and in autobiographies, African composers conjured up audiences, offered a shared vision of the past and the future, and set them on a forward path together.

**AAS 347 / RCSSCI 343 / SOC 335. Urban Inequality in America**

One course in introductory sociology. (4; 3 in the half-term). (SS). May not be repeated for credit. No credit granted to students who are enrolled in or have completed SOC 435 or SOC 535.

This course examines three questions: (1) Why are American cities and suburbs so racially and economically segregated? (2) What are the consequences of living apart? (3) What are the challenges of living together? The role of race and policy is interrogated. The class focuses primarily on Black and White communities.

**AAS 354 / HONORS 354 / RCHUMS 354 / WGS 354. Race and Identity in Music(3).**

(HU). (R&E). May not be repeated for credit.

This course explores the parameters of racial and ethnic identities in music; primarily but not exclusively in Western art music (commonly known as "classical music"). The focus is on understanding how racial and ethnic differences can be portrayed musically. Case studies are drawn from the late eighteenth century through the present with a strong emphasis on the nineteenth century and opera.

**AAS 355 / ANTHRCUL 355 / HISTORY 355.**

**Health and Illness in African Worlds**

(4; 3 in the half-term). (R&E). May not be repeated for credit. (African Studies).

Changes in disease, epidemiology, and health and healing practices in African continental and Atlantic worlds from the fifteenth century, as Africans encountered new forms of medicine, slavery, colonialism, epidemic, famine, and war. Designed for concentrators in History and Afroamerican and African Studies and/or students seeking careers in medicine, public health, and medical anthropology.

**AAS 356 / POLSCI 355. Democracy and Development in Africa**

(4). May not be repeated for credit.

This course investigates the deep historical and more contemporary explanations for these diverse political and economic outcomes, through case studies of political development in particular countries, analyses of broader patterns for the continent as a whole, and consideration of Africa in the context of the broader developing world.

**AAS 358. Topics in Black World Studies**

(3). May be repeated for a maximum of 6 credits.

**AAS 359 / POLSCI 359. African Politics**

AAS 200. (3 - 4; 3 in the half-term). May not be repeated for credit.

A comparative survey of the African states and territories, with primary emphasis on the process of decolonization, the continued dependent status of African states, obstacles to change, and alternative strategies of development.

**AAS 362 / HISTART 362. Expressive Cultures of the Black Atlantic: Vision and Time**

*HISTART 208/AAS 208 and upperclass standing. (3). May not be repeated for credit.*

This course addresses a diversity of Black Atlantic visual cultures, both in Africa and in the Diaspora, with a focus on how historical memory and the experience of the passage of time are articulated in objects and performances.

**AAS 365 / WGS 365. Global Perspectives on Gender, Health, and Reproduction**

*One course in either Women's Studies or AAS. (3). (SS). May not be repeated for credit.*

Examines constructions and meanings of gender, health, reproduction and social difference. By using various cross-cultural examples, we discuss how gender, racial, and class differences are enacted and manifested in the divisions of social spaces, and in bodily conduct, function, hygiene, and sickness.

**AAS 366. Music of Africa**  
*(3). May not be repeated for credit.*

This course introduces students to African musical traditions through an investigation of the aural styles, creative processes and social contexts of music making in a variety of African nations and cultures.

**AAS 381 / ENGLISH 380 / WGS 381. Intersections: Fictions and Feminisms of the African Diaspora**  
*AAS 111 (CAAS 111). (3). May not be repeated for credit.*

Focusing on fiction written by women in the African Diaspora, this course explores how works of fiction can contribute to an understanding of feminisms, and how various feminist perspectives can contribute to an understanding of fictional texts.

**AAS 384 / AMCULT 376 / ENGLISH 384. Caribbean Literature**

*AAS 202. (3). (HU). May be repeated for a maximum of 6 credits.*

The course considers a range of topics in the study of Caribbean literature. It raises questions concerning the canon of texts to be studied, the cultural construction of Caribbean literature, race and ethnicity.

**AAS 385 / ENGLISH 385. African Literature**  
*AAS 200. (3). (HU). May be elected twice for credit. (African Studies).*

This course considers a range of topics in the study of African literature. It raises questions concerning the canon of texts studied, the cultural construction of African literature, race and ethnicity.

**AAS 394. Junior Seminar in Professional Writing**  
*Upperclass standing. (4). May be repeated for a maximum of 8 credits. Cross-Area Course.*

This seminar provides students with opportunities to read, analyze, and practice a diverse range of professional writing styles based on a theme chosen by the students and instructor. Writing formats may include journalism, creative writing, grant proposals, legal writing, public scholarship, and writing related to the fields of science and health.

**AAS 395 / GERMAN 396 / HISTORY 396. Germany and the Black Diaspora**  
*(3). (HU). (R&E). May not be repeated for credit.*

This course explores German-speaking Europe's historical relationship to the Black Diaspora. How have Germans and people of African descent come into contact with each other throughout history? What have been some of the outcomes of this contact? In asking these questions, we will explore how definitions of identity and race have changed over time.

**AAS 407 / HISTART 406. Looking at African Things**

*HISTART 208/AAS 208. (3). May not be repeated for credit. Rackham credit requires additional work.*

This course examines the shifting historical terms and narratives that constitute and justify the creation, display and reception of African object, both in and out of Africa, in such contexts as museums, photographic archives, world's fairs, theme parks and other cultural spectacles.

**AAS 408. African Economies: Social and Political Settings**

*AAS 200. (4; 3 in the half-term). May not be repeated for credit.*

**AAS 410. Supervised Reading and Research**

*Consent of instructor required. (1 - 6). (INDEPENDENT). May not be repeated for credit. Continuing Course. Y grade can be reported at end of the first-term to indicate work in progress. At the end of the second term (AAS 410 or 510), the final grade is posted for both term's elections. (Cross-Area Courses). F, W, Sp, Su.*

**AAS 418 / POLSCI 324. Black Americans and the Political System**

*One course in Political Science and AAS 201. (3). May not be repeated for credit. (African-American Studies).*

This course focuses on the status of Blacks in the American political system. Students analyzes the capacity and the capability of the political system for negotiating internal conflicts involving Black/White relationships.

**AAS 421 / HISTORY 421 / LACS 421 / RELIGION 421. Religions of the African Diaspora**

*(3). (R&E). May not be repeated for credit. Rackham credit requires additional work.*

Conceptualizes "diaspora" and introduces Brazilian Candomble, Cuban Santeria and Palo Monte, Haitian Vodou, Jamaican and globalized Rastafari, the ancestor religion of the Garifuna of Central America, and Afro-Indian practices in Trinidad. Studies of historical development as well as contemporary practice will be used.

**AAS 422 / ANTHRCUL 411. African Cultures**  
*AAS 200 (CAAS 200); and junior standing. (3; 2 in the half-term). May not be repeated for credit. (African Studies).*

Africa is considerably more important, more interesting and certainly more complex than its popular image suggests. The course provides an introduction to the peoples and cultures of tropical (sub-Saharan) Africa.

**AAS 426. Cities in Contemporary Africa**  
*(3). May not be repeated for credit. (Cross-Area Courses). F.*

This course explores cities in contemporary Africa through the lens of work and livelihoods, mobility and circulation, informal economies and survivalist strategies, architecture and the built environment art and culture, social justice and citizenship.

**AAS 432 / ENVIRON 432. Violent Environments: Oil, Development and the Discourse of Power**

*(4). May not be repeated for credit.*

This course will examine and compare discourses and practices concerned with resource extraction, resource distribution, energy security, and "modernity" in Africa, Europe, the Middle East, and Latin America. In particular, we'll explore how oil exploration in postcolonial states has created spaces of violence and possibilities for development, and has continually

reshaped the idea of what constitutes the nation.

**AAS 439 / LING 449. Creole Languages and Caribbean Identities**

AAS 202. (3; 2 in the half-term). May not be repeated for credit. (Afro-Caribbean Studies).

**AAS 440 / FTVM 440. African Cinema**

AAS 200. (3). May not be repeated for credit. (African Studies).

A critical and interdisciplinary look at the development of African cinema from its inception in the 1960s, at the height of the sociopolitical upheavals experienced by many nations in the transition from colonialism to independence, to the recent phase of introspection and diversification.

**AAS 443 / WGS 443. Pedagogy of Empowerment: Activism in Race, Gender, and Health**

AAS 201, WGS 240 or 220, AMCULT 240, NURS 220. (3). May not be repeated for credit.

This course will explore the intersections of health, gender, and race by focusing on the epidemic of HIV and the epidemic of violence in the African American community. Students will explore the theory and practice surrounding an intervention module on HIV prevention and violence.

**AAS 444 / ANTHRCUL 414. Introduction to Caribbean Societies and Cultures, I**

Junior standing or above. (3). May not be repeated for credit. (Afro-Caribbean Studies). F.

A survey of the peoples and cultures of the Caribbean with emphasis on Haiti, Jamaica, Trinidad, and Guyana. Analysis of class, race relations, cultural pluralism, ethnicity, population movements, and economic development.

**AAS 450. Law, Race, and the Historical Process, I**

(3). May not be repeated for credit. (African-American Studies). F.

**AAS 451. Law, Race, and the Historical Process, II**

AAS 450. (3). May not be repeated for credit. (African-American Studies). W.

This course is a continuation of Law, Race and the Historical Process I (AAS 450). It covers the period of time from the beginnings of the modern Civil Rights movement to the present.

**AAS 454 / ANTHRCUL 453. African-American Culture**

One introductory course in the social sciences. AAS 201 recommended. (3). May not be repeated for credit. (African-American Studies).

**AAS 457 / ENVIRON 457. When China Comes to Town: Environment and the Politics of Development in Africa**

(3). May not be repeated for credit.

This course will address post-colonial African states as a historically unique social form that presents special challenges for the socioeconomic and political analysis of environment and development. The course will focus on the growing interest of emerging world economic powers such as China in Africa's natural resources.

**AAS 458. Issues in Black World Studies**

(3). May be repeated for a maximum of 6 credits.

**AAS 462. Globalization and African Health**

AAS 200 recommended. (3). May not be repeated for credit. Rackham credit requires additional work.

The course will investigate the two-way relationship between globalization and

African health. Topics include: globalization and informalization; urbanization and health; the influence of international property rights and access to pharmaceuticals; the impact of international trade on African incomes; the relationship between international debt, World Bank and IMF conditionality and the health of Africans; the impact of FDI on African livelihoods; the influence of commodity chains and global industries on Africa's standard of living; how the shifting global climate has affected rainfall patterns; agricultural production and the incidence of malnutrition and famine; and the relationship between the health of Africans and new global diseases.

**AAS 468. Practicum in Field Studies in the Diaspora**

*AAS 111 or permission of instructor. May require concurrent registration in AAS 469, Issues in the Diaspora. (3). (EXPERIENTIAL). May be repeated for a maximum of 6 credits. Rackham credit requires additional work.*

Exposing students to the culture and politics of regions in the African Diaspora through experiential educational methodologies. This course provides instruction and practical experience in public health, architecture, ethnomusicology, and/or other disciplines under the supervision of a faculty member. Includes completion of journals or field notes, projects and presentations as required by instructor.

**AAS 473 / HISTORY 473 / LACS 483. Brazil: History and Culture**

*(3). May not be repeated for credit. Rackham credit requires additional work.*

This course examines the history of Brazil, focusing on literature and performance as expressions of the national or regional cultural identities, with particular attention to racial categories and African heritage.

Topics include: indigenous societies and responses to European invasion; slavery and paternalism; religious expression; and the ways that racial and ethnic identification has inspired much of Brazil's unique cultural production. When possible, we will include various ways of learning about cultural expression, incorporating interdisciplinary sources such as fiction, archival documents, testimony, ethnography, recorded music, and dance/movement.

**AAS 480 / HISTART 408. The Future of Africa's past: Material Culture, History, and Heritage**  
*AAS 200 (CAAS 200). (3). May not be repeated for credit.*

The course examines the material culture of precolonial African societies as historical "documents," as evidence of the social, political, religious, and economic processes that shaped these societies. In addition to dealing with the significance of these things in the past, the course considers what they mean in the present, as heritage.

**AAS 487. Communication Media in the Black World: Electronic Media**

*AAS 201. (3). (R&E). May not be repeated for credit. (African-American Studies).*

**AAS 490. Special Topics in Black World Studies**  
*(1 - 2). May be repeated for a maximum of 6 credits.*

The mini-course is part of a series that explores race.

**AAS 495. Senior Seminar**

*Upperclass standing. (4). May be repeated for a maximum of 8 credits. (Cross-Area Courses). (Capstone Course).*

An intensive seminar on specialized topics in Afroamerican, African, and/or Caribbean Studies.

**AAS 558. Seminar in Black World Studies**  
*Graduate standing or permission of instructor.*  
*(3). May be repeated for a maximum of 6 credits.*

## **Air Force Officer Education (AERO)**

**AERO 101. Heritage and Values of the United States Air Force I**  
*(1). May not be repeated for credit. Not for credit toward LSA degree. F. (non-LSA credit).*

The first course in a two-course sequence designed to introduce students to the United States Air Force and provides an overview of the basic characteristics, missions, and organization of the Air Force. It focuses on leadership, core values, and teamwork within the Air Force.

**AERO 102. Heritage and Values of the United States Air Force II**  
*(1). May not be repeated for credit. Not for credit toward LSA degree. (non-LSA credit).*

The second course in a two-course sequence designed to introduce students to the United States Air Force provides an overview of the basic characteristics, missions, and organization of the Air Force. It focuses on the history and organizational structure of the United States Air Force and airpower's role in war.

**AERO 201 / UC 201. Team and Leadership Fundamentals I**  
*AERO 102/Permission of Instructor. (1). May not be repeated for credit. (non-LSA credit).*

Topics allow students to improve their leadership personally and within teams, instill a leadership mindset and transition from cadet to officer candidate. The course

prepares students for field-training, where they will put concepts into practice

**AERO 202 / UC 202. Team and Leadership Fundamentals II**

*AERO 201/Permission of Instructor. (1). May not be repeated for credit. (non-LSA credit).*

Topics allow students to improve their leadership personally and within teams, instill a leadership mindset and transition from cadet to officer candidate. The course prepares students for field-training, where they will put concepts into practice.

**AERO 310 / UC 307. Leading People and Effective Communication I**  
*(3). May not be repeated for credit. (non-LSA credit).*

The course provides juniors and seniors with the opportunity to apply leadership and management techniques in a supervised environment. The course enhances leadership and communication skills.

**AERO 311. Leading People and Effective Communication II**  
*AERO 310. (3). May not be repeated for credit. Not for credit toward LSA degree. (non-LSA credit).*

The second course in a two-course sequence focused on advanced management and leadership skills. The course provides juniors and seniors with the opportunity to apply leadership and management techniques in a supervised environment. The course enhances leadership and communication skills.

**AERO 410. National Security Affairs/Preparation for Active Duty I**  
*AERO 310 and AERO 311. (Prerequisites enforced at registration.) (3). May not be repeated for credit. Not for credit toward LSA degree. F. (non-LSA credit).*

The first course in a two-course sequence focused on an overview of the complex and political issues facing the military profession. The course provides seniors with the foundation to understand their role as military officers in American society. The course prepares seniors for Active Duty.

**AERO 411. National Security**

**Affairs/Preparation for Active Duty II**

*AERO 310 and AERO 311. (Prerequisites enforced at registration.) (3). May not be repeated for credit. Not for credit toward LSA degree. (non-LSA credit).*

The second course in a two-course sequence focused on an overview of the complex and political issues facing the military profession. The courses provide seniors with the foundation to understand their role as military officers in American society. The course prepares seniors for Active Duty.

**Applied Liberal Arts (ALA)**

The Applied Liberal Arts (ALA) curriculum provides a nondepartmental home for courses on essential skills for college success and other curricular and co-curricular opportunities for first- and second-year students as they explore majors, minors, internships, and other options for education, leadership, and personal growth. This part of the LSA curriculum is still "under construction." In the semesters to come it will also serve as a trans-departmental space for integrative, multi-disciplinary, and experimental teaching and learning, including the "22 Ways" courses, specialized Sophomore Seminars, and Critical Issues courses that explore modes of problem-based education. Finally, ALA is a laboratory for new directions in the LSA undergraduate

curriculum, especially those that highlight student-led and student-designed initiatives. It will host liberal arts courses that are part of the cross-campus undergraduate Minor in Entrepreneurship and the Social Innovation Challenge sponsored by optiMize.

**ALA 101. A User's Guide to the Liberal Arts**

*Students cannot enroll if they have completed UC 270, Topic Title "A User's Guide to Liberal Arts". (Prerequisites enforced at registration.) (1 - 2). May not be repeated for credit.*

This mini-course is designed to help students understand why their college education looks the way it does and learn to speak confidently about how their liberal arts education is preparing them for success in a wide range of possible careers and endeavors.

**ALA 102. Michigan Community Scholars Program: The Student in the University**

*Michigan Community Scholars Program participant. (1). May not be repeated for credit. Offered mandatory credit/no credit.*

This course introduces first-year participants in the Michigan Community Scholars Program to the academic, civic, and cultural resources available at the University and in the community. In addition to enabling students to make a successful transition to college, the goal is to engage them in a community of academicians and leaders pursuing excellence in all areas of endeavor.

**ALA 103. Michigan Community Scholars Program: Academic Decision Making**

*Admission to the Michigan Community Scholars Program. (1). May not be*

*repeated for credit. Offered mandatory credit/no credit.*

This course will provide participants in the Michigan Community Scholars Program with an opportunity to critically review the roles of leadership and decision making related to their academic and professional careers. It allows students to consider various theoretical perspectives and link them to civic responsibility and social change.

**ALA 104. Introduction to Research**  
*Participant in Michigan Research and Discovery Scholars. (1). May not be repeated for credit.*

This one-credit course is required for all first-year students enrolled in the MRADS. In preparation for a year-long research project, students are introduced to research ethics and exposed to a variety of different research methodologies employed in disciplines across campus. Students examine the building blocks for critical thinking skills through reading assignments and classroom activities. They learn how to read professional journal articles, formulate questions, and how to evaluate arguments and evidence. Small group activities focus on team work and oral communication skills necessary to be successful in the classroom, research lab, and work place.

**ALA 105. Digital Research: Critical Concepts and Strategies**  
*(1). May not be repeated for credit. No credit granted to those who have completed or are enrolled in UC 170, UC 174, UC 175-176, or UC 177 or ALA 105. Meets 01/03/18 - 02/20/18. (Drop/Add deadline=01/16/18.). Offered mandatory credit/no credit.*

This hands-on computer lab will help students lay a solid foundation for success in all current and future academic research. With an emphasis on the wealth of digital resources now available, the material focuses on information discovery and management skills, expands knowledge of scholarly sources, and promotes critical thinking. Specific topics include resource availability, source selection, search strategies, content evaluation, referencing, and academic integrity. Taught by a University librarian, the interactive format allows students to learn via database searches, group discussion, and case studies. Students work individually and collaboratively on reports, reading assignments, and projects.

**ALA 106. Health Sciences Scholars Program: Perspectives on Health and Health Care**

*Restricted to students enrolled in the Health Sciences Scholars Program. (3). (ID). May not be repeated for credit.*

This course provides an overview of major current health and health care issues. Students exchange ideas and experiences with faculty from a broad spectrum of health-related fields. Faculty engage the students in consideration of the cultural, political, socioeconomic, and personal dimensions of health as well as the options and issues facing those who manage, provide, and evaluate healthcare. This is the first of two core courses for students in the Health Sciences Scholars Program and is open only to students in HSSP.

**ALA 107. Women in Science and Engineering Residence Program Seminar**

*Participant in the WISE Residence Program. (1). May not be repeated for credit.*



The Women in Science and Engineering Residence Program Seminar is a required one-credit course for all first-year students enrolled in the WISE RP. Through a combination of short lectures and classroom activities it exposes students to the intellectual life at the University of Michigan and what it means to pursue a liberal arts education. Selected faculty members share their current research with students as well as their career paths and professional development. In addition, students learn the building blocks for critical thinking skills through reading assignments and classroom activities. Students also learn how to read professional journal articles, formulate questions, and evaluate arguments and evidence. Small group activities focus on team work and the oral communication skills necessary to be successful in the classroom, research lab, and work place.

**ALA 108. STEM Challenges/STEM Success**

*Completion of UC 107. (Prerequisites enforced at registration.) Participation in the WISE Residence Program. (1). May not be repeated for credit.*

This course is a follow up to UC 107. Students will continue to explore many of the STEM disciplines and the key areas of focus within each discipline. In addition, students will learn the key components of researching a topic, including locating academic sources, reading and analyzing those sources and presenting their findings.

**ALA 109. Perspectives on Health Care**  
*Restricted to students enrolled in the Health Sciences Scholars Program. (2). (ID). May not be repeated for credit.*

ALA 109 is a continuation of ALA 106. It provides students with an overview of the cultural, socioeconomic, and political dimensions of health, encourages the development of an individual model of health, and provides a realistic perspective on various disciplines in the health sciences.

**ALA 115. The Financially Savvy Student**

*Students cannot enroll if they have already completed UC 170, Topic Title "The Financially Savvy Student". (Prerequisites enforced at registration.) (1 in the half-term). May not be repeated for credit. Offered mandatory credit/no credit.*

Students in the class will develop skills in managing money, making choices, and planning for the future, including: safe and smart use of credit and debit cards; developing personal monthly budgets and financial self-assessments; leveraging financial aid and scholarships; and funding study abroad, spring break, research, and internships.

**ALA 122 / PSYCH 122 / SOC 122. Intergroup Dialogues**

*Consent of instructor required. (3). (R&E). May be repeated for a maximum of 6 credits.*

In a multicultural society, discussions about issues of conflict and community are needed to facilitate understanding between social/cultural groups. In this intergroup dialogue, students will participate in semi-structured face-to-face meetings across social identity groups. Students will discuss relevant reading material and will explore group experiences in various social and institutional contexts. Participants will examine narratives and historical, psychological, and sociological

materials. Students will participate in exercises that will be debriefed in class and in weekly journals. Students will learn about pertinent issues facing the participating groups on campus and in society. The goal is to create a setting in which students engage in open and constructive dialogue, learning, and exploration concerning issues of intergroup relations, conflict, and community.

**ALA 125. Positioning Yourself for a Successful Internship**

*Consent of department required. (1 in the half-term). May not be repeated for credit. Offered mandatory credit/no credit.*

This one-credit course will provide you with the skills to make yourself competitive for internships, as well as the opportunity to identify your strengths and see the connections between your academic interests and your career exploration. Much of the course work will focus on your representation of yourself, including effective and dynamic communication strategies, developing presentation materials, using LinkedIn, and building networking and interviewing skills.

**ALA 160. Humanities Topics in ALA**  
*(1 - 4). (HU). May be repeated for a maximum of 9 credits. May be elected more than once in the same term.*

This course is intended to house Humanities courses that do not fit into any specific department or courses taught by non-LSA faculty from various units across the university.

**ALA 161. Social Science Topics in ALA**  
*(1 - 4). (SS). May be repeated for a maximum of 9 credits. May be elected more than once in the same term.*

This course is intended to house Social Science courses that do not fit into any specific department or courses taught by non-LSA faculty from various units across the university.

**ALA 162. Natural Science Topics in ALA**

*(1 - 4). (NS). (BS). May be repeated for a maximum of 9 credits. May be elected more than once in the same term.*

This course is intended to house Natural Science courses that do not fit into any specific department or courses taught by non-LSA faculty from various units across the university.

**ALA 164. Interdisciplinary Studies Topics in ALA**

*(1 - 4). (ID). May be repeated for a maximum of 9 credits. May be elected more than once in the same term.*

This course is intended to house Interdisciplinary Studies courses that do not fit into any specific department or courses taught by non-LSA faculty from various units across the university.

**ALA 170. Applied Liberal Arts Topics**  
*(1 - 3). May be elected four times for credit. May be elected more than once in the same term. Offered mandatory credit/no credit.*

This course examines select topics in applied liberal arts.

**ALA 171. Making the Most of Michigan**  
*(1 in the half-term). May not be repeated for credit. Offered mandatory credit/no credit.*

"Making the Most of Michigan and Beyond" will focus on skills for transitioning during college and beyond. The course is taught in the residence halls

and covers integrating in-class and out-of-class experiences, identifying and setting short-term and long-term goals, and utilizing social and intellectual diversity to become intentional, self-directed learners. Launch your undergraduate career and explore the processes for successful learning in college and beyond.

**ALA 175. BLI Leadership Lab**

*Students must be a Barger Leadership Lab Member (they must complete a short online form stating their intent to become a member). No credit granted to those who have completed this course as ALA 170, topic #1, 2, or 3 (BLI Leadership Lab, BLI Peer FAC Training, or BLI Peer Leader). (Prerequisites enforced at registration.) (1). May not be repeated for credit. Offered mandatory credit/no credit.*

This interactive class is designed to help participants develop the skills and confidence they need to grow as leaders. Group exercises and a self-designed team project allow them to practice and reflect on key leadership roles.

**ALA 206. Health Career Mentorship, Experiences, and Reflections**

*Consent of instructor required. (1). May not be repeated for credit.*

In this course, students will explore mentorship and observation in various health careers. This course will expand upon the observation activities introduced the previous year in ALA 106 and 109. Students will be paired with health-care professionals for mentorship and guidance. These relationships and experiences will serve as catalysts for self-reflection, helping students to better understand how various career paths intersect with their personal values, motivations, and skill sets.

**ALA 210. Defining Critical Global Issues**

*Consent of department required. (2). May not be repeated for credit.*

This is the fall component of the sequence required for GSP students, only available to students in GSP. Through this course, students critically explore global justice issues through a multicultural perspective. Key elements: guest lectures, Model United Nations simulations, dialogues, and internship with an NGO done as a Collaborative Group.

**ALA 211. Addressing Critical Global Issues**

*Consent of instructor required. (2). May not be repeated for credit.*

This is the winter component of the sequence required for GSP students, only available to students in GSP. Through this course, students critically explore global justice issues through a multicultural perspective. Key elements: guest lectures, Model United Nations simulations, dialogues, and internship with an NGO done as a Collaborative Group.

**ALA 212. Practicum: Facilitating Global Engagement**

*(1). (EXPERIENTIAL). May not be repeated for credit.*

This is the required facilitation training course for GSP students, only available to students in GSP. This course will provide Rising Peer Facilitators with the necessary knowledge and skills to facilitate multicultural group interactions and become more engaged contributors to our diverse society.

**ALA 220 / PSYCH 213 / SOC 218. Foundations of Intergroup Relations**

*No credit granted if you've already taken UC 218, ALA 220, SOC 218, or PSYCH*

218 with the topic "Foundations in Intergroup Relations (#2). (Prerequisites enforced at registration.) (3). (SS). May not be repeated for credit.

This introductory course examines the theory behind how social identity groups form, how bias develops (prejudice, stereotyping, and discrimination), and how people come to understand their own social identity group membership in the context of a society where privilege and power exist. Students can expect to participate in class through individual and group projects as well as class discussion.

**ALA 222. Twenty Two Ways**

(3). (ID). May be elected twice for credit. May be elected more than once in the same term.

This topics course, designed for sophomore exploration, provides a multidisciplinary investigation of natural science, social science, and humanities approaches to issues surrounding food. Featuring single lectures from the College's best teachers, the course offers students perspectives on health, environment, social relations, economics, politics, and culture.

**ALA 223 / PSYCH 223. Entrepreneurial Creativity**

No credit is granted for students who previously took UC 270 with the topic "Entrepreneurial Creativity" (#27). (Prerequisites enforced at registration.) (3). May not be repeated for credit.

This class was created to serve as the LS&A core course for the Entrepreneurship minor, and explores the relation between creativity, innovation, and problem-solving processes. We will consider the elements of creative thinking, explore insights from a variety of

perspectives, and engage in projects designed to foster students' own creativity and innovation.

**ALA 225. Undergraduate Internship**

Consent of department required. (1). (EXPERIENTIAL). May be repeated for a maximum of 2 credits. May be elected more than once in the same term. Offered mandatory credit/no credit.

In ALA 225 students will integrate academic and experiential learning through an internship experience. This course is designed to ensure students fully prepare to engage in all learning aspects of their internship and gain credit for the academic requirements associated with the course. ALA 225 offers a framework within which a student can maximize the learning environment at the external worksite and connect their experiential learning to their undergraduate education. In this course, you will: - Establish goals and prepare for your internship experience - Document your experiences and initial reactions to professional settings through a personal blog - Develop skills for framing your internship experience and plan for your next internship opportunity. For instructions about how to register for ALA 225, please visit the academic credit page on the LSA Internship Program website.

**ALA 228 / PSYCH 312 / SOC 375.**

**Intergroup Conflict and Coexistence: Religion, Ethnicity and Culture**

(3). May not be repeated for credit.

This course examines examples of social conflict based on religion, ethnicity and culture, interdisciplinary theories that help to understand the nature of such conflict, and current coalition building and coexistence work among various religious, ethnic and cultural groups. Experiential

activities enhance learning about intergroup conflict and coexistence work.

**ALA 230. STEM Transitions: Strategies for STEM Success**

*(1). May not be repeated for credit.*

This course is for transfer students interested in pursuing STEM majors. Our aim is to help students successfully transition to STEM classes and the UM community. We will examine key differences in how STEM classes are taught here and provide the tools to succeed inside and outside the classroom.

**ALA 238 / EARTH 238 / ENVIRON 238 / HISTORY 238 / MIDEAST 278.**

**Zoom: A History of Everything**

*(4; 3 - 4 in the half-term). (ID). May not be repeated for credit.*

This interdisciplinary course in "Big History" integrates the human story with its terrestrial and cosmic surroundings. It uses the notion of "powers of ten" to shift perspectives in space and time. It proceeds logarithmically, "nesting" each topic (and disciplinary perspective) within its predecessor, from astrophysics to history and back again.

**ALA 240. Living Well in College and Beyond**

*(2). May not be repeated for credit.*

This class will focus on exploring the eight dimensions of personal well-being through a lens of positive psychology, motivation, and social justice. Students will explore the ways that well-being is dynamic and interdependent, and will learn how to integrate well-being with success.

**ALA 250. Topics in Critical Issues**

*Students cannot enroll if they have already completed 4 instances of ALA 250 or UC 270, Topic Titles Critical Issues in Education, Critical Issues in Health,*

*Critical Issues in Sustainability, or Critical Issues in Detroit . (Prerequisites enforced at registration.) (1). May be repeated for a maximum of 4 credits. May be elected more than once in the same term.*

The Critical Issues minicourses feature expert speakers from campus and beyond, with each speaker introducing a pressing issue facing society and challenging students to design creative solutions. This 1-credit mini course is part of the Critical Issues Series presented by optiMize Social Innovation.

**ALA 256. Innovator's Toolkit**

*(3). May not be repeated for credit.*

"What tools do I have in my toolbox and how can I use them to make an impact?" This is the central question of The Innovator's Toolkit. By the end of this course, you will have worked to implement an innovative approach to a complex social problem related to the topic of water.

**ALA 260. Humanities Topics in ALA**

*(1 - 4). (HU). May be repeated for a maximum of 9 credits. May be elected more than once in the same term.*

This course is intended to house Humanities courses that do not fit into any specific department or courses taught by non-LSA faculty from various units across the university.

**ALA 261. Social Science Topics in ALA**

*(1 - 4). (SS). May be repeated for a maximum of 9 credits. May be elected more than once in the same term.*

This course is intended to house Social Science courses that do not fit into any specific department or courses taught by

non-LSA faculty from various units across the university.

**ALA 262. Natural Science Topics in ALA**

*(1 - 4). (NS). (BS). May be repeated for a maximum of 9 credits. May be elected more than once in the same term.*

This course is intended to house Natural Science courses that do not fit into any specific department or courses taught by non-LSA faculty from various units across the university.

**ALA 264. Interdisciplinary Topics in ALA**

*(1 - 4). (ID). May be repeated for a maximum of 9 credits. May be elected more than once in the same term.*

This course is intended to house Interdisciplinary courses that do not fit into any specific department or courses taught by non-LSA faculty from various units across the university.

**ALA 270. Applied Liberal Arts Topics**  
*Students cannot enroll if they have already completed 4 instances of ALA and/or UC 270. (Prerequisites enforced at registration.) (1 - 3). May be elected four times for credit. May be elected more than once in the same term.*

This course examines select topics in applied liberal arts.

**ALA 276. Student Leadership in Global Contexts**

*Consent of instructor required. (2). (EXPERIENTIAL). May be elected twice for credit. Offered mandatory credit/no credit.*

Refine your leadership and mentoring skills and take them abroad - Student Leadership in Global Contexts is designed to develop student facilitation and

mentoring skills in the context of coleading study abroad programs. Through interactive activities, experiential learning, readings, and reflection exercises, students learn from peer experiences, analyze and gain understanding of intercultural dynamics, and learn how to mentor study abroad participants before and during on-site experiences.

**ALA 284. Topics in Understanding Conflict through International Dialogue**  
*Consent of instructor required. (3). May be elected twice for credit. May be elected more than once in the same term.*

This course offers a unique opportunity for students to engage in intercultural communication with college students in other parts of the world without having to leave the classroom. Intercultural exchange is conducted using written communications (online chatting and collaborative paper assignments) and "face-to-face" real time group discussions via video conference.

**ALA 285. Introduction to Intercultural Study**

*Consent of instructor required. (1). (EXPERIENTIAL). May be elected four times for credit. Offered mandatory credit/no credit.*

This interdisciplinary experiential course introduces students to intercultural learning. It prepares students to make the most of their off-campus field study opportunities through identifying and setting goals, developing skills for cross-cultural learning and adaptation, and formulating plans to put those skills to good use on site.

**ALA 286. Engaged Learning Abroad**  
*Consent of instructor required. Students must be concurrently enrolled in an off-campus field learning experience. (1).*

*(EXPERIENTIAL). May be elected four times for credit. Offered mandatory credit/no credit.*

This interdisciplinary experiential course is designed to assist students involved in intercultural field learning in developing skilled local interactions, identifying new learning and interactive possibilities on site, sharing strategies for handling conflicts, unexpected situations, and misunderstandings, and well as those for capitalizing on local field opportunities. Students learn how to cultivate the documentation and implementation of their own experiential growth and development in intercultural environments.

**ALA 287. Integrative Intercultural Study**

*Consent of instructor required. Immediate past participation in off-campus experiential field-learning opportunity. (EXPERIENTIAL). May be elected four times for credit. Offered mandatory credit/no credit.*

This interdisciplinary course is designed to assist students integrate what they have learned from their intercultural field experiences. It also helps students to build on acquired skills and experiences in academic and co-curricular programs on the Ann Arbor campus and to prepare for future academic, programmatic, and career pursuits.

**ALA 290 / COMM 290. Public Speaking in the Digital Age**

*(3). May not be repeated for credit. No credit granted to those who have completed or are enrolled in SM 101 - Public & Small Group Communication.*

This skills- and practice-based course, rooted in rhetorical theory, is designed to

increase students' knowledge, understanding, and ability to use the fundamentals of oral communication for work and civic engagement. Students participate in lectures, discussions and activities, culminating in multiple presentations. Students leave this course as more confident, persuasive, and compelling speakers.

**ALA 291 / COMM 291. Public Speaking: World of Work**

*(3). May not be repeated for credit.*

This skills- and practice-based course is designed to increase your ability to use the fundamentals of oral communication in the world of work. You will participate in lectures, discussions and activities, which will build to a number of presentations, ranging from elevator speeches to sales pitches to business presentations to interviews.

**ALA 292 / COMM 292. Argumentation and Debate**

*(3). May not be repeated for credit.*

This course teaches students the fundamentals and art of argumentation. Students learn how to identify, critique and build arguments. Students will accrue public speaking skills, and learn how to convince various audiences. The capstone of this course is a series of team debates, demonstrating students' facility with argument and presentation.

**ALA 301. Tours of the Past**

*(1). (EXPERIENTIAL). May not be repeated for credit. No credit granted to those who have completed or are enrolled in UC 300. Offered mandatory credit/no credit.*

This 1-credit course presents "behind-the-scenes" tours of various U-M research

facilities, museums, and libraries that center on scientific and historical study.

**ALA 306 / WGS 305.**

**Interdisciplinary and Intersectional LGBTQ Health**

(3). (ID). May not be repeated for credit.

LGBTQ people face health disparities including cancer, HIV, depression, suicide, and more. Biological, sociological, and historical factors perpetuate them. Race and socioeconomic status play major roles in intragroup disparities. This course uses interdisciplinary approaches to understand historical and contemporary disparities, with special attention to racial disparities within the LGBTQ population.

**ALA 315. Popular Science**

(3). (ID). May not be repeated for credit.

This course is designed to equip students to read, understand, and critique popular science.

**ALA 320 / PSYCH 310 / SOC 320.**

**Processes of Intergroup Dialogues Facilitation**

*Admission by application. Previous participation in UC 122/PSYCH 122/SOC 122 strongly encouraged. (3). (R&E). May not be repeated for credit.*

Designed to give students a foundation in the skills and knowledge needed to facilitate multicultural group interactions, including structured intergroup dialogues. Topics include: basic group facilitation skills and their applications to multicultural settings; social identity group development; prejudice and stereotyping and their effects on groups; etc.

**ALA 321 / PSYCH 311 / SOC 321.**

**Practicum in Facilitating Intergroup Dialogues**

*PSYCH 310/SOC 320 and permission of*

*instructor. (4). (EXPERIENTIAL). May not be repeated for credit.*

This practicum follows PSYCH 310 or SOC 320, and requires applied work in facilitating intergroup dialogues. Students also participate in weekly supervision seminars to discuss their work in the dialogue groups. They also discuss theory and practice of group observation, in-out group conflict intervention skills, intergroup communication, and community building.

**ALA 322 / PSYCH 324 / SOC 324.**

**Advanced Practicum in Intergroup Relations**

*Consent of instructor required. UC 320/PSYCH 310/SOC 320. (1 - 4). (EXPERIENTIAL). May be repeated for a maximum of 8 credits.*

This course is for students doing advanced applied work in intergroup relations.

**ALA 323. IGR Directed Study**

*UC 324. (1 - 4). (INDEPENDENT). May be elected eight times for credit.*

Supervised study in an area related to the IGR Program as agreed upon by a student and a member of the faculty.

**ALA 324. Facilitation for Effective Leadership**

*Not available to students who have completed UC 370-003, Facilitation for Effective Leadership (Topic #9). (Prerequisites enforced at registration.) (3). May not be repeated for credit.*

Facilitation skills are some of the most important sets of competences for leaders today. These are the "process" skills used to guide key parts of our work as leaders. Students in all majors and leadership roles will benefit by gaining knowledge and



practical experience of the different elements of facilitation.

**ALA 325. Putting Your Education to Work**

*(1). May not be repeated for credit. Offered mandatory credit/no credit.*

This one-credit course is designed with LSA juniors and seniors in mind as they prepare to meet their goals beyond graduation. Classes are interactive, and the course is structured so that students prioritize, and progress toward, individual goals. Students will develop fluency in articulating the value of their LSA degree, create search strategies for jobs, mentors, and funding; and produce coherent narratives about their academic experiences, interests, and coursework.

**ALA 326. IGR Global Course Connections Special Topics**

*Consent of instructor required. (2 in the half-term). (EXPERIENTIAL). May be elected twice for credit.*

This course allows students to explore intergroup relations in a global context. Students must enroll in the related Fall or Winter course and then travel internationally to get hands on experience with the course material.

**ALA 329. Qualitative and Quantitative Approaches in Research on Intergroup Relations**

*Consent of instructor required. (2). May not be repeated for credit.*

This course is an overview of research methods used in intergroup relations, focusing on intergroup dialogue. Students examine research using qualitative, quantitative, methods, and discuss what each method provides in understanding how identities play a role in intergroup relations and how group dynamics and

processes affect outcomes of intergroup interactions.

**ALA 350. Predicting the Future**

*No credit granted to those who have completed UC 254 Topic #8: "Predicting the Future". (Prerequisites enforced at registration.) (3). (ID). May not be repeated for credit.*

A highly multidisciplinary exploration of ideas about the future drawn from across the sciences and humanities.

**ALA 360. Humanities Topics in ALA (1 - 4). (HU). May be repeated for a maximum of 9 credits. May be elected more than once in the same term.**

This course is intended to house Humanities courses that do not fit into any specific department or courses taught by non-LSA faculty from various units across the university.

**ALA 361. Social Science Topics in ALA (1 - 4). (SS). May be repeated for a maximum of 9 credits. May be elected more than once in the same term.**

This course is intended to house Social Science courses that do not fit into any specific department or courses taught by non-LSA faculty from various units across the university.

**ALA 362. Natural Science Topics in ALA (1 - 4). (NS). (BS). May be repeated for a maximum of 9 credits. May be elected more than once in the same term.**

This course is intended to house Natural Science courses that do not fit into any specific department or courses taught by non-LSA faculty from various units across the university.

**ALA 364. Interdisciplinary Topics in ALA**

(1 - 4). (ID). May be repeated for a maximum of 9 credits. May be elected more than once in the same term.

This course is intended to house Interdisciplinary courses that do not fit into any specific department or courses taught by non-LSA faculty from various units across the university.

**ALA 370. Applied Liberal Arts Topics**  
*Students cannot enroll if they have already completed 4 instances of ALA and/or UC 370. (Prerequisites enforced at registration.) (1 - 4). May be elected four times for credit. May be elected more than once in the same term.*

This course examines select topics in applied liberal arts.

**ALA 375. Skills for College, Career, and Beyond**  
*Students cannot enroll if they have already completed UC 370, Topic Title Skills for College, Career, and Beyond. (Prerequisites enforced at registration.) (3). May not be repeated for credit.*

This class will give you the chance to hone several skills that will be very helpful to you in coming years. We will work on everything from preparing for a job search and considering how to communicate what you have to offer to potential future employers, to skills that are useful in a wide variety of educational and career settings.

**ALA 410. Organizing for Global Justice**  
*(2). May not be repeated for credit.*

Sustainable social change requires strong cross-group collaboration and coalition-building, as exemplified by social movements, multi-national coalitions convened to address pressing issues, and even organizations such as the United

Nations. Through this course, members of the GSP Advisory Council will explore organizing strategies for driving global change, through examples from historical and current world issues.

**ALA 421. Creating Inclusive Communities**

*Consent of instructor required. (2). (EXPERIENTIAL). May be repeated for a maximum of 4 credits. Offered mandatory credit/no credit.*

Using the social psychology of intergroup relations as the framework, this course prepares undergraduates who will serve as residence hall staff the following year to create effective multicultural communities within the residence halls.

**ALA 429 / PSYCH 411 / SOC 471. IGR Senior Capstone: Social Justice in the Real World**

*Consent of instructor required. UC/SOC 320/321/PSYCH 310/311 or CASC Foundations and 2 related courses in social movements or activism. (3). May not be repeated for credit.*

The focus is on strategies for social justice and change. The class explores alternative meanings of social justice, theories and strategies for social change, roles of change agents in traditional careers, the assessment of personal skills and resources, discussions with local social justice advocates and practice in multicultural teamwork.

**ALA 470. Applied Liberal Arts Topics**  
*Students cannot enroll if they have already completed 4 instances of ALA and/or UC 370. (Prerequisites enforced at registration.) (1 - 4). May be elected four times for credit. May be elected more than once in the same term.*

This course examines select topics in applied liberal arts.

**ALA 471. Leadership and Facilitation in Community Building**

*Consent of instructor required. (1 - 3). May not be repeated for credit.*

This course will be offered to undergraduate Residence Education staff members who are facilitating ALA 171 (Making the Most of Michigan) in the five First-Year Experience (FYE) residence communities. ALA 471 will focus on theories of student identity development and best practices of group facilitation, each of which will assist them in providing effective leadership for ALA 171 and other community building initiatives in their residence hall and apartment communities.

**ALA 472. Advanced Leadership and Facilitation in Community**

*Consent of instructor required. (1 - 3). May be repeated for a maximum of 8 credits.*

This course will be offered to undergraduate Residence Education staff members who are facilitating ALA 171 in the five First-Year Experience residence communities. ALA 472 will focus on theories of student identity development and best practices of group facilitation, each of which will assist them in providing effective leadership for ALA 171.

**American Culture (AMCULT)**

**AMCULT 100. What is an American?**

*(4; 3 in the half-term). (SS). (R&E). May not be repeated for credit.*

This course challenges students to rethink their understanding of American citizenship

through important readings on race, class, ethnicity, immigration, gender, sexuality, liberty and equality.

**AMCULT 102. First Year Seminar in American Studies**

*Enrollment restricted to first-year students, including those with sophomore standing. (3). (SS). May not be repeated for credit.*

This course is designed to introduce students to a wide variety of topics and issues in American Studies in a seminar format from a Social Science perspective. It will enable students to have contact with regular faculty in a small-class experience and to elicit their active participation in the topics under discussion.

**AMCULT 103. First Year Seminar in American Studies**

*Enrollment restricted to first-year students, including those with sophomore standing. (3). (HU). May not be repeated for credit.*

This course is designed to introduce students to a wide variety of topics and issues in American Studies in a seminar format from a Humanities perspective. It will enable students to have contact with regular faculty in a small-class experience and to elicit their active participation in the topics under discussion.

**AMCULT 201. American Values**

*(4; 3 in the half-term). (HU). (R&E). May not be repeated for credit.*

**AMCULT 202 / DIGITAL 202. Digital Culture**

*(4; 3 in the half-term). (ID). May not be repeated for credit. No credit granted to those who have completed or are enrolled in ENGLISH 280 or SAC 202.*

This course explores how digital technologies and practices have shaped contemporary culture and cultural production, focusing on the relationships of

power through the lens of race, class, gender, and sexuality.

**AMCULT 204. Themes in American Culture**

(3 - 4; 3 in the half-term). (HU). May be elected four times for credit. May be elected more than once in the same term.

This course is intended for first year students, sophomores and juniors as specific illustrations of the issues raised and the approaches used by American Studies scholars. It is an interdisciplinary approach to a social, cultural, or literary theme in American Culture.

**AMCULT 205. American Cultures**

(3 - 4; 3 in the half-term). (HU). May not be repeated for credit.

Topics and approaches of American Studies scholars.

**AMCULT 208. Post World War II American Sub-Cultural Movements: Beatniks, Hippies, and Punks**

(3). (SS). May not be repeated for credit.

This course looks at the beatnik, hippie, and punk movements in America to introduce the concepts of sub- and counter -cultures, issues of cultural diversity, and the function of such groups as folk cultures. By tracing the history of each group the course investigates how these twentieth-century American secondary cultures responded to the traditional, or dominant, culture. We also consider how each group, despite radical appearances, drew upon a host of traditional cultural tools and processes to create their own communities.

**AMCULT 209. History of American Popular Music**

(3). (HU). May not be repeated for credit.

America has never been without popular music, a form that expresses our deepest

collective desires and our most transparent sentiments. This course traces the history of American Popular Music from its earliest days through contemporary genres.

Students listen to, watch, and analyze popular music in and from its context, styles, and forms.

**AMCULT 212. Motor Nation: Car Cultures, Race, and Gender**

(4; 3 in the half-term). (HU). May not be repeated for credit.

This class analyzes and studies the history and evolution of cars and car cultures in the United States and its influence in Michigan. It uses the intersections of gender, class, race, and historicity as points of departure to understand the unique relationship that America has with cars, the car industry and its developments. This class explores cars not just as transportation devices, but rather as a system of meanings and values, and as an everyday ubiquitous cultural product influenced by economic, political, and social forces.

**AMCULT 213 / LATINOAM 213.**

**Introduction to Latina/o Studies**

(3 - 4). (ID). (R&E). May not be repeated for credit.

An interdisciplinary overview of the historical experiences, contemporary community issues, and cultural and artistic expressions of Latina/os in the United States.

**AMCULT 214 / ASIANPAM 214.**

**Introduction to Asian/Pacific American Studies**

(3 - 4). (HU). (R&E). May not be repeated for credit.

An overview of the historical experiences, contemporary community issues, and cultural and artistic expressions of Asian Americans and Pacific Islander Americans in the U.S.

**AMCULT 215 / ARABAM 215 /  
MIDEAST 275. Introduction to Arab-  
American Studies**

(4). (HU). (R&E). *May not be repeated for credit.*

This course is an introductory survey to Arab-American studies.

**AMCULT 217 / NATIVEAM 217.  
Introduction to Native American Studies**  
(4; 3 in the half-term). (HU). *May not be repeated for credit.*

This course will give students an overview of many aspects of Native-American culture, including Pre-Columbian lifestyles and gender roles, religion, literature, Native-American identity, attempts and resistance to forced assimilation, and struggles for sovereignty. Themes of colonialism and its impact on Native Americans are featured throughout. The course emphasizes the diversity of Native-American communities, and seeks to broaden students' understanding of Native Americans beyond the image of Plains Indians on horseback. As the course name implies, the topics will be covered in a way that emphasizes breadth, rather than depth, whetting students' appetite for the advanced courses in these areas offered through the Program in American Culture.

**AMCULT 219. Survey of American  
Folklore**

(3). (HU). *May not be repeated for credit.*

This course surveys the unofficial culture of the American experience, with emphasis on oral literature, beliefs, and lifeways. Special sections deal with folk music, dance, and material culture. This course helps us understand what it is to be American and how we define this through our traditions and beliefs.

**AMCULT 221 / SOC 221. Unequal  
America: Understanding Social**

**Inequality**

(4; 3 in the half-term). (SS). *May not be repeated for credit.*

The United States has higher inequality - the gap between the rich and the poor - than any of the other industrialized democracies. Further, that gap has increased dramatically since 1980. This course examines inequality in U.S. society from a sociological perspective, incorporating insights from other fields, including demography, psychology, and economics. We will explore contemporary debates and issues, with an emphasis on research evidence. A goal of the course is to encourage students to critically evaluate their own assumptions about the rich and the poor in U.S. society.

**AMCULT 222 / NATIVEAM 222.**

**Elementary Ojibwe I**

(3; 2 in the half-term). *May not be repeated for credit. May not be included in a minor in Native American Studies. F.*

The course will serve as an introduction to Anishinaabe language and culture. This course is for students who have no previous knowledge of the tribe as well as tribal members interested in learning more about their culture and language. Because Ojibwe is an endangered language, it is of utmost importance that we make sure the language is learned and used. This is a beautiful language with much to teach about living in this place. It deserves to be revitalized for future generations.

**AMCULT 223 / NATIVEAM 223.**

**Elementary Ojibwe II**

*NATIVEAM 222 or AMCULT 222; with a minimum grade of C- or better.*

*(Prerequisites enforced at registration.) (3; 2 in the half-term). May not be repeated for credit. May not be included in an academic minor in Native American Studies. W.*

**AMCULT 225. Space, Story and the  
American Self**

*(4; 3 in the half-term). (HU). (R&E). May not be repeated for credit.*

This course explores historic and cultural contexts of "what is an American: by bringing together narrative texts and architectural spaces that represent, interrogate, and complicate concepts of national identity; e.g., how race, gender, class, and ethnicity determined who did or did not belong in the idealized American social space.

**AMCULT 226 / AAS 236 / HISTORY 226 / LACS 226 / LATINOAM 226. The Latin Tinge: Latin Music in Social Context in Latin America and the U.S.**  
*(4; 3 in the half-term). (HU). (R&E). May not be repeated for credit.*

This course introduces key Latin musical styles, recordings, and musicians. It requires extensive listening and musical analysis, and develops these historical themes: 1) the origins and development of Afro-diasporic musical styles: 2) the interplay between nationalism and popular music: and 3) international musical flows shaped by Atlantic colonialism, commercial markets, and labor migration.

**AMCULT 230 / HISTART 230. Art and Life in 19th-Century America**  
*(3). (HU). May not be repeated for credit.*

This lecture/discussion class surveys painting, sculpture, architecture, and the visual and material culture of everyday life. It examines the impact of industrialization, Westward expansion, international art movements, and the rise of middle-class taste. Assignments include museum visits, readings in historical sources and recent critical interpretations, and original research.

**AMCULT 231. Visual & Material Culture Studies**

*(3 - 4; 3 in the half-term). (HU). May not be repeated for credit.*

The purpose of this course is to establish a vocabulary and methods for scholarly work in Visual Culture and Material Culture. Students will be asked to interrogate the meanings in and uses of photography, public art, advertising, illustration, architecture, industrial design, film, etc... as these fundamental elements of the visual terrain of the United States construct and convey ideas about "America" and "Americanness."

**AMCULT 232 / ENGLISH 282 / NATIVEAM 232. Native American Literature**  
*(4; 3 in the half-term). (HU). (R&E). May not be repeated for credit.*

This course surveys the history of Native American writing and oratory in the English language from the late eighteenth century to the present. Texts are situated to their historical, cultural, and political contexts, so this course also serves as a basic introduction to American Indian history, policy and law.

**AMCULT 233 / WGS 233. Genes and Society: Comparative and International Perspectives**  
*(3). (ID). May not be repeated for credit.*

This course explores genes and society from a global perspective including case studies from Iceland, Argentina, Cyprus, Germany, India, United States and China. Students learn about historical and contemporary perspectives and think critically about the medical benefits and moral quandaries generated by rapidly advancing genetic knowledge and technologies.

**AMCULT 234 / ASIAN 232. Zen Masters, Dharma Bums, and Drag**

### **Queens: Buddhism in America**

(3). (HU). *May not be repeated for credit.*

In this course we will consider the various ways Buddhism was and is transmitted to this country and how Buddhist traditions have taken shape within the contexts of colonialism, globalization, and distinctly American philosophical and cultural values. We will be looking at a wide range of sources, including novels, Buddhist teachings, popular culture, contemporary scholarship, and films. All are welcome. No previous experience necessary.

### **AMCULT 235 / ARABAM 235 / WGS 235. From Harems to Terrorists: Representing the Middle East in Hollywood Cinema**

(4). (HU). (R&E). *May not be repeated for credit.*

An overview of representations of Arabs and Arab-Americans in Hollywood cinema over the last century. Course traces a shift in stereotypes from the rich Arab sheik with a harem to the Arab terrorist, examining the connection between representations and the historical-political moment in which they are created, from European colonialism to 9/11.

### **AMCULT 237 / HISTART 237 / RCHUMS 237. On the Margins of the Art World - Self-Taught Artists in the U.S.**

(3). (ID). *May not be repeated for credit.*

This course surveys a broad range of artists variously known as "Outsider", "Self-Taught", or "Folk" artists. In addition to exploring these artists' work, this course explores boundaries between Fine Art and other creative practices, and explores broader issues regarding creativity, marginality, art, and culture.

### **AMCULT 239 / WGS 239. Gender, Sexuality, and Health in**

### **America**

(3). (ID). *May not be repeated for credit.*

This course explores gender, sexuality, and health in America over time and in terms of contemporary issues and controversies.

### **AMCULT 240 / WGS 240.**

#### **Introduction to Women's Studies**

(4; 3 in the half-term). (HU). (R&E). *May not be repeated for credit.*

### **AMCULT 241 / HISTORY 214. Health, Biology, and Society: What is Cancer? (3 - 4). (ID). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in BIOLOGY 241.**

This course explores the question "What is Cancer?" from the natural sciences, social sciences, and the humanities, and seeks to educate and train students in a multidimensional and holistic understanding of health and society. One goal of the course is to provide an integrated overview of how scholars in various fields approach broad and complicated topics.

### **AMCULT 242 / WGS 242.**

#### **Gender Violence in a Global Context**

(4). (SS). (R&E). *May not be repeated for credit.*

Students will study various human rights debates related to racial, sexist, and homophobic violence on a global scale. Course themes include: human trafficking; law enforcement and criminal justice-based violence; armed conflict and war; medicalized violence; and socio-economic violence. Students will learn to apply course material to their analysis of and involvement in the world around us. Course materials draw upon several disciplines ranging from anthropology and sociology to cultural studies, literature, and film and incorporate scholarly studies as well as

policy, advocacy, and community-based based publications and reports.

**AMCULT 243 / LATINOAM 243 / WGS 243. Latina Women in the U.S.**  
(3). (HU). *May not be repeated for credit.*

This course will serve to introduce the study of gender, culture, and identity among Latinas in the U.S. It will grapple with the cultural forces that have historically created and re-created Latina identities.

**AMCULT 244 / HISTART 244. Art of the American Century (1893-1968)**  
(3). (HU). *May not be repeated for credit.*

This lecture class surveys the artistic, visual, and material world of the United States from its rise as a world power in the 1890s through the questioning of the American Dream in the 1960s. Class discussions introduce fundamental concepts and skills of art history while examining challenging interpretive readings. All students welcome

**AMCULT 245 / JUDAIC 245. Jews and Other Others**  
*Not available to students who have completed AMCULT 211 or JUDAIC 218 when taught with the topic "Jews and Other Others" (Topic #1). (Prerequisites enforced at registration.) (3 - 4). (HU). May not be repeated for credit.*

In this class, we'll look at the ways in which Jewish-Americans have shaped and been shaped by their contacts with other marginalized social groups: Latinos, African-Americans, Asian-Americans, gays and lesbians, among others. Classes will consider some historical backgrounds, but will mainly be focused on the films, photographs, music and especially literature in which these interactions took place.

**AMCULT 248 / ARABAM 248. Arab America: Art, Cultural Politics, and Activism**  
(3). (HU). *May not be repeated for credit.*

This class explores the links between artistic practices, the mobilization of various concepts of "culture," and activism within Arab American communities. We consider works of visual art, performance, comic art, film, spoken word poetry, and music. We also examine the use of creative work in the act of protest.

**AMCULT 263 / HISTORY 262. The American South**  
(4; 3 in the half-term). (SS). (R&E). *May not be repeated for credit.*

This course explores race, culture, and "Southernness" in the twentieth century American South. We consider Southern identities in relation to historical events (such as segregation, the black freedom struggle, New Deal economics, recent Latin American migrations) and cultural elements (such as music, food, religion, sports). Throughout the course, we also pay attention to how the region's racial and cultural history has been shaped by gender, class, nation, and ethnicity.

**AMCULT 267 / AAS 267 / HISTORY 267. Religion in the Making of African America**  
(3). *May not be repeated for credit.*

This undergraduate course studies the historical development of African American religion. The course begins with discussion of the faith systems created and adapted in transatlantic slavery. The lectures and interdisciplinary reading assignments examine the multiple evolutions of religious thought and practice among African descended communities in the 19th and 20th centuries. The course examines the U.S. contexts of African American religious



culture in their historical relationships with the Caribbean, South America and Africa. The course pays especial attention to the influence of religion in the overlapping affiliations of nation and diaspora.

**AMCULT 270 / HISTORY 270. Religion in America**

(4). (HU). *May not be repeated for credit.*

A one-term survey of religious ideas, practices, and institutions in American history from the colonial period to the twentieth century.

**AMCULT 273 / AAS 273. The Southern Novel in Historical Context**

(3). (R&E). *May not be repeated for credit.*

Focusing on five classic southern novels, this course will examine how history and literature can illuminate each other, particularly in matters of race and race relations. Readings will include works by Harper Lee, Zora Neale Hurston, William Faulkner, Dames Dickey, and Alice Walker, while in-class lectures will address Southern literary history and the history of the South during the turbulent decades of the 1930s through the 1970s. We will also focus on the authors' lives and the ways in which they created works of lasting significance out of the raw materials of their experiences.

**AMCULT 277 / ASIAN 277. From Truman to Trump: Introduction to US-Korea Relations**

(4). (HU). *May not be repeated for credit.*

This course provides an overview of the relations between the US and the two Koreas from the end of WWII to the present by focusing on cultural and material history. Course materials will be drawn from fiction, film, music, television, sports, fashion, and architecture.

**AMCULT 284 / HISTORY 284. Sickness and Health in Society: 1492 to the Present**

*First-year students must obtain permission of the instructor. (3 - 4; 3 in the half-term). (SS). May not be repeated for credit.*

This course examines the social and medical factors responsible for sickness and health, and the impact of disease upon society and the medical profession.

**AMCULT 293 / WGS 293. 20th Century Writing by Women of Color**

(3). (HU). *May not be repeated for credit.*

In this class we explore the narrative practices of Latinas, African American, Native American, and Asian American women, paying special attention to the way in which their writing has given voice to their experiences as women of color. Over the course of the semester we consider the cultural, linguistic, and familial traditions that have informed their respective approaches to feminism, antiracism, and oppositional politics.

**AMCULT 295 / WGS 295.**

**Sexuality in Western Culture**

(3). (SS). *May not be repeated for credit.*

This is an introductory course on human sexuality and its role in Western culture. The focus is theories about sexuality, the history of sexual beliefs and practices, and the relationship of these beliefs and practices to other aspects of society such as the economy, the class system, gender roles, etc. Texts are drawn from literature, history, contemporary social theory, the Bible, and pornography.

**AMCULT 300. Practices of American Culture**

(3). (ID). *May not be repeated for credit.*

This course introduces interdisciplinary approaches to American studies. Students

will consider the role that media, politics, history, family, and community play in shaping their understanding of their place in the nation. As a group, we consider the nation's ever increasing diversity and the U.S.'s role in a global context.

**AMCULT 301. Topics in American Culture**

*(1 - 4). May be elected four times for credit. May be elected more than once in the same term.*

This course provides undergraduates the opportunity to explore a specific topic in American life in depth using an interdisciplinary approach.

**AMCULT 303. Race and Mixed Race**

*(4). (HU). (R&E). May not be repeated for credit.*

This course examines how conceptions of race and mixed race have been historically shaped through, law, science, and popular culture.

**AMCULT 304 / LATINOAM 304 / SOC 304. American Immigration**

*One introductory course in Sociology or American Culture. (4). (SS). (R&E). May not be repeated for credit.*

As America is a nation of immigrants, this course surveys the immigrant past of ethnic groups such as the Irish, Germans, Jews, Italians, Chinese, Japanese, Blacks, Puerto Ricans, Cubans, and Mexicans. Surveying these varied ethnic histories, we analyze them from contrasting theoretical perspectives on race and ethnic relations, theories of assimilation, internal colonialism, etc. We seek to understand what is unique to and shared among these experiences.

**AMCULT 308 / HISTORY 315.**

**American Constitutional History**

*Students should have a good general*

*knowledge of United States History, such as that acquired in HISTORY 260 and 261, or equivalent rigorous high school history courses. (4; 3 in the half-term). (SS). (R&E). May not be repeated for credit.*

From the origins of popular sovereignty to today's struggles for equality, this course investigates constitutional thought and activity in America. It examines constitutional amendments, Supreme Court cases, and political struggles (Revolution, the Constitutional Convention and ratification, Civil War, New Deal, Civil Rights era, Immigration, War on Terror), that have affected how "the people" are constituted. Readings will include a large share of primary sources.

**AMCULT 310. Topics in Ethnic Studies**

*(3). (SS). May be repeated for a maximum of 6 credits. May be elected more than once in the same term.*

This course serves as a 300-level social science course in ethnic studies the content of which varies from term to term.

**AMCULT 311. American Culture and the Humanities**

*(1 - 4). (HU). May be elected four times for credit. May be elected more than once in the same term.*

This course serves as a 300-level humanities course in ethnic studies the content of which varies from term to term.

**AMCULT 313 / ANTHRCUL 314 / LATINOAM 313. Cuba and its Diaspora**

*(3). (R&E). May not be repeated for credit. F.*

This course examines Cuban history, literature, and culture since the Revolution both on the island and in the United States Diaspora. Through political and cultural essays, personal narratives, fiction, poetry, drama, and visual art, we will seek a

comprehensive and diverse view of how Cubans and Cuban-Americans understand their situation as people of the same nation divided for thirty-five years by the Cold War, revolution, and exile.

**AMCULT 315 / HISTORY 377 / LATINOAM 315. History of Latina/os in the U.S.**

*(3 - 4). (R&E). May not be repeated for credit. No credit granted to those who have completed or are enrolled in AMCULT 312 or HISTORY 312.*

This course is an exploration of the history and culture of Latina/os in the U.S. from the colonial era to the present. The diversity among groups that make up the Latina/o population of the U.S. will be examined.

**AMCULT 320 / JUDAIC 320 / MIDEAST 380. The Jewish Graphic Novel**

*(3). (HU). May not be repeated for credit.*

Are the Jews the people of the graphic book? Can the Bible be rendered as comics? Did Jewish immigrants invent American superheroes? This seminar explores the poignant and oftentimes subversive ways in which American, European, and Israeli graphic narratives reconfigure canonical Jewish texts and address pivotal events in twentieth-century Jewish history.

**AMCULT 321 / PSYCH 325. Detroit Initiative**

*One of the following: PSYCH 111, 112, 114, or 115. (1 - 4). (EXPERIENTIAL). May be elected three times for credit. A total of six credits of PSYCH letter-graded experiential courses may be counted for the Psychology major. PSYCH 325 must be taken for at least three credits to count as an experiential lab in the Psychology major. No more than 6 credits of directed readings/internships may be counted toward the American Culture major.*

In this experiential field course students are assigned to work with community-based organizations on a variety of community education projects. Internships are supervised by the instructor and program staff.

**AMCULT 322 / NATIVEAM 322.**

**Intermediate Ojibwe I**

*NATIVEAM 223 or AMCULT 223; with a minimum grade of C- or better.*

*(Prerequisites enforced at registration.) (3; 2 in the half-term). May not be repeated for credit. F.*

The course will serve as further introduction to Anishinaabe language and culture. Because Ojibwe is an endangered language, it is of utmost importance that the language is learned and used. This is a beautiful language with much to teach about living in this place. It deserves to be revitalized for future generations. After completing AMCULT 322 students should be able to use Ojibwe to: -- Create and respond to simple and compound statements and questions. Understand 500 - 1000 words. -- Understand some idiomatic phrases. -- Express detailed descriptions of events. -- Describe actions, people, places and things using complete sentences. -- Be able to write using standardized orthography. -- Understand the major contemporary cultural and political issues of the tribes of the Great Lakes.

**AMCULT 323 / NATIVEAM 323.**

**Intermediate Ojibwe II**

*NATIVEAM 322 or AMCULT 322; with a minimum grade of C- or better.*

*(Prerequisites enforced at registration.) (3; 2 in the half-term). (Lang Req). May not be repeated for credit. W.*

**AMCULT 324 / ASIANPAM 324 / ENGLISH 381. Asian American Literature**

*(3). (HU). May not be repeated for credit.*

This course considers a range of topics in the study of Asian American literature. It raises questions concerning the canon of texts to be studied, the cultural construction of Asian American literature, race and ethnicity in America, and the ways in which these texts challenge and expand our understanding of American literature.

**AMCULT 325 / ASIANPAM 325 / ENGLISH 388. Pacific Literary and Cultural Studies**

(3). (HU). *May not be repeated for credit.*

This course will introduce students to major authors and texts of Pacific and Pacific Islander American literature. We will attend to issues of representation, form and genre, identify, history, social and political movements, gender, sexuality, class, and race.

**AMCULT 326 / COMM 326. American Magazines**

(4; 3 in the half-term). (HU). *May not be repeated for credit. No credit granted to students who have completed AMCULT 250.*

This class examines past and present magazines in the United States, and explores the way in which they provide a window into American history and the development of communications media. It includes both direct study of magazines themselves and secondary readings.

**AMCULT 327 / ENGLISH 387 / LATINOAM 327. Latina/Latino Literature of the U.S.**

(3). (HU). *May not be repeated for credit. Taught in English.*

This course, taught in English, considers the relationships between Latino/a literary productions and the social conditions and possibilities of its production. A variety of topics are addressed in the study of such

Latino/a literatures of the US as Chicano/a, Puerto Rican, and Cuban American.

**AMCULT 328 / ENGLISH 382 / NATIVEAM 328. Studies in Native American Literature**

(3). (HU). *May not be repeated for credit.*

This course considers a range of topics in the study of native American literature. It raises questions concerning the canon of texts studied, the cultural construction of ethnicity in America, and the ways in which these texts challenge and expand our understanding of American literature.

**AMCULT 330 / ARABAM 330. Camels, Kabobs, and Kahlil Gibran: Arab American Cultural Studies**

(3 - 4). (HU). *May not be repeated for credit.*

Camels, Kabobs, and Kahlil Gibran investigates Arab American cultural identity through the objects, events, and institutions that have helped to create and maintain Arab American "culture" since the late 19th century. Some of the driving questions of the course are: Is there a specific Arab American "Arabness"? Why is ethnic food an important area of analysis? How and why does Arab American cultural identity change?

**AMCULT 333 / NATIVEAM 333. Green Indigeneity**

*Not available to students who have completed AMCULT 311 (Topic #11) or ENGLISH 317 (Topic #33) when taught with the topic "Green Indigeneity". (Prerequisites enforced at registration.) (3 - 4). (HU). May not be repeated for credit.*

This course examines environmental issues as they engage, relate to, and contradict with indigenous belongings to land and place in the Pacific Islands and beyond. We will examine the histories of colonialism and imperialism that set the stage for

contemporary formations militarization, tourism, national parks, and genetically modified organisms, issues that engage both questions of sustainability and indigenous political sovereignty.

**AMCULT 334 / COMM 334 / FTVM 334. Race, Gender, Sexuality and U.S. Culture in Video Games**

*(4; 3 in the half-term). May not be repeated for credit.*

This course examines how video games function as a window into U.S. race relations. We will study the history, theory, and practice of video games in the U.S. with particular attention to racial stereotyping, user demographics, diversity of the industry, and racial conflict in shared world and social games.

**AMCULT 335. Arts and Culture in American Life**

*(4; 3 in the half-term). (HU). May not be repeated for credit. F.*

This course will explore ways in which arts and culture constitute and reflect American life through different kinds of representations and narrative forms.

**AMCULT 337. A Survey of American Blues Music**

*(3). (HU). May not be repeated for credit.*

This course focuses on blues a musical influence on many other forms and styles -- jazz, rock, and roll, etc -- as well as the socio-cultural impact that the blues have had on American society. We will examine the history of the music, its associated literature, and postmodern mythology.

**AMCULT 340 / AAS 340. A History of Blacks in American Film**

*AAS 201. (3). May not be repeated for credit.*

**AMCULT 341 / HISTORY 343. Rise of the Corporation**

*(3). (SS). May not be repeated for credit.*

This course examines the historical development of the American corporation, from its origins in the sole proprietorship, firm and chartered company of the 17th and 18th centuries through the rise of corporation America in the 19th century to challenges to corporate dominance towards the end of the 20th century. It highlights major themes in the development of corporate America: evolving entrepreneurship, emergent capitalism, economic growth, technological change, capital/labor relations, and consumer responsiveness.

**AMCULT 342 / HISTORY 368 / WGS 360. History of the Family in the U.S.**

*(4; 3 in the half-term). (ID). (R&E). May not be repeated for credit.*

An interdisciplinary course providing perspective on the contemporary family by studying its historical development. The course includes consideration of changing gender roles; sexuality; childrearing; work patterns; race, ethnicity and class; the changing role of state in family relations.

**AMCULT 345. American Politics and Society**

*(3). (SS). May not be repeated for credit.*

This course will look closely at some of the major issues facing contemporary America from multiple disciplinary perspectives in the social sciences. It will offer a unique, interdisciplinary approach to contemporary American society and politics.

**AMCULT 346 / DIGITAL 346 / FTVM 346 / GERMAN 346. Media Matter: From Print to Screen Culture**

*(3). (HU). May not be repeated for credit.*

This course explores the histories of writing, photography, radio, film, television, and the computer in order to gain a firmer understanding of how technology shapes culture, politics, and personal identity in the German-speaking world and beyond.

**AMCULT 347 / DIGITAL 347. Politics of Code**

*(3 - 4). (ID). May not be repeated for credit.*

This course allows students to think through the concept of "code," focusing on how codes carry politics and how politics determine and define relationships of power.

**AMCULT 348 / HISTORY 346. History of American Radicalism**

*(4; 3 in the half-term). (SS). May not be repeated for credit.*

Starting with abolitionism and early women's rights, this course examines 150 years in the development of a modern Left in the U.S., highlighting labor-based radicalism as well as militant protest by people of color, feminists, antiwar activists, disaffected youth, and other liberation advocates of the latter 20th century, culminating with recent "anti-globalization" activism.

**AMCULT 352 / ASIANPAM 352. Asian/Pacific Islander American Cultural Performance**

*(4; 3 in the half-term). (HU). May not be repeated for credit.*

Critical examination of collegiate culture night shows, focusing on Asian/Pacific Islander American communities, and including processes of preparation and production as well as the content of these shows. Discussion of the multiple levels of meaning and representation that operate in these shows.

**AMCULT 353 / ASIANPAM 353 / HISTORY 454. Asians in American Film and Television**

*(4; 3 in the half-term). (ID). (R&E). May not be repeated for credit.*

This course will examine how film and television have reflected and shaped Asian culture and identity in American history. Through screenings of feature films and documentaries produced by Asian Americans and non-Asians, we will study the shifting representations of Asians across historical periods from the 19th century to the present.

**AMCULT 354 / ENGLISH 312 / ENVIRON 354. Camp Davis: History and Literature of the Rockies**

*Consent of department required. (3 in the half-term). (HU). May not be repeated for credit. Su at Camp Davis, Wyoming. May not be taken pass/fail.*

This course is taught onsite at the University of Michigan's Camp Davis Geology field station south of Jackson Hole, Wyoming. It examines a range of human experiences and expressions of place, centered on the area of Jackson Hole, but extending in conceptual terms across the central and northern Rocky Mountain region and to the American West as a whole.

**AMCULT 355. Topics in American Creative Expression**

*(1 - 3). (CE). May be repeated for a maximum of 6 credits. May be elected more than once in the same term.*

This course is in studio and performing arts.

**AMCULT 358 / DIGITAL 358. Topics in Digital Studies**

*(1 - 4). (ID). May be elected twice for credit. May be elected more than once in the same term.*

This course provides undergraduates the opportunity to explore a specific topic in Digital Studies in depth using an interdisciplinary approach.

**AMCULT 359 / ASIANPAM 359. South Asian Diaspora in America**

*Not available to students who have completed AMCULT/ASIANPAM 311 when taught with the topic "South Asian Diaspora in America". (Prerequisites enforced at registration.) (3). (HU). May not be repeated for credit.*

This course teaches students about the long history of migration of people from South Asia to North America, from the earliest settlers who arrived in the 19th century to the contemporary moment. Students also read how writers, filmmakers, and other artists have explored the experiences of diaspora and immigration.

**AMCULT 360 / DIGITAL 360. Radical Digital Media**

*Not available to students who have completed AMCULT 358 Topics in Digital Studies when taught with the topic "Radical Digital Media" (topic #1) or AMCULT 405 Topics in American Culture when taught with the topic "Radical Digital Media" (topic #31). (Prerequisites enforced at registration.) (3). (HU). May not be repeated for credit.*

Do digital technologies advance or thwart political action? Are forms of radical refusal still possible in network culture? This course explores the seismic shifts digital media has produced in our conceptions of corporate power, radical art, individual agency, and collective action.

**AMCULT 361 / EDUC 395 / ELI 395 / LATINOAM 361 / LING 391 / RCSSCI 395. Principles and Practices of Teaching ESL in Migrant Communities**

*(3). (R&E). (EXPERIENTIAL). May be elected three times for credit.*

In this service-learning course students explore the language, educational, health, and legal issues facing migrant farmworkers in southeast Michigan. As students come to understand the needs of these communities, they learn and practice methods and techniques for teaching ESL to this mixed-proficiency, primarily Spanish-speaking population.

**AMCULT 362 / EDUC 396 / ELI 396 / LATINOAM 362 / LING 396 / RCSSCI 396. Migrant Community Outreach and ESL Teaching Practicum**

*ELI 395; completed with a minimum grade of C or better. (Prerequisites enforced at registration.) (2 - 3). (EXPERIENTIAL). May be elected three times for credit.*

In this Summer half-term course students practice teaching English to migrant farm workers in southeast Michigan. Students also help provide outreach services to camp residents such as pesticide training, interpreting, and translating. Central to the course is extensive reflection on the teaching experience, both in discussions and written assignments.

**AMCULT 363 / ASIANPAM 363 / WGS 363. Asian/Pacific Islander American Women**

*(3). May not be repeated for credit.*

This is an upper-division, interdisciplinary course focusing on the experiences of Asian American and Pacific Islander American women in the United States from historical, anthropological, sociological, and psychological and literary perspectives.

**AMCULT 364. U-M in Incarcerated America**

*Open to all undergraduates with second-year standing or above. (Prerequisites*

*enforced at registration.) (3). (SS). May not be repeated for credit.*

A study of mass incarceration, movement toward decarceration, and the potential for institutions of higher education to contribute to solutions and healing.

**AMCULT 365. AIDS and America**

*Not available to students who have completed AMCULT 206 when taught with the topic "AIDS in America" (Topic #1). (Prerequisites enforced at registration.) (3). (SS). May not be repeated for credit.*

AIDS and America studies the ways HIV/AIDS has developed in the United States and elsewhere in the world. We also examine the U.S. as an actor in the global epidemic.

**AMCULT 366 / HISTORY 353 /**

**WGS 366. Sex and Sexuality in U.S. Popular Culture**

*(3). (HU). May not be repeated for credit.*

We will explore how changing ideas about sex, sexuality, and gender appeared in certain types of twentieth-century popular culture. As a group, we will learn to interpret media, such as movies or television, as historical texts that provide insight into past notions about sex in the United States.

**AMCULT 367 / HISTORY 367 /**

**NATIVEAM 367. American Indian History**

*(4; 3 in the half-term). (SS). (R&E). May not be repeated for credit.*

This course will survey the social, cultural and political history of American Indians. The course explores the dynamics of Native American history from conquest to the present mostly within the boundaries of the United States.

**AMCULT 369 / HISTORY 369. The History of U.S. Mass Culture From Minstrelsy to Hip Hop**

*(4; 3 in the half-term). (HU). May not be repeated for credit.*

This course is an intensive historical examination of U.S. mass culture over the past two centuries. We begin with the very first "culture industries" of the 1820s followed by the expansion and evolution of U.S. commercial entertainment through the dawn of electronic media and globalization. The approach is deliberately comparative, cutting across many different eras and media, from museum exhibitions, theater, dance, and circuses to radio, television, film, and the Internet.

**AMCULT 370 / DIGITAL 370. Digital Bodies: Performance After the Internet**

*Not available to students who have completed AMCULT 405 Topics in American Culture when taught with topic "Digital Bodies: Performance After the Internet" (topic #29). (Prerequisites enforced at registration.) (3). (HU). May not be repeated for credit.*

What happens to a body when it goes online? How have digital technologies recast everyday life as a performance? This course explores how new technologies structure performances of identity and social engagement, whether performances of "self" on social media or creative responses to surveillance.

**AMCULT 371 / HISTORY 371 / WGS 371. Gender and Sexuality in the US**

*Students will not receive credit for this course if they've taken HISTORY 328 with the title "Sex and Gender in U.S. History, 1600-2000" (topic ID #48). (Prerequisites enforced at registration.) (3 - 4). (HU). (R&E). May not be repeated for credit.*



This course will focus upon the experiences of American women, examining how constructions of gender, race, class, and sexuality have shaped women's lives. We will explore family structure, gender expectations, and cultural practices, and will look closely at intersections of gender, race, sexuality, and class and the role they play in the development of self-identity. The changing concepts of equality and difference, as employed by women and men in articulating gender relations, will serve as a theoretical framework for our examination. We will emphasize the diversity women's historical experiences by region as well as by social category, and will situate those experiences in the larger contexts of social, economic, and political change on local, national, and even global levels.

**AMCULT 372 / ASIANPAM 372. Hula - Creative Practice**

*Not available to students who have completed AMCULT 355 when taught with the topic "The Hula" (topic #1). (Prerequisites enforced at registration.) (3). (CE). May not be repeated for credit.*

An introduction to the performance rudiments of the Hawaiian hula tradition, as they are contextualized within a system of cultural expectations of behavior.

**AMCULT 373 / HISTORY 373 / NATIVEAM 373. History of the U.S. West**

*(4; 3 in the half-term). (HU). May not be repeated for credit.*

This course examines both the "place" and the "process" of the history of the U.S. West, a shifting region of the Native North America that was the object first of Spanish, French, and English imperial designs, then of U.S. expansionism, and finally a region with peculiarities to the

federal government, distinctive patterns of race relations, and a unique place in American cultural memory.

**AMCULT 374 / HISTORY 374. The Politics and Culture of the "Sixties"**  
*(4; 3 in the half-term). (SS). (R&E). May not be repeated for credit.*

The current debate over the Sixties and the history of that decade mirror the very essence of American Culture. This course will explore the era of the Sixties using a variety of methodologies and disciplinary approaches.

**AMCULT 375 / HISTORY 370 / WGS 370. Queer Histories of the United States, 1850 to the Present**  
*(4; 3 in the half-term). (SS). May not be repeated for credit.*

To teach queer history or to queer the teaching of history? This question- posed by historian John Howard- reflects the central teaching objectives of Queer Histories of the United States, 1850 to the Present. Course participants will survey the diverse social, political, cultural and economic histories of lesbian, gay, bisexual, transgender and queer (LGBTQ) communities in the United States from the middle of the nineteenth century through the early twenty-first century. Moreover, the instructor and students will collectively interrogate the historical production of categories of "deviancy" and "normalcy" within American life as it relates to certain acts, desires, identities and bodies. Course topics include but are not limited to the historical development of queer communities, homophile organizations, gay liberation politics, the histories of queer communities of color, the AIDS Crisis and related activism, transgender political communities, the role of federal and state law/policy in the production of heteronormativity and the movement for

marriage equality. This course utilizes lectures, discussions and writing assignments alongside interdisciplinary scholarship and primary source materials (including photographs, art, newspapers, memoirs, film and political ephemera).

**AMCULT 376 / AAS 384 / ENGLISH 384. Caribbean Literature**

*AAS 202. (3). (HU). May be repeated for a maximum of 6 credits.*

The course considers a range of topics in the study of Caribbean literature. It raises questions concerning the canon of texts to be studied, the cultural construction of Caribbean literature, race and ethnicity.

**AMCULT 379 / DIGITAL 379. Privacy, Politics, and Power**

*Not available to students who have completed AMCULT 301 when taught with the topic "Privacy, Politics and Power" (Topic #72). (Prerequisites enforced at registration.) (3). (HU). May not be repeated for credit.*

This course explores the concept of privacy through history as it applies to politics and power. We begin with privacy's origins, trace them through the contemporary era, and evaluate privacy's use in a digitally-networked world. Key themes we discuss include: the Internet, liberalism, race, citizenship, law, gender, and sexuality.

**AMCULT 380 / DIGITAL 380 / FTVM 380 / LATINOAM 380. Studies in Transnational Media**

*Prior coursework in Film Television, and Media, Communications (TV), or Latino Studies. Knowledge of Spanish is not required. (3). May not be repeated for credit. Taught in English.*

Drawing from writings in cultural theory and criticism in both English and Spanish. This course will examine national and transnational trends in Spanish and

Portuguese language TV, alternative video and cinema since WW II.

**AMCULT 381 / FTVM 381 / LATINOAM 381. Latinas/Latinos and the Media**

*Consent of department required. (3). (HU). May not be repeated for credit.*

This course examines the access and contributions of Latinas/os to the U.S. media from an historical perspective, with a culminating emphasis on the contemporary period. The cultural scope is pan-Latino, covering a range of genres and formats, from documentary to experimental film and television.

**AMCULT 383. Junior Honors Reading and Thesis**

*Consent of instructor required. Juniors only. (3; 2 in the half-term). (INDEPENDENT). May not be repeated for credit. F, W, Sp/Su, Sp, Su.*

**AMCULT 384 / ARABAM 384. Islamophobia**

*Not available to students who have completed AMCULT/ARABAM 311 when taught with the topic "Islamophobia" (Topic #27). (Prerequisites enforced at registration.) (3). (HU). May not be repeated for credit.*

This course examines the phenomenon of Islamophobia from several angles: policies and practices that justify the exclusion of Muslims from multicultural nations; case studies in the U.S. and Europe; and responses through community organizing and artistic forms.

**AMCULT 385 / HISTORY 335 / ISLAM 335 / LATINOAM 385. Immigration Law: Critical Approaches to Contemporary Issues**

*(3 - 4; 3 in the half-term). (SS). May not be repeated for credit.*

This course assists students to develop an informed analysis of current immigration debates through investigation of the legislative and social history of immigration since the late 1880s, with an emphasis on issues of race, gender, and sexuality. Students develop legal history research skills and become familiar with the kinds of arguments made in history, sociology, and law journals, as well as media, legislatures, and courts.

**AMCULT 387 / HISTORY 387 / JUDAIC 387. History of American Jews** (4; 3 in the half-term). (HU). May not be repeated for credit.

This course explores the history of American Jews from the colonial era to the 21st century, focusing on immigration, politics, cultural creativity, religious innovation, and the establishment of a diasporic community with ties to Jews throughout the world. The course asks how Jews resolved the tensions between being Jewish and American.

**AMCULT 388. Field Study**  
*Consent of instructor required. Sophomore standing. (1 - 4). (EXPERIENTIAL). May be repeated for a maximum of 8 credits. Offered mandatory credit/no credit.*

**AMCULT 389. Reading Course in American Culture**  
*Consent of instructor required. (1 - 4). (INDEPENDENT). May not be repeated for credit. No more than 6 credits of directed readings/internships may be counted toward the American Culture major. F, W, Sp/Su, Sp, Su.*

**AMCULT 398. Junior Honors Writing Workshop**  
*Consent of instructor required. Permission of a concentration advisor in American Culture. (1 - 3). May not be repeated for credit.*

**AMCULT 399. Race in America** (4; 3 in the half-term). (SS). (R&E). May not be repeated for credit.

This course examines how historical notions of race continue to haunt U.S. society. Students consider how racial ideologies originate, developed, and changed over time. They also ask what the meanings of race and ethnicity have to do with interconnected notions of gender, class, religion, sexuality and nationalism.

**AMCULT 405. Topics in American Culture** (1 - 4). May be elected four times for credit. May be elected more than once in the same term.

This course provides undergraduates the opportunity to explore a specific topic in American life in depth using an interdisciplinary approach.

**AMCULT 407. The History of American Folk Music: Culture, Politics, Music**  
*Consent of instructor required. (3). May not be repeated for credit.*

In this course we investigate the history of scholarly and popular attention to folk music in America. It will deal with much more than just the songs and musics of the vernacular (and popular) American cultural landscape.

**AMCULT 408 / MUSEUMS 408. Museums in the Digital Age: Technology, Media, Modernity**  
*Intended for advanced undergraduates pursuing Museum Studies and Digital Studies minors and related fields (art, architecture, design). Graduate students pursuing a certificate in the Museum Studies Program, graduate students in the School of Information. (3). May not be repeated for credit. Rackham credit requires additional work.*

This course develops perspectives for understanding and thinking about the potential impact of media and technology on museums. Historical intersections of museums, media and technology will provide points of reference for elucidating the particular uses and challenges offered by new media, digitalization, the Internet and mobile computing.

**AMCULT 410 / DIGITAL 410 / SI 410. Ethics and Information Technology**  
(4). *May not be repeated for credit.*

Applies an emergent philosophy of information to a variety of new technologies that are inherently social in their design, construction, and use. Learning modules include: social media interaction; remembering/forgetting; and game design ethics. By collaborating on building a wiki community, students explore ethical/unethical information behaviors and test information quality metrics.

**AMCULT 411 / WGS 411. Rednecks, Queers, and Country Music**  
*One course in Women's Studies or American Culture. (3). May not be repeated for credit.*

Queer identity is associated with urban, bourgeois, coastal lifestyles. Country music is linked to heterosexual white, rural, working-class, Southern, and Midwestern cultures and often to "redneck" bigotry. How has music that many people perceive as homophobic and racist become a medium for multicultural queer social and sexual exchange?

**AMCULT 412. Pre WWII American Blues: Roots, Context, Content**  
*Not available to students who have completed AMCULT 405 when taught with the topics "American Blues Music".*

*(Prerequisites enforced at registration.) (3). May not be repeated for credit.*

This course focuses on the pre-WWII history of American Blues Music. It addresses the socio-cultural impact that the blues have had on American society, discusses important blues artists, the cross-cultural history of the music, its associated literature, and the postmodern mythology that arose about it.

**AMCULT 420 / LATINOAM 420 / SPANISH 420. Latin American & Latino/a Film Studies**  
*Nine credits chosen from: SPANISH 279 and 399 or two RCLANG 324; and six credits chosen from SPANISH 279 and 399. (Prerequisites enforced at registration.) (3). May not be repeated for credit. Rackham credit requires additional work.*

Comparative survey of historical and theoretical development in Latin American and Latino/a audio visual media, with an emphasis on the cinema.

**AMCULT 425 / WGS 425. Feminist Practice of Oral History**  
*One course in WGS or AMCULT. (3). May not be repeated for credit. Rackham credit requires additional work.*

This course focuses on the theory and practice of collecting oral histories of women. We examine various theories and methods of conducting interviews, with a concentration on the feminist perspective. We also explore issues such as "insider-outsider" perspectives, relationships between the interviewer and interviewee, our role as "narrator," legal and ethical issues, the reliability of memory, and how the complex intersection of race, class, gender, and sexuality are reflected in women's life stories.

**AMCULT 433 / HISTART 431. Made in Detroit: A History of Art and Culture in**

**the Motor City**

*Upperclass standing; prior coursework in Art History, U.S. History, American Culture, or Urban studies, and permission of instructor. (3). May not be repeated for credit.*

This course examines modern art, architecture, music, and culture in the local context of Detroit's urban, social, and racial history in the twentieth century. Students undertake challenging readings in theories of modernity then apply them in Detroit through original research.

**AMCULT 437 / JUDAIC 437. Yiddish Culture in America**

*(3). (R&E). May not be repeated for credit. Rackham credit requires additional work.*

Course examines the rich and diverse creativity of immigrants from Eastern Europe which made New York the world center of Yiddish culture. It explores prose, poetry, theater, film, photography and visual arts, as well as politics and journalism, focusing on the ways of representing modernity through urban space.

**AMCULT 440 / HISTORY 440. American Thought and Culture Since 1940**

*(3). May not be repeated for credit. Rackham credit requires additional work.*

This course explores some of the most significant trends of intellectual life in the United States (and to an extent, trends in the "high" and "popular" arts as well) from around 1940 to the present. We begin as the Second World War had commenced in Europe and debate within the U.S. dwelled on whether this nation would enter that struggle. Two key sets of ideas accompanied that political debate: the meaning of democracy in relation to the newly "discovered" phenomenon of

"totalitarianism," and the nature of U.S. power in the world at large in the context and anticipated aftermath of war (or, the character of an "American Century").

**AMCULT 461 / ANTHRCUL 461 / LING 461 / NATIVEAM 461. Language, Culture, and Society in Native North America**

*(3). May not be repeated for credit.*

This course will explore how Native North American languages are used in relation to the historical circumstances, cultural practices and social settings of their speakers. Of particular concern is the interrelationship between linguistic practice and ideologies that can either promote or discourage the use (and maintenance) of these languages.

**AMCULT 462 / HISTORY 461. The American Revolution**

*(4; 3 in the half-term). May not be repeated for credit. Rackham credit requires additional work.*

An analysis of the causes, consequences and nature of the American Revolution.

**AMCULT 489. Senior Essay**

*Consent of instructor required. Senior concentrators and AMCULT 350. (3). (INDEPENDENT). May not be repeated for credit.*

**AMCULT 493. Honors Readings and Thesis**

*Consent of instructor required. Senior standing and a grade point average of at least 3.5 in Honors concentration. (1 - 3). May be repeated for a maximum of 6 credits. No more than 6 credits of directed readings/internships may be counted toward the American Culture major. Continuing Course. Y grade can be reported at end of the first-term to indicate work in progress. At the end of the second term of AMCULT 493, the final grade is*

*posted for both term's elections. F, W, Sp/Su, Sp, Su.*

**AMCULT 498. Capstone Seminar in American Culture**

*(3 - 4; 3 in the half-term). May be elected twice for credit. May be elected more than once in the same term.*

## **Anatomy (ANATOMY)**

**ANATOMY 541 / PHYSIOL 541 / PSYCH 532. Mammalian Reproductive Physiology**

*PHYSIOL 201 or PHYSIOL 502 or BIOL 225. (BS). May not be repeated for credit.*

An introduction to the mammalian reproductive physiology for PhD, MS, and senior undergraduate students who are considering a career in the biomedical sciences.

## **Anthropology, Archaeological (ANTHRARC)**

**ANTHRARC 180. First-Year Seminar in Anthropological Archaeology**

*Enrollment restricted to first-year students, including those with sophomore standing. (3). (SS). May not be repeated for credit.*

A small seminar designed to introduce first-year students to the theory and practice of anthropological archaeology. This will be accomplished by discussing topics of current interest to anthropology faculty who are conducting original research in archaeology. Emphasis will be on understanding how prehistoric material remains inform us about the economy, polity, and cosmology of ancient societies.

**ANTHRARC 181. Past Meets Present: Discovering Archaeology**

*(4). (SS). May not be repeated for credit.*

This course is designed to show undergraduate students how archaeological discoveries--old and new--help us to understand how the ancient past shapes our collective present.

**ANTHRARC 282. Introduction to Prehistoric Archaeology**

*(4). (SS). May not be repeated for credit.*

Basic principles and methods of archaeological research. Survey of prehistoric cultures in the Eastern and Western hemispheres from earliest times to the rise of high civilization.

**ANTHRARC 284. Aztec, Maya, and Inca Civilizations**

*(4). (SS). May not be repeated for credit.*

This course focuses on the rise and fall of the ancient civilizations of Latin America. Two major goals of the course are to expose undergraduates to an anthropological perspective and to a comparative perspective.

**ANTHRARC 285. Frauds and Fantastic Claims in Archaeology**

*(4). (SS). (R&E). May not be repeated for credit.*

Examines the prehistory and contact periods of the New World from the perspective of critical thinking, ethics, and racism. It evaluates each claim to explain cultural achievements - art, architecture, agriculture, etc. - on a case by case basis to demonstrate the accomplishments of Indians.

**ANTHRARC 287. The Rise and Fall of Mediterranean Civilizations**

*(4). (SS). May not be repeated for credit.*

Why do civilizations rise and fall? This course employs the ancient societies of the Mediterranean to address this question, with a focus on Greece. The Minoan and Mycenaean and Classical states of Greece are explored, as well as later empires, including the Roman and Ottoman empires.

**ANTHRARC 296. Topics in Archaeology**  
(3). (SS). May be repeated for a maximum of 12 credits. May be elected more than once in the same term.

The course covers a topic in archaeology in depth. The topic varies from term to term.

**ANTHRARC 381 / HISTART 382 / MIDEAST 338. Introduction to Egyptian Archaeology**  
(4; 3 in the half-term). (HU). May not be repeated for credit.

This course focuses on the material culture and disposition of archaeological sites in ancient Egypt and Nubia from c. 3200 BCE-285 ac. The logic and nature of both sacred and secular landscapes are explored, and specific sites, some well known (such as the extensive temple precinct at Karnak and the Meroitic pyramids).

**ANTHRARC 383. Prehistory: Africans**  
*Sophomore standing. (3). (SS). May not be repeated for credit.*

A functional and evolutionary examination of extinct cultural systems of Africa from the first appearance of cultural remains until circa A.D. 1600. Sub-Saharan Africa is emphasized.

**ANTHRARC 384 / MIDEAST 337. Ancient Mesopotamia: History and Culture**  
*Sophomore standing. (4; 3 in the half-term). (ID). May not be repeated for credit.*

Sumerian, Babylonian, and Assyrian civilization from the first cuneiform documents to the fall of the Neo-Babylonian empire; special attention to (1) the rise and nature of early Mesopotamian city-states; (2) Mesopotamian economics; (3) Mesopotamian law; (4) ethnic relations in Mesopotamia; (5) Mesopotamia and its neighbors - Egypt, Iran, Israel; (6) the collapse of Mesopotamian civilization.

**ANTHRARC 385. The Archaeology of Early Humans**  
*Sophomore standing. (3). (SS). May not be repeated for credit.*

Survey of evidence for the origins and evolution of stone age human cultures from the earliest sites in Africa (2 million years ago) to the origins of agriculture (10,000 years ago); discussion of techniques and methods used to identify and interpret ancient human cultures prior to the advent of civilization.

**ANTHRARC 386. Early Civilizations**  
*Sophomore standing. (4; 2 in the half-term). (SS). May not be repeated for credit.*

This course considers the long term development of pre-Columbian American civilization with particular focus on Mesoamerica and the central Andes. The major emphasis is on recent archaeological research which has illuminated the development of prehistoric chiefdoms, states, and empires.

**ANTHRARC 392. Archaeology Underwater**  
(3). (SS). May not be repeated for credit.

This course considers the techniques and potentials of underwater archaeology. Topics range from the technical questions of how to conduct normal archaeological activities such as site survey and excavation in the underwater environment, through to a

review of the varied applications of underwater archaeology on both shipwrecks and ancient inundated sites.

**ANTHRARC 394. Undergraduate Seminar in Archaeology**

*Consent of instructor required. ANTHRARC 282; and concentration in Anthropology. (3). May not be repeated for credit.*

Examination of the development of prehistoric and anthropological archaeology through readings and discussions of traditional research problems, outstanding site reports, and the works of major contributions to the field.

**ANTHRARC 398. Honors in Anthropological Archaeology**

*Senior standing. (Prerequisites enforced at registration.) (3). (INDEPENDENT). May be repeated for a maximum of 6 credits.*

For information about honors work in anthropology, see the Honors Program description preceding the listing of anthropology courses or consult with the honors concentration advisor.

**ANTHRARC 399. Honors in Anthropological Archaeology**

*Senior standing and permission of instructor. (Prerequisites enforced at registration.) (3). May be repeated for a maximum of 6 credits. W.*

For information about honors work in anthropology, see the Honors Program description preceding the listing of anthropology courses or consult with the honors concentration advisor.

**ANTHRARC 482. Topics in Anthropological Archaeology**

*Consent of instructor required. Junior standing. (3). May be elected twice for credit. May be elected more than once in the same term.*

Course will cover in-depth topics in anthropological archaeology. The topics covered will vary from term to term. Students should consult the time schedule for the focus in any given term.

**ANTHRARC 486. Archaeological Methods**

*This course requires field work; students who do not want to conduct field work should not register. Students should have taken an introductory archaeology course before enrolling for ANTHRARC 486. (4). May not be repeated for credit.*

This course teaches the methods employed by archaeologists in both the field and laboratory. Instruction revolves around archaeological investigations at a local historical-archaeological site. In the context of this larger project, students learn methods for mapping, survey, excavation, and laboratory analysis.

**ANTHRARC 490. Prehistory of North America**

*Sophomore & above/permission of instructor. (3). May not be repeated for credit.*

The growth of prehistoric American Indian cultures from the Arctic to the Rio Grande.

**ANTHRARC 494. Introduction to Analytical Methods in Archaeology**

*Consent of instructor required. One course in statistics and junior standing. (3). May not be repeated for credit.*

An introduction to the major methods of statistical analysis used in archaeological research.

**ANTHRARC 497. Museum Anthropology**

*Junior standing. (3). May not be repeated for credit.*



This course examines museums in anthropological theory and practice, tracing the history of anthropology museums from colonial collecting institutions to active collaborators with source communities. We explore issues of ownership, representation, ethics, and research potential of museum collections. Field trips and projects with museum collections provide hands-on learning experiences.

**ANTHRARC 499. Undergraduate Reading and Research in Anthropology**  
*Consent of instructor required. (1 - 3). (INDEPENDENT). May be repeated for a maximum of 6 credits. May be elected more than once in the same term. May not be used toward the Anthropology academic minors.*

Independent reading and research under the direction of a faculty member. Ordinarily available only to students with background in Anthropology.

## **Anthropology, Biological (ANTHRBIO)**

**ANTHRBIO 166. First Year Seminar: Searching for Human Origins**  
*Enrollment restricted to first-year students, including those with sophomore standing. (3). (NS). (BS). May not be repeated for credit.*

Until recently, discussions of human origins have been confined to mythological, philosophical and theological speculation. The modern synthesis of evolutionary biology (or simply "evolutionary theory") and discovery of human fossils have provided a conceptual framework in which we can now begin to critically examine the process that has led to modern humans.

### **ANTHRBIO 167 / ENVIRON 167. Evolution, Environment, and Global Health**

*(4). (NS). (BS). May not be repeated for credit.*

Earth is on the brink of the Sixth extinction - likely more devastating than the asteroid impact that took out the dinosaurs. Scientific evidence shows that humans are the cause. Evolutionary anthropology can uniquely contribute to understanding how we got here and what we need to do.

**ANTHRBIO 201. Introduction to Biological Anthropology**  
*(4). (NS). (BS). May not be repeated for credit.*

Study of human evolution with emphasis on genetic evolutionary process. Man's evolutionary history as evidenced by fossil remains and present racial variation in light of modern evolutionary theory.

**ANTHRBIO 297. Topics in Biological Anthropology**  
*(3). (NS). (BS). May be repeated for a maximum of 12 credits.*

Course will cover a topic in biological anthropology in depth. The topic will vary from term to term.

**ANTHRBIO 342 / ANTHRCUL 342. Nature/Culture Now!**  
*ANTHRCUL 101. (4). (SS). (BS). May not be repeated for credit.*

This course, co-taught by a biological and a cultural anthropologist, investigates the ongoing power of the nature/culture divide and examines anthropology's central role in formulating the nature/culture dichotomy itself. The course is broken down into four sections including, a history of nature/culture in anthropology, race, sex, and health and disease.

**ANTHRBIO 362 / EEB 362 / ENVIRON 362. Primate Evolutionary Ecology**

*An introductory course on primates, ecology, or conservation biology is advised. No quantitative or statistical training is required. (4). (NS). (BS). May not be repeated for credit.*

This course examines primate ecology within an evolutionary framework. We consider how environmental factors, evolutionary history, and ecological processes affect individuals, social groups, populations, and communities. Topics in primate and rainforest conservation biology are also discussed. Emphasis is placed on critical assessment and interpretation of quantitative and graphical evidence.

**ANTHRBIO 363. Genes, Disease, and Culture**

*(4). (NS). (BS). May not be repeated for credit. F.*

This course is an introduction to genes, disease, and culture. Students will be exposed to a wide range of topics including the adaptive aspects of genetic disease, cultural selection, biological and environmental determinism, gene-culture co-evolution, and niche construction theory.

**ANTHRBIO 364. Nutrition and Evolution**

*Sophomore standing. (4; 3 in the half-term). (NS). (BS). May not be repeated for credit.*

Study of the evolutionary basis of contemporary nutritional patterns, the short and long-term effects of industrialization on human biology during development and adulthood.

**ANTHRBIO 365. Human Evolution**

*Sophomore or Junior or Senior. (Prerequisites enforced at registration.) High school biology is assumed. (4). (NS). (BS). May not be repeated for credit.*

**ANTHRBIO 368 / PSYCH 338. Primate Social Behavior I**

*(4). (NS). (BS). May not be repeated for credit. F.*

This course describes and explains primate societies and is first in a sequence of two. The course investigates sex, aggression, cooperation, social development and group structure.

**ANTHRBIO 369. Topics in Biological Anthropology**

*(3). (BS). May be repeated for a maximum of 9 credits. May be elected more than once in the same term.*

Course covers in-depth topics in Biological Anthropology. The topics covered will vary from term to term. Students should consult the time schedule for the topic in any given term.

**ANTHRBIO 370. U.G. Reading and Research in Anthropology**

*Consent of instructor required. (1 - 3). (INDEPENDENT). May be repeated for a maximum of 6 credits.*

Laboratory training and work in the techniques used in various aspects of research in biological anthropology.

**ANTHRBIO 371. Techniques in Biological Anthropology**

*Consent of instructor required. (1 - 3). (BS). May be repeated for a maximum of 6 credits. May not be included in a concentration plan in Anthropology.*

Laboratory training and work in the techniques used in various aspects of research in biological anthropology.

**ANTHRBIO 373. Humans and Environmental Change**

*ANTHRBIO 201. (3). (NS). (BS). May not be repeated for credit.*

This course examines the interface of human evolutionary biology and ecology throughout the span of our evolutionary history.

**ANTHRBIO 398. Honors in Biological and Evolutionary Anthropology**

*Seniors Only. Consent of instructor required. (Prerequisites enforced at registration.) (3). (BS). (INDEPENDENT). May be elected twice for credit. Continuing Course. Y grade can be reported at end of the first-term to indicate work in progress. At the end of the second term of ANTHR BIO 399, the final grade is posted for both term's elections. F.*

Seniors enrolled in the Honors program conduct a research project under the supervision of a member of the faculty. Students receive help with planning, conducting, and writing up the results of their research.

**ANTHRBIO 399. Honors in Biological and Evolutionary Anthropology**

*Seniors Only. Consent of instructor required. (Prerequisites enforced at registration.) Senior standing. (3). (BS). (INDEPENDENT). May be repeated for a maximum of 6 credits. W.*

Seniors enrolled in the Honors program conduct a research project under the supervision of a member of the faculty. Students receive help with planning, conducting, and writing up the results of their research.

**ANTHRBIO 450. Molecular Anthropology**

*ANTHRBIO 161 and 363. (4). (BS). May not be repeated for credit.*

This course is an advanced introduction to Molecular Anthropology. It introduces ways in which molecular data is analyzed and then used to answer questions

concerning human evolutionary history. Students will learn principles of molecular evolution and how to apply these principles to human and non-human primate DNA and protein sequence data.

**ANTHRBIO 461 / ENVIRON 461. Primate Conservation Biology**

*An introductory course on primates, ecology, or conservation biology is advised. No quantitative or statistical training is required. (3). (BS). May not be repeated for credit.*

This seminar fosters critical consideration of issues within primate conservation biology. Topics will include: alternative conceptual approaches, mathematical models, assessing the status of primate populations and habitats, major threats, the role of ecology, theory vs. practice, conservation priority setting, strategies, tactics, and the role of local human communities.

**ANTHRBIO 462. Human Growth and Development Across the Life Cycle**

*ANTHRBIO 201, 364, 365 or 465. (4). (BS). May not be repeated for credit.*

This course tracks the human life cycle from beginning to end, with specific comparison to other primates including earlier hominins. Topics include prenatal growth, evolution of human birth, postnatal growth and development, adult fertility and reproduction, and discussion of whether human childhood and adolescence are unique compared to other primates.

**ANTHRBIO 463 / ENVIRON 473 / PSYCH 463. Statistical Modeling and Data Visualization in R**

*Basic knowledge of statistics (e.g., linear regression). Some prior experience with R is advisable, but not required. (4). (BS). (QR/1). May not be repeated for credit. Rackham credit requires additional work.*

This course is a boot camp in statistical modeling and data visualization using the R computer language. Topics include basic R programming, data exploration, statistical modeling, form a model comparison, parameter estimation and interpretation, and the visual display of quantitative information.

**ANTHRBIO 465. Primate Functional Anatomy**

*ANTHRBIO 201, 365, 366 or 368. (3). (BS). May not be repeated for credit. Rackham credit requires additional work.*

This course introduces students to the evolutionary history of the primate radiation, particularly the evolution of monkeys, apes and humans, through an analysis of primate anatomy. The focus will be on the postcranial musculoskeletal anatomy of extant and fossil primates and reconstruction of the behavior of extinct forms.

**ANTHRBIO 467. Human Behavioral Ecology**

*A strong background in the natural sciences is assumed, including any two of the following courses: ANTHR BIO 161, 368; BIOLOGY 162, 171, 172; MCDB 404; EEB 494. (4; 3 in the half-term). (BS). May not be repeated for credit.*

This course considers the anthropological significance of recent advances in natural selection theory. Students will read the primary scientific literature to learn how anthropologists test evolutionary hypotheses about human behavior.

**ANTHRBIO 468 / PSYCH 439. Evolutionary Endocrinology**

*PSYCH 335, PSYCH 337, or EEB 492. (3). (BS). May not be repeated for credit. Rackham credit requires additional work.*

Welcome to Evolutionary Endocrinology! In this course, we will examine the ways in which animals evolve physiological adaptations to the environment in which they live. Using literature that spans across vertebrate taxa from reptiles to birds to mammals, we will focus on exciting new ideas about the evolutionary significance of hormones in shaping life-history evolution, facilitating or constraining adaptation, and mediating non-genetic inheritance and maternal effects.

**ANTHRBIO 469. Topics in Biological Anthropology**

*Consent of instructor required. (2 - 4; 2 - 3 in the half-term). (BS). May be repeated for a maximum of 9 credits. May be elected more than once in the same term.*

**ANTHRBIO 471. Research in Biological Anthropology**

*Consent of instructor required. (1 - 4). (BS). May be repeated for a maximum of 9 credits. May be elected more than once in the same term.*

This course provides technical training in how to carry out research in Biological Anthropology including project development, hypothesis generation and testing, data collection and analysis, and writing. Approaches may include but are not limited to: primatological and paleontological field methods, wet laboratory research, and/or collections-based research.

**ANTHRBIO 472. Human Nature**

*Consent of instructor required. ANTHR BIO 467. (2). (BS). May not be repeated for credit.*

This is an advanced seminar in evolutionary psychology. Topics include: sexual selection, mating systems theory, parental investment, reciprocity, morality, and religion.

**ANTHRBIO 474. Hominid Origins**

*ANTHRBIO 365. (4). (BS). May not be repeated for credit.*

This course is about the origin of the human species and the adaptations and life history of the earliest human ancestors before Homo. It examines the ancestry of the hominids, the various theories of their origin, and aspects of australopithecine evolution such as their history, locomotion, behavior, adaptations, and taxonomy.

**ANTHRBIO 475. Evolution of Genus Homo**

*ANTHRBIO 351 or 365. (Prerequisites enforced at registration.) (4). (BS). May not be repeated for credit.*

Evolution of the genus Homo from H erectus to modern human populations. Topics include origin and dispersal of Homo erectus, appearance and evolution of early H. sapiens, Neanderthal, and modern humans.

**ANTHRBIO 476. Methods in Paleodiet Reconstruction**

*ANTHRBIO 201. (3). (BS). May not be repeated for credit. Rackham credit requires additional work.*

Much of human evolution is linked to the foraging niche of our ancestors. This course examines quantitative methodological approaches to reconstructing aspects of paleodiet relevant to interpreting the fossil and archaeological record.

**ANTHRBIO 478 / PSYCH 438. Primate Behavioral Ecology**

*Consent of instructor required. ANTHR BIO 368. (3). (BS). May not be repeated for credit.*

This advanced undergraduate/graduate course examines the ecology and behavior of non-human primates. Using mainly primary research articles, we explore

several themes in primate behavioral ecology including reproductive strategies, sexual selection, behavioral endocrinology, cooperation and conflict, cultural transmission, and primate cognition.

**Anthropology, Cultural (ANTHRCUL)****ANTHRCUL 101. Introduction to Anthropology**

*(4). (SS). (R&E). May not be repeated for credit. Does not count toward requirements for the Anthropology major. F, W, Sp.*

A survey of the fundamental concepts and perspectives of anthropology with an emphasis on sociocultural anthropology.

**ANTHRCUL 158. First Year Seminar in Anthropology**

*Enrollment restricted to first-year students, including those with sophomore standing. (3). (SS). May not be repeated for credit. May not be included in an Anthropology major.*

A small seminar designed to introduce entering students to the discipline of Anthropology, its history, and to the concept of "culture," which is at the heart of anthropological research methods and theories. Students will develop analytical and intellectual skills that will help them understand and negotiate the complex world we live in, and to become familiar with the evolutionary processes responsible for humans in all their diversity.

**ANTHRCUL 202. Ethnic Diversity in Japan**

*(3). (SS). May not be repeated for credit.*

This course explores the history and cultures of Japanese ethnic groups and minorities. Among the groups we will focus

on are the ("aboriginal") Ainu, resident Koreans, migrant workers (of Japanese ancestry) from S. American, children of mixed parentage, etc. Japanese expressions and ideologies of "race" and ethnicity" are also analyzed comparatively. Anthropological readings are augmented by novels and short stories, comics, videos and films.

**ANTHRCUL 222. The Comparative Study of Cultures**

*(4; 2 in the half-term). (SS). May not be repeated for credit.*

A selective survey of ways of life in both the Eastern and Western hemispheres describing and analyzing the technology, economic and social organization, religion, and arts of specific peoples.

**ANTHRCUL 226 / HISTORY 229. Introduction to Historical Anthropology**

*(3). (SS). May not be repeated for credit.*

This course is designed to examine the ways in which people in different societies and at different times have understood the past and have used history to assign meaning to past events. A variety of different systems, programs, and practices for maintaining and deploying knowledge of the past will be explored, including monuments, commemorations and memorials, oral materials and tradition, museums and exhibitions, personal memoirs, film, photography, and literature. Particular attention will be given to the latency of powerful formations seated in understandings of race, gender, ethnicity, and nation.

**ANTHRCUL 231. Honors Core in Sociocultural Anthropology**

*(4). (SS). May be elected twice for credit. May be elected more than once in the same term.*

As part of the Honors Core Curriculum, this course introduces Honors students to the fields, questions and meta-questions, and methodologies of the Social Sciences; in this case, Sociocultural Anthropology. The course uses both contemporary technology and time-honored methodologies to examine theoretical concepts, problems, and case studies; the course uses a variety of formats and strategies.

**ANTHRCUL 235. Crime, Criminalization and Punishment**

*(4). (SS). (R&E). May not be repeated for credit.*

Using the United States as a primary case study, this course draws from anthropology and a range of critical theoretical perspectives in order to closely examine the processes, systems and institutions through which certain groups of people come to be seen as criminal, criminalized and punished. Crime, Criminalization and Punishment

**ANTHRCUL 240. Honors Core Writing in Anthropology**

*Consent of department required. (4). (SS). May be elected twice for credit. May be elected more than once in the same term.*

As part of the Honors Core Curriculum, this course introduces Honors students to the fields, questions and meta-questions, and methodologies of the Social Sciences; in this case, Anthropology. The course uses both contemporary technology and time-honored methodologies to examine theoretical concepts, problems, and case studies; the course uses a variety of formats and strategies.

**ANTHRCUL 246 / ISLAM 246 / RELIGION 246. Anthropology of Religion**

*(4). May not be repeated for credit.*

An introduction to basic problems faced by religions and by the study of religion. Draws on case studies from around the world to examine how people confront questions of life, death, evil, misfortune, and power. Also asks how the study of religion wrestles with relations between tolerance and faith.

**ANTHRCUL 252. Law and Culture**  
(4). (SS). *May not be repeated for credit.*

This course examines the question of law and the social, historical, and cultural contexts within which norms about legality and illegality are produced. Specifically, we focus on how ideas of what law is and how it works emerge not just from doctrines in courtrooms, but are embedded in everyday practice.

**ANTHRCUL 254. The Anthropology of Food**  
(4). (SS). *May not be repeated for credit.*

Every human eats, and yet the styles and meaning of sharing food and drink together vary enormously across cultures. This course introduces students to anthropological approaches to cooking, feasting, fasting, the politics of obesity, and the cultures of fast, slow, artisanal, local and global foods.

**ANTHRCUL 256 / ENVIRON 256. Culture, Adaptation, and Environment**  
(3). (SS). *May not be repeated for credit.*

This course explores anthropological approaches to human relationships with their environments and resources. Examines diverse conceptions of culture and nature, and time and space, and the impacts that contemporary global forces are having on indigenous societies and their ecosystems. Particular interest to relative strengths and weaknesses of materialistic and cultural analyses of human-environment

relationship, and models that attempt to combine them.

**ANTHRCUL 258. Honors Seminar in Anthropology**

*LSA Honors. (Prerequisites enforced at registration.) Honors students with sophomore standing or above. (3). May not be repeated for credit.*

A small seminar designed to introduce Honors students to the discipline of Anthropology, its history, and to the concept of "culture," which is at the heart of anthropological research methods and theories. Students will develop analytical and intellectual skills that will help them understand and negotiate the complex world we live in, and to become familiar with the evolutionary processes responsible for humans in all their diversity.

**ANTHRCUL 272 / LING 272. Language in Society**

*Primarily for first- and second-year students. (4). (SS). (R&E). May not be repeated for credit. Primarily for first- and second-year students. W.*

An introduction to the systematic study of language and of the place of language in society. Origins of language in the species, child language, language and thought, meaning and language and social class.

**ANTHRCUL 298. Topics in Sociocultural Anthropology**

*(3; 2 - 3 in the half-term). (SS). May be repeated for a maximum of 12 credits. May be elected more than once in the same term.*

Course covers a topic in sociocultural anthropology in depth. The topic will vary from term to term.

**ANTHRCUL 299. Topics in Linguistic Anthropology**

*(3). (SS). May be repeated for a maximum of 12 credits.*

Course will cover a topic in linguistic anthropology in depth. The topic will vary from term to term.

**ANTHRCUL 302 / HISTART 302 / WGS 302. Sex and Gender in Japan**  
(3). (SS). *May not be repeated for credit.*

Explore attribution and construction of gender in Japan historically and in the present time.

**ANTHRCUL 314 / AMCULT 313 / LATINOAM 313. Cuba and its Diaspora**  
(3). (R&E). *May not be repeated for credit.*

This course examines Cuban history, literature, and culture since the Revolution both on the island and in the United States Diaspora. Through political and cultural essays, personal narratives, fiction, poetry, drama, and visual art, we will seek a comprehensive and diverse view of how Cubans and Cuban-Americans understand their situation as people of the same nation divided for thirty-five years by the Cold War, revolution, and exile.

**ANTHRCUL 317 / HISTORY 228 / POLSCI 334 / REEES 397 / SLAVIC 397 / SOC 317. Communism and Capitalism in Eastern Europe**  
(4). (SS). *May not be repeated for credit. No credit granted to those who have completed or are enrolled in REEES 396 or SLAVIC 396 or POLSCI 396 or HISTORY 333 or SOC 393. May not be counted in a Slavic Department academic minor.*

An overview of East Central Europe from 1945 to the present. The first half of the course explores the workings of state socialism from an anthropological perspective (with particular focus on political economy and material culture) from the Stalinist 1950s to the more

diversified decades of the 1960s to 1980s. The second half covers the "revolutions" of 1989 and contemporary social, cultural, economic and political processes, including struggles over membership to the E.U.

**ANTHRCUL 319. Latin American Society and Culture**  
(3). (SS). (R&E). *May not be repeated for credit.*

A multi-disciplinary, contextual introduction to the study of Latin American culture, society and politics. Faculty are drawn from Political Science, Romance Languages, History, Anthropology, and Geography, among others. Students are introduced to Latin America in its historical perspective.

**ANTHRCUL 320. Mexico: Culture and Society**  
(3). *May not be repeated for credit.*

This course will look at Mexican culture and society. In particular, it will address the question of how culture and national identity in Mexico have been historically and socially constructed over the past century.

**ANTHRCUL 325 / WGS 324. Childbirth & Culture**  
*Sophomore standing.* (4). (SS). *May not be repeated for credit.*

This course focuses on the distinctive sociocultural configurations of childbirth practices and beliefs in several different societies. The cross-cultural study of childbirth provides a basis for understanding the cultural logic underlying these practices and beliefs and expands our knowledge of women's perspectives on social change and the medicalization of childbirth.

**ANTHRCUL 327 / RCSSCI 327 / WGS 307. Critical Theory in**



**Medicine and Healing**

*One course in ANTHRCUL or RCSSCI or WGS 240 or WGS with an SS designation. (4). (SS). May not be repeated for credit.*

This course introduces students to the critical anthropological analysis of illness, health, healing, and medicine. We explore current and past medical anthropological approaches--political economic, phenomenological, symbolic, feminist, post-structural--in order to evaluate how well these frameworks convey the lived experience of bodies in their local worlds.

**ANTHRCUL 328. Globalizing Consumer Cultures**

*(3). (SS). May not be repeated for credit.*

This course presents an anthropological perspective on consumer culture. Topics include: classic oppositions between gift exchanges vs. commodity societies; analyses of advertising, branding and retail; and ethnographic descriptions of increasingly commodified lives in places as far flung as Hungary, India, Argentina, England, Sweden and Nepal as well as in the U.S.

**ANTHRCUL 329. Encounters: Cultural Difference in the Modern World**

*(4). (SS). May not be repeated for credit.*

Cultural difference does not disappear with globalization, which creates new modes of interaction and demands for making sense of difference. Explanations of difference may invoke religious identity, history, politics, ideas about race, and questions about culture. This course draws on concepts from political science, history, sociology, and anthropology to help explain the persistence of difference.

**ANTHRCUL 330. Culture, Thought, and Meaning**

*(4). (HU). May not be repeated for credit.*

**ANTHRCUL 331. Kinship, Social Organization, and Society**

*One course in Anthropology. (3). (SS). May not be repeated for credit.*

This course introduces core problems in social anthropology, centering on how the organization of societies affects the lives and experiences of those who live in them. We examine anthropological approaches to social relationships, broadly defined, both historically and across the field of anthropology today.

**ANTHRCUL 332. Exchange, Commodities, and Money**

*Sophomore standing. (4; 3 in the half-term). (SS). May not be repeated for credit.*

Introduces core problems in social anthropology, centering on how the organization of societies affects the lives and experiences of those who live in them. Topics covered may include material possessions and values, gifts and commodities, family life, and the sense of personal identity.

**ANTHRCUL 333. Non-Western Legal Systems, I**

*Sophomore standing. (3). (SS). May not be repeated for credit. F.*

Comparative cross-cultural analysis and discussion of the nature and attributes of law in non-Western cultures. The relationship between law and social structure, customs, morality, religion, politics, and government, including case studies of the judicial processes and dispute settlement.

**ANTHRCUL 337. Death, Dying and the Afterlife**

*(4). (SS). May not be repeated for credit.*

This course explores the ways that death, dying and the afterlife are practiced and imagined in different places and times,

drawing on the anthropology of religion, political anthropology, and medical anthropology.

**ANTHRCUL 341. The Globalization of Biomedicine**

*(4). May not be repeated for credit.*

This course treats Western Medicine as a "culture," and then addresses what happens in global health interventions when medical culture runs up against other ways of viewing the world.

**ANTHRCUL 342 / ANTHRBIO 342. Nature/Culture Now!**

*ANTHRCUL 101. (4). (SS). (BS). May not be repeated for credit.*

This course, co-taught by a biological and a cultural anthropologist, investigates the ongoing power of the nature/culture divide and examines anthropology's central role in formulating the nature/culture dichotomy itself. The course is broken down into four sections including, a history of nature/culture in anthropology, race, sex, and health and disease.

**ANTHRCUL 343 / POLSCI 342. Eastern Europe: Revolution, Reaction, and Reform**

*POLSCI 140 or upperclass standing. (3). (SS). May not be repeated for credit.*

This course is a survey of the political and social development of Eastern Europe under socialism. Major themes include the political cultures of the area, communist accession to power, totalitarianism and its erosion, elite-mass relations, the role of public opinion and interest groups, and economic and political change.

**ANTHRCUL 344. Medical Anthropology**  
*ANTHRCUL 101 or 222; or sophomore and above. (Prerequisites enforced at registration.) (4). (SS). May not be repeated for credit.*

Medical Anthropology examines illness and healing in cross-cultural perspective. How do people make meaning of their suffering? What determines what is normal and what pathological? How are morality and medicine intertwined? We will examine illness and patient care within varied understandings of the body, mind, and self; consider how social, economic, and political processes shape health and illness; and ask how healing systems -including biomedicine- both reflect and influence what people "know" to be true. We will draw on a variety of examples -cancer, schizophrenia, disabilities, Alzheimer's, among others- to illustrate topics including risk, biotechnology, stigma, and inequality.

**ANTHRCUL 346 / HISTORY 347. Latin America: The Colonial Period**

*(4). (SS). May not be repeated for credit.*

This course examines Latin America from the initial encounters between Europeans and Native Americans to the early nineteenth-century wars of independence. It focuses on interactions among Native Americans, Africans, and Europeans, and on the emergence of a durable colonial system.

**ANTHRCUL 349. Indigenous Political Movements**

*(3). May not be repeated for credit.*

This seminar examines contemporary indigenous political movements, including definitions and histories, politics of culture, legal treatment, significance of place, nongovernmental organizations, social movement theory, and their intersection with global environmentalism. Geographical focus on Latin America, the Pacific, and Southeast Asia.

**ANTHRCUL 352. Anthropology of the Body**

*(3). (SS). May not be repeated for credit.*

Approaches to the study of embodied experience. Themes include: some classic theories that offer different ways of thinking about and "with" the body; the cultural and historical constitution of bodies, particularly their differentiation from bodily "others"; and transformations of bodily experience via contemporary mass media, commodities, and globalization.

**ANTHRCUL 354 / HISTART 354. Art, Science, and Technology: The Human Body as an Experiment**

(3). (ID). *May not be repeated for credit.*

This multimedia, interdisciplinary seminar is devoted to exploring the global history and present-day expressions of the relationship between art, science, and technology, and how they are integrated. To this end we will cultivate both a new visual literacy and a new literacy in science and technology.

**ANTHRCUL 355 / AAS 355 / HISTORY 355. Health and Illness in African Worlds**

(4; 3 in the half-term). (R&E). *May not be repeated for credit.*

Changes in disease, epidemiology, and health and healing practices in African continental and Atlantic worlds from the fifteenth century, as Africans encountered new forms of medicine, slavery, colonialism, epidemic, famine, and war. Designed for concentrators in History and Afroamerican and African Studies and/or students seeking careers in medicine, public health, and medical anthropology.

**ANTHRCUL 356. Topics in Sociocultural Anthropology**

*ANTHRCUL 101. (3). May be repeated for a maximum of 9 credits. May be elected more than once in the same term.*

Course covers in-depth topics in Sociocultural Anthropology. Topics vary from term to term.

**ANTHRCUL 357. Seminar in Sociocultural Anthropology**

*A course in cultural anthropology and junior standing. (3; 2 in the half-term). May not be repeated for credit.*

Readings, discussions, and reports on problems in modern sociocultural anthropology.

**ANTHRCUL 370 / LING 370. Language and Discrimination: Language as Social Statement**

(3). (SS). (R&E). *May not be repeated for credit.*

This course examines the role of language as social statement and social conflict, particularly with respect to questions of race and ethnicity. It looks at issues concerning language-based discrimination in various public and private contexts and at beliefs about language and language variation.

**ANTHRCUL 374 / LING 374. Language and Culture**

*Sophomore standing. (4). (HU). May not be repeated for credit.*

The study of the ways various cultural patterns and values are reflected in language.

**ANTHRCUL 402. Contemporary China**

*Junior standing. (3). May not be repeated for credit.*

The twentieth century was a time of enormous change in mainland China: two revolutions, civil war, famine, cultural upheaval, and many episodes of massive economic, social, and political restructuring. What was life like in the

twentieth century for farmers, urban people, men and women, and ethnic and cultural minorities? What are their lives like today? In the last five years, a new anthropological literature on China has begun to probe these questions in rich detail. We explore this literature in this seminar to build an understanding of daily life for China's diverse populations through the twentieth century and today.

**ANTHRCUL 403. Japanese Society and Culture**

*Anthropology majors and minors; students who have taken ANTHRCUL 202 and/or 302; any student interested in Japan. (3). May not be repeated for credit.*

An examination of cultural patterns that distinguish Japan from its counterparts among the industrial nations of the West. Topics include: the family, patterns of education and socialization, the importance of groups and group membership, and the place of the individual in society.

**ANTHRCUL 409. Peoples and Cultures of the Near East and North Africa**

*Junior standing. (3; 2 in the half-term). May not be repeated for credit.*

**ANTHRCUL 411 / AAS 422. African Cultures**

*AAS 200 (CAAS 200); and junior standing. (3; 2 in the half-term). May not be repeated for credit.*

Africa is considerably more important, more interesting and certainly more complex than its popular image suggests. The course provides an introduction to the peoples and cultures of tropical (sub-Saharan) Africa.

**ANTHRCUL 414 / AAS 444. Introduction to Caribbean Societies and Cultures, I**

*Junior standing or above. (3). May not be repeated for credit.*

A survey of the peoples and cultures of the Caribbean with emphasis on Haiti, Jamaica, Trinidad, and Guyana. Analysis of class, race relations, cultural pluralism, ethnicity, population movements, and economic development.

**ANTHRCUL 417 / ASIAN 416.**

**Possessing Culture: Mediumship and Ethnography in Southeast Asia**

*Some coursework in cultural anthropology or Southeast Asian studies is useful, but not required. (3). May not be repeated for credit.*

This course examines spirit possession and mediumship in Southeast Asia, focusing in particular on the representation of such phenomena in ethnographic scholarship.

**ANTHRCUL 428 / RCSSCI 428 /**

**WGS 428. Sex Panics in the US and UK since 1890**

*One course in WGS or ANTHRCUL or RCSSCI, SOC, or HISTORY. (3). May not be repeated for credit.*

This course explores the paradigm of "sex panics" and examines several case studies, including anti-prostitution movements in Britain and the US, progressive era conflicts over age of consent, female sexual precocity and juvenile justice in the US, the eruption of concern over sexual psychopaths in the 1930s-1950s, and anti-homosexual crusades in the 1940s and 1950s. The lingering legacies of these conflicts and their imprint on more contemporary conflicts will be explored.

**ANTHRCUL 430 / HISTORY 430 /**

**MIDEAST 480. History, Memory, and Silence in the Middle East**

*(3). May not be repeated for credit.*

This senior/graduate seminar is an exploration in the anthropological

approaches to the study of history and memory. It introduces and problematizes the concept of 'silence' in the ethnographic practices of history such as the silences of the empty archives, the ruptured oral historical accounts, and the fragments left behind by past events. Taking the demise of the Ottoman Empire as a starting point, the readings focus on minorities, refugees, and genocide survivors to probe into the history, historiography, and historicity that trace the lived experiences, mundane lives, and emotions of such marginal populations, underrepresented groups, undocumented individuals, and in-archived events. We take the creation of ethno-religious nation-states in the Middle East and the Balkans to navigate the following questions: How do we trace and represent the past in the aftermath of violence and destruction? How do historians and anthropologists conduct their research when the evidence is destroyed? Ultimately, what constitutes an 'evidence' for history, and how could we entertain material and immaterial remnants of the past to rethink our understanding of the 'archive'? Overall, the seminar invites participants to think of the role of historians and anthropologists as storytellers who are perpetually struggling with the politics of representation of the past. Second, we read ethnographies as genre of writing history with an eye on texts, research methods, and theories employed. The readings are anchored on the ethnography of Middle East and North Africa, with a comparative reference to the post-Ottoman Balkans. We take the Armenian genocide and the politics of its historiography, commemoration, and denial as a case study.

**ANTHRCUL 439. Economic Anthropology and Development**

*Junior standing or permission of instructor. (3; 2 in the half-term). May not be repeated for credit.*

**ANTHRCUL 440. Environmental Anthropology**

*Junior standing or above. (3). May not be repeated for credit.*

This class examines anthropological approaches to contemporary environmental problems. We will consider what it means to live in a world in which competing ideas about nature are in dialogue with each other. We will study the way that the world is transformed by the accelerated circulation of persons, things, and ideas through globalization. We will also learn about the institutions and forces that increasingly mediate anthropogenic impacts on the environment, including the relationship between corporations and their critics, states and their legal systems, the media, and nongovernmental organizations (NGOs) focused on environmental issues.

**ANTHRCUL 446 / WGS 446.**

**Sex and the City: Urban Geography and Sexual Locations**

*At least one course in Anthropology, History, Women's Studies, Sociology, LGBTQ Studies, or Urban Studies/Urban Planning. (3). May not be repeated for credit.*

This course examines contemporary sexual diversity in the context of urban geography, urban studies, and the political economies of sexuality and space. It addresses issues of the spatial locations of sexual populations and situates the formation and disappearance of sexual neighborhoods and territories in terms of the larger dynamics of urban life. Topics include relationships between urban size to sexual specialization, impact of redevelopment and gentrification on the texture of urban neighborhoods, and specific studies of red light districts, prostitution, and homosexuality.

**ANTHRCUL 447. Culture, Racism, and Human Nature**

*(3). (R&E). May not be repeated for credit.*

**ANTHRCUL 450. Anthropologies of Insurgency: Bandits, Rebels and Freedom Fighters**

*(3). May not be repeated for credit.*

This course explores the interlinked categories of rebel, bandit, and freedom fighter to understand insurgency from an anthropological viewpoint. Privileging sociological and micropolitical analysis, the course approaches specific instances of illegal use of force in their sociocultural and historic settings, and builds toward a consideration of insurgency from "the actors' points of view".

**ANTHRCUL 453 / AAS 454. African-American Culture**

*One introductory course in the social sciences. AAS 201 recommended. (3). May not be repeated for credit.*

**ANTHRCUL 458. Topics in Sociocultural and Linguistic Anthropology**

*Consent of instructor required. Junior and above. (3). May be repeated for a maximum of 6 credits. May be elected more than once in the same term.*

Course covers various in-depth topics in sociocultural or linguistic. Topics covered vary from term to term. Consult the Time Schedule for the focus in any given term.

**ANTHRCUL 461 / AMCULT 461 / LING 461 / NATIVEAM 461. Language, Culture, and Society in Native North America**

*(3). May not be repeated for credit.*

This course will explore how Native North American languages are used in relation to the historical circumstances, cultural practices and social settings of their

speakers. Of particular concern is the interrelationship between linguistic practice and ideologies that can either promote or discourage the use (and maintenance) of these languages.

**ANTHRCUL 473 / LING 473. Oral Narrative and Poetics**

*Two courses in anthropology, linguistics, or literature or permission of instructor. (3; 2 in the half-term). May not be repeated for credit.*

This course explores relationships between language and social groupings such as "tribe", "ethnic group" and "nation". Are such groupings based on shared language? Through cross-cultural case studies and historical materials, we consider how linguistic similarities and differences unite or divide people, in practice and in ideology.

**ANTHRCUL 497. Honors in Sociocultural and Linguistic Anthropology**

*Seniors Only. (Prerequisites enforced at registration.) (3). May not be repeated for credit.*

This honors course is designed for undergraduate anthropology majors who have applied for senior honors in the Department of Anthropology.

**ANTHRCUL 498. Honors in Sociocultural and Linguistic Anthropology**

*Senior standing. (Prerequisites enforced at registration.) (3). May not be repeated for credit.*

This honors course is designed for undergraduate anthropology majors who have applied for senior honors in the Department of Anthropology.

**ANTHRCUL 499. Undergraduate Reading and Research in Anthropology**

*Consent of instructor required. (1 - 3). (INDEPENDENT). May be repeated for a maximum of 6 credits. May be elected more than once in the same term. A maximum of three credits of independent reading may be included in a concentration plan in Anthropology. F, W, Sp/Su, Sp, Su.*

**ANTHRCUL 519 / GERMAN 517 / LING 517. Principles and Methods of Historical Linguistics**

*Graduate standing, or permission of instructor. (3; 2 in the half-term). May not be repeated for credit.*

**ANTHRCUL 553. Blurred Genres: Autobiography, Fiction & Ethnography**  
*400-level coursework in Anthropology, Graduate standing, and permission of instructor. (3). May not be repeated for credit.*

This course will focus on the history, politics, and possibilities of interconnecting autobiography, ethnography, and fiction. We will read widely in a variety of ethnographic, fictional, and autobiographic genres, including literary journalism, autobiographic ethnography, feminist ethnography, fieldwork accounts, the memoir, autobiographical criticism, family stories, and fiction that uses first-person voices.

**ANTHRCUL 572 / LING 542.**

**Introduction to Sociolinguistics**

*LING 411 or graduate standing. (3; 2 in the half-term). May not be repeated for credit.*

The class will discuss such relationships between language and society and how they might be studied objectively. We will focus on issues directly affecting a person's everyday life, such as attitudes towards different languages and dialects and historical and social reasons for these attitudes; questions about why different groups of speakers in the same society use language differently and how this difference

is evaluated; use of minority languages whose survival seems to be threatened and governments' language policies.

## **Applied Physics (APPPHYS)**

**APPPHYS 530 / EECS 530.**

**Electromagnetic Theory I**

*PHYSICS 438 or EECS 330. (3). (BS). May not be repeated for credit. F.*

**APPPHYS 540 / EECS 540. Applied Quantum Mechanics**

*Permission of instructor. (3). (BS). May not be repeated for credit.*

**APPPHYS 541 / EECS 541. Applied Quantum Mechanics II**

*APPPHYS 540. (3). (BS). May not be repeated for credit. W.*

**APPPHYS 672 / NERS 572. Plasma and Controlled Fusion II**

*NERS 571. (3). (BS). May not be repeated for credit.*

## **Arab American Studies (ARABAM)**

**ARABAM 204. Themes in Arab American Studies**

*(3 - 4; 3 in the half-term). (HU). May be elected twice for credit. May be elected more than once in the same term.*

This course is intended for first year students, sophomores and juniors as specific illustrations of the issues raised and the approaches used by American Studies scholars. It is an interdisciplinary approach to a social, cultural, or literary theme in Arab American Studies.

**ARABAM 215 / AMCULT 215 / MIDEAST 275. Introduction to Arab-American Studies**

(4). (HU). (R&E). May not be repeated for credit.

This course is an introductory survey to Arab-American studies.

**ARABAM 235 / AMCULT 235 / WGS 235. From Harems to Terrorists: Representing the Middle East in Hollywood Cinema**

(4). (HU). (R&E). May not be repeated for credit.

An overview of representations of Arabs and Arab-Americans in Hollywood cinema over the last century. Course traces a shift in stereotypes from the rich Arab sheik with a harem to the Arab terrorist, examining the connection between representations and the historical-political moment in which they are created, from European colonialism to 9/11.

**ARABAM 248 / AMCULT 248. Arab America: Art, Cultural Politics, and Activism**

(3). (HU). May not be repeated for credit.

This class explores the links between artistic practices, the mobilization of various concepts of "culture," and activism within Arab American communities. We consider works of visual art, performance, comic art, film, spoken word poetry, and music. We also examine the use of creative work in the act of protest.

**ARABAM 301. Topics in Arab American Studies**

(1 - 4). May be elected twice for credit. May be elected more than once in the same term.

This course provides undergraduates the opportunity to explore a specific topic in ethnic life in depth using an interdisciplinary approach.

**ARABAM 310. Arab American Studies and the Social Sciences**

(3). (SS). May be repeated for a maximum of 6 credits. May be elected more than once in the same term.

This course serves as a 300-level social science course in Arab American Studies the content of which varies from term to term.

**ARABAM 311. Arab American Studies and the Humanities**

(1 - 4). (HU). May be elected twice for credit. May be elected more than once in the same term.

This course serves as a 300-level humanities course in Arab American Studies the content of which varies from term to term.

**ARABAM 330 / AMCULT 330. Camels, Kabobs, and Kahlil Gibran: Arab American Cultural Studies**

(3 - 4). (HU). May not be repeated for credit.

Camels, Kabobs, and Kahlil Gibran investigates Arab American cultural identity through the objects, events, and institutions that have helped to create and maintain Arab American "culture" since the late 19th century. Some of the driving questions of the course are: Is there a specific Arab American "Arabness"? Why is ethnic food an important area of analysis? How and why does Arab American cultural identity change?

**ARABAM 384 / AMCULT 384. Islamophobia**

Not available to students who have completed AMCULT/ARABAM 311 when taught with the topic "Islamophobia" (Topic #27). (Prerequisites enforced at registration.) (3). (HU). May not be repeated for credit.

This course examines the phenomenon of Islamophobia from several angles: policies



and practices that justify the exclusion of Muslims from multicultural nations; case studies in the U.S. and Europe; and responses through community organizing and artistic forms.

**ARABAM 388. Field Study**

*Consent of instructor required. Sophomore standing. (1 - 4). (EXPERIENTIAL). (INDEPENDENT). May be repeated for a maximum of 8 credits. Offered mandatory credit/no credit.*

A field study is available to undergraduates who are interested in exploring new areas in the field of Arab American Studies beyond the Michigan campus. These include internship opportunities. Each student makes individual arrangements with a faculty member in the student's area of interest.

**ARABAM 389. Reading Course in Arab American Studies**

*Consent of instructor required. (1 - 4). (INDEPENDENT). May not be repeated for credit. No more than 6 credits of directed readings/internships may be counted toward the American Culture major.*

An independent study course available to undergraduates who are interested in designing a reading list for the purpose of exploring new areas in the field of Arab American Studies. Each student makes individual arrangements with a faculty member in the student's area of interest.

**ARABAM 390. Internship in Arab and Muslim American Studies**

*Consent of instructor required. (2 - 4; 1 - 4 in the half-term). (EXPERIENTIAL). May be repeated for a maximum of 6 credits. Not available to students who have completed six (6) credits in ARABAM 388 or AMCULT 390. Offered mandatory credit/no credit.*

This course entails an internship in local Arab and/or Muslim American

organizations. Contact internship faculty advisor about availability, details, and requirements. Having taken at least one course in Arab and Muslim American Studies is recommended but not required. Can sign up for 2 credits (6 hours of work), 3 credits (9 hours of work), or 4 credits (12 hours of work). Transportation needed.

**ARABAM 405. Topics in Arab American Studies**

*(1 - 4). May be elected twice for credit. May be elected more than once in the same term.*

This course provides undergraduates the opportunity to explore a specific topic in Arab American life in depth using an interdisciplinary approach.

**ARABAM 498. Capstone Seminar in Arab American Studies**

*(3 - 4; 3 in the half-term). May be elected twice for credit. May be elected more than once in the same term.*

## Arabic Studies (ARABIC)

The Department of Near Eastern Studies offers an impressive range of Arabic courses at all levels including Arabic for Academic, Communication, Business, and Islamic purposes.

ARABIC 101 is open to all students with no prior knowledge of Arabic.

**ARABIC 101. Elementary Arabic I**

*(5). May not be repeated for credit. No credit granted to those who have taken or are enrolled in ARABIC 103 (AAPTIS 103).*

This is the first of a two semester sequence in elementary level Arabic. Students learn the sounds and letters of Arabic and learn to understand, speak, read and write Arabic at Novice High to Intermediate Low level in

addition to learning cultural meanings of language.

**ARABIC 102. Elementary Arabic II**

*ARABIC 101 (AAPTIS 101) (completed with a minimum grade of C- or better).*

*(Prerequisites enforced at registration.)*

*ARABIC 101 (AAPTIS 101) or by assignment to ARABIC 102 (AAPTIS 102) by Placement test. (5). May not be repeated for credit. No credit granted to those who have taken or are enrolled in ARABIC 103 (AAPTIS 103).*

This course is the second of a two semester sequence in elementary level Arabic. Students learn to understand, speak, read and write Arabic at Intermediate Low to Intermediate Mid level in addition to learning cultural meanings of language.

**ARABIC 201. Intermediate Arabic I**

*ARABIC 102 (AAPTIS 102) or ARABIC 103 (AAPTIS 103) completed with a minimum grade of C- or better; or by assignment to ARABIC 201 by placement test.*

*(Prerequisites enforced at registration.)*

*ARABIC 102 (AAPTIS 102), ARABIC 103 (AAPTIS 103), or by assignment to ARABIC 201 by placement test. (5). May not be repeated for credit. No credit granted to those who have completed or are enrolled in ARABIC 203 (AAPTIS 205).*

This is the first of a two semester sequence of intermediate level Arabic. Students learn to understand, speak, read and write Arabic at Intermediate Mid to Intermediate High level in addition to learning cultural meanings of language.

**ARABIC 202. Intermediate Arabic II**

*ARABIC 201 (AAPTIS 201) (completed with a minimum grade of C- or better).*

*(Prerequisites enforced at registration.)*

*ARABIC 201 (AAPTIS 201) or by assignment to ARABIC 202 (AAPTIS 202) by placement test. (5). (Lang Req). May not be repeated for credit. No credit granted to*

*those who have completed or are enrolled in ARABIC 203 (AAPTIS 205).*

This course is the second of a two semester sequence of Intermediate level Arabic. Students learn to understand, speak, read and write Arabic at Intermediate High to Advanced Low level in addition to learning cultural meanings of language.

**ARABIC 203. Intensive Intermediate Arabic I and II**

*ARABIC 102 (AAPTIS 102) with at least a C-. (Prerequisites enforced at registration.) ARABIC 102 or 103. Recommended for Arabic majors and those who need Arabic for academic and research purposes. (10 in the half-term). (Lang Req). May not be repeated for credit. No credit granted to those who have completed or are enrolled in ARABIC 201 or 202.*

This course is an intensive course equivalent to one year of intermediate Arabic (ARABIC 201 and ARABIC 202). Students learn to understand, speak, read and write Arabic at Intermediate High to Advanced Low level in addition to learning cultural meanings of language.

**ARABIC 401. Advanced Arabic I**

*ARABIC 202 (AAPTIS 202), ARABIC 203 (AAPTIS 205) completed with a minimum grade of C- or better. (Prerequisites enforced at registration.) ARABIC 202 (AAPTIS 202), ARABIC 203 (AAPTIS 205) or assignment to ARABIC 401 by placement test. (5). May not be repeated for credit.*

This is the first of a two semester sequence of Advanced level Arabic. Students learn to understand, speak, read and write Arabic at Advanced Low to Advanced Mid level in addition to learning cultural meanings of language.

**ARABIC 402. Advanced Arabic II**

*ARABIC 401 (AAPTIS 403) (completed with a minimum grade of C- or better).*

*(Prerequisites enforced at registration.) ARABIC 401 (AAPTIS 403) or by assignment to ARABIC 402 (AAPTIS 404) by placement test. (5). May not be repeated for credit.*

This is the second of a two semester sequence of Advanced level Arabic. Students learn to understand, speak, read and write Arabic at Advanced Mid level in addition to learning cultural meanings of language.

**ARABIC 410. Topics in Arabic Language**

*Completion of ARABIC 202. Students cannot elect the same topic twice. (3). May be elected twice for credit. Taught in Arabic.*

This course is aimed at undergraduate and graduate students with intermediate Arabic language proficiency. Topics will vary, focusing on aspects of culture, linguistics, literature, music, film, history, etc. All material will be in Arabic, and the class will be taught in Arabic.

**ARABIC 499. Independent Study in Arabic**

*Consent of department required. (1 - 4). (INDEPENDENT). May be elected three times for credit.*

An independent study course in the area of Arabic. The intended language of instruction is Arabic. Approval from the department is required.

**ARABIC 501. Advanced Arabic Conversation and Composition**

*ARABIC 402 (AAPTIS 404). (Prerequisites enforced at registration.) (3). May not be repeated for credit.*

The objectives of this course are to develop fluency and accuracy in understanding, speaking, and writing modern standard Arabic, and to expand students' awareness

of Arab-Islamic culture and civilization. The course is based on a variety of literary texts and authentic cultural audio-visual materials.

**ARABIC 503. Classical Arabic Grammar**

*Three years of Arabic study. (3). May not be repeated for credit.*

This course will approach the study of Arabic grammar in the same way as it was approached by traditional Arab grammarians. We will analyze the structure of Arabic discourse by applying Arabic grammatical terminology and highlighting the relationship of the lexical meaning of the term to its denoted function. Illustrative examples are taken from classical texts including but not limited to Qur'an, Hadith, literary prose and pre-Islamic poetry.

**ARABIC 504. Advanced Arabic Media I**

*ARABIC 402 (AAPTIS 404). (Prerequisites enforced at registration.) (4). May not be repeated for credit.*

Emphasizes developing ease and fluency in listening, speaking, reading and writing journalistic Arabic. Course material includes unedited news items and radio and television programs which serve as the basis for class discussion and writing summaries.

**ARABIC 506. Arabic Phonology and Morphophonology**

*ARABIC 202 (AAPTIS 202) or ARABIC 203 (AAPTIS 205) (completed with a minimum grade of C- or better). (Prerequisites enforced at registration.) (3). May not be repeated for credit. No credit granted to those who are enrolled in or have completed ARABIC 606.*

Arabic Phonology and Morphology examines the phonetic, phonological, and morphophonological features of standard and dialectal Arabic.

**ARABIC 507 / LING 433. Arabic Syntax and Semantics**

*ARABIC 202 (AAPTIS 202) or ARABIC 203 (AAPTIS 205) completed with a minimum grade of C- or better. (Prerequisites enforced at registration.) (3). May not be repeated for credit.*

The course examines generative syntactic theory, especially the notion of principles and parameters, as well as functional, cognitive, and lexical semantic approaches and their relevance of analysis to standard Arabic and at least one Arabic dialect, using as a reference point medieval Arabic grammar.

**ARABIC 508. Arabic Historical Linguistics and Dialectology**

*ARABIC 202 (AAPTIS 202) or ARABIC 203 (AAPTIS 205) (completed with a minimum grade of C or better). (Prerequisites enforced at registration.) (3). May not be repeated for credit.*

This course surveys the development of the Arabic language from its origins to the present. The structure and development of Old, Middle, and Modern Arabic and their affinities to other indigenous dialects and languages are outlined. The historical implications of the development of communal dialects, sociolinguistic variation, and inherent linguistic variability are treated.

**ARABIC 509. Arabic Second Language Acquisition**

*ARABIC 202 (AAPTIS 202) or ARABIC 203 (AAPTIS 205) completed with a minimum grade of C or better. (Prerequisites enforced at registration.) (3). May not be repeated for credit.*

Arabic second language acquisition examines: (1) how Arabic as a second/foreign language is learned, (2) what factors contribute to different learning

outcomes and variability, and (3) how second language learners of Arabic with different native language backgrounds can attain superior or near native competence. Research findings on Arabic and other languages are explored not only from the perspective of the researcher, but also from that of the teacher. Hence, the course helps students in developing skills to interpret research findings as well as using relevant findings to inform teaching.

**ARABIC 510. Topics in Arabic Language**

*ARABIC 402 or advanced proficiency. Students may not take the same topic twice. (3). May be elected three times for credit. May be elected more than once in the same term.*

This course is aimed at undergraduate and graduate students with advanced Arabic language proficiency. Topics will vary, focusing on aspects of culture, linguistics, literature, music, film, history, etc. All material will be in Arabic, and the class will be taught in Arabic.

**ARABIC 513. Arabic-English Translation: Theory and Practice**

*Completion of ARABIC 402 or permission of the instructor. (3). May not be repeated for credit. Rackham credit requires additional work.*

Examines linguistic and textual issues at the word, sentence, and discourse levels and explores methods of translation and the translator's latitude in reconstructing the meaning of the source text. Taught in English.

**ARABIC 530. Arabic Poetry and Discourses of Empire**

*Completion of ARABIC 402 or advanced Arabic proficiency. (3). May not be repeated for credit.*

Our seminar explores how classical Arabic poetry constructed mind, world, and worldview, while drawing on interdisciplinary methods from literary and anthropological studies.

**ARABIC 600. Reading Modern Arab Authors in Arabic**

*ARABIC 402, ARABIC 501, or permission of instructor. (3). May be repeated for a maximum of 6 credits.*

Selected texts (novels, short stories, poetry, and personal interviews), written by modern Arab authors in the last two decades, will read and discussed in Arabic, with a special emphasis on the language and strategies of narration, cultural contextualizations and the sheer pleasure of reading an original text.

**ARABIC 610. Topics in Arabic Language**

*A minimum of two terms of 500-level Arabic coursework. Students cannot elect the same topic twice. (3). May be elected three times for credit. May be elected more than once in the same term.*

This course is aimed at undergraduate and graduate students with advanced Arabic language proficiency. Topics will vary, focusing on aspects of culture, linguistics, literature, music, film, history, etc. All material will be in Arabic, and the class will be taught in Arabic.

## Architecture (ARCH)

Architectural education at the University of Michigan prepares students to participate actively in the design of the physical environment. To effect change, an architect must understand the nature of the human problem in its environmental context, have

knowledge of the techniques and technology of building, and possess the intellectual and aesthetic skills necessary for a creative synthesis of that information into meaningful and expressive design solutions.

### Courses for non-majors

All students are welcome to take our pre-arch courses: ARCH 201, 202, 211, 212, 218, 313, 323, 357 and 423.

### Pre-Architecture Courses

A series of courses is offered at the undergraduate level at the University of Michigan designed specifically for students considering entering the Architecture Program their junior year. ARCH 211 introduces students to digital design tools and drawing and image manipulation software. ARCH 212 provides a general view and understanding of the profession and discipline of architecture. This course examines visual, cultural, historical, and philosophical aspects of the man-made environment. ARCH 313 and 323 are a two-part course series surveying the history of Architecture from antiquity to the present. Studio courses ARCH 201, ARCH 202, and ARCH 218 provide students with drawing and visual design skills primarily used in architecture and related fields.

### LSA Credit

The following courses count as LSA courses for LSA degree credit.

**ARCH 212 / HISTART 212. Understanding Architecture**

*(3). May not be repeated for credit. W.*

**ARCH 213 / HISTART 213. Architecture in Modernity**

*(4). (HU). May not be repeated for credit.*

This is a survey course on modern architecture in relation to other modernist discourses in the 19th and 20th centuries.

**ARCH 357 / URP 357. Architecture, Sustainability and the City: Ideas, Forces and People Shaping the Built Environment**  
(3). (HU). May not be repeated for credit.

An introduction to the design of the built environment, society's largest investment and biggest consumer of energy, the course's focus will range from the room to the building to the city to the metropolis, including spaces and places that are consciously planned and intentionally designed, as well as ones that are vernacular and organic. In addition to the fundamentals, history, theory and practice of design and urban planning, case studies of buildings and cities of different periods and cultures will be presented to deepen the student's understanding of the environmental, economic, socioculture and aesthetic impacts of architecture and urbanism. Contemporary problems and opportunities in sustainable building and community design will be considered, including energy and water conservation, waste management and recycling. Livability, walkability, bikeability and transit, as well as the importance of a vibrant and diverse public realm, will also be studied.

**ARCH 423 / ENVIRON 370 / URP 423. Introduction to Urban and Environmental Planning**  
(3 - 5). May not be repeated for credit.

## **Armenian Studies (ARMENIAN)**

**ARMENIAN 101. Western Armenian I**  
(4). May not be repeated for credit. No credit granted to those who have completed

or are enrolled in ARMENIAN 103  
(ARMENIAN 173/AAPTIS 173).

Introduction to the Western Armenian Language with exercises in reading, writing, and speaking. A balanced approach giving equal emphasis to the development of language skills and the study of Armenian culture will be employed.

**ARMENIAN 102. Western Armenian II**  
ARMENIAN 101 (AAPTIS 171). (4). May not be repeated for credit. No credit granted to those who have completed or are enrolled in ARMENIAN 103(AAPTIS 173).

Introduction to the Western Armenian Language with exercises in reading, writing, and speaking. A balanced approach giving equal emphasis to the development of language skills and the study of Armenian culture will be employed.

**ARMENIAN 201. Intermediate Western Armenian I**  
ARMENIAN 102 (AAPTIS/ARMENIAN 172) or ARMENIAN 103 (AAPTIS/ARMENIAN 173). (4). May not be repeated for credit.

Continuation of Western Armenian II. Reading, composition and conversation. A balanced approach, giving equal emphasis to the development of language skills and the study of Armenian culture.

**ARMENIAN 202. Intermediate Western Armenian II**  
ARMENIAN 201 (AAPTIS 271). (4). (Lang Req). May not be repeated for credit.

Continuation of Armenian 101/102. Reading, composition and conversation. A balanced approach, giving equal emphasis to the development of language skills and the study of Armenian culture.

**ARMENIAN 205. Intermediate Eastern Armenian I**

*ARMENIAN 105 (ARMENIAN/AAPTIS 182) or ARMENIAN 107 (ARMENIAN/AAPTIS 183). (4). May not be repeated for credit.*

This course is a continuation of Eastern Armenian II and forms the intermediate stage in teaching Eastern Armenian in a two-year cycle. Fundamentals of grammar, reading, writing and speaking, as well as translation from Armenian into English and vice versa will be emphasized.

**ARMENIAN 301. Advanced Armenian**  
*Completion of ARMENIAN 202, ARMENIAN 206, placement into Advanced Armenian, or permission of instructor. (4). May be elected twice for credit.*

This course is designed for students who have completed at least four semesters of Modern Western and/or Eastern Armenian. Students learn to understand, speak, read and write Armenian at an advanced level in addition to learning cultural meanings of language.

**ARMENIAN 389 / HISTORY 389 / MIDEAST 389. From Natives to Foreigners: Armenians in Turkey and the Diaspora**  
*(3). (SS). (R&E). May not be repeated for credit.*

With the establishment of the Republic of Turkey in 1923, the Armenian genocide 'survivors' became citizens of an ethno-religious nation-state that once sought their annihilation. We read the history of the Republic of Turkey parallel with the Armenian experience to look at the ambiguous relationship Armenians continue to have with the Turkish state following the Lausanne Treaty of 1923, the Armenian Patriarchate of Istanbul, as well as the Armenian diaspora institutions. The readings will contrast official and critical historiographical accounts of republican

Turkey and modern Armenians, as well as silenced chapters, absences, and misrepresentation of Armenians in such accounts by looking at ethnographies and social historical accounts.

**ARMENIAN 401. Introduction to Classical Armenian**

*No prior Armenian language experience is required. The course will be taught in English and will work to assist students in using resources, like dictionaries, etc. to help them read classical Armenian. (4). May be elected twice for credit.*

This course is an introduction to Classical Armenian (Grabar), the oldest written form of the ancient tongue of Armenia. A vast corpus of texts of biblical, religious, theological, exegetical, moral, historical, philosophical, linguistic, rhetorical, calendrical nature as well as law codices and translations from Greek, Syriac, Arabic, Old French, Latin, etc., some of which bear witness to lost originals, enable the student to explore an infinite wealth of wisdom and knowledge, history and literature in the widest sense of the word. Robert W. Thomson's *A Textbook of Classical Armenian* (second edition) will be used for weekly lessons on grammar, which will be illustrated and reinforced with a variety of passages from the Bible and old Armenian authors (Agathangelos, Eznik, Ghazar Parpetsi, Epic Histories, Eghishe, Movses Khorenatsi, etc). By the end of the first semester the students will have mastered the Armenian alphabet and acquired a basic, working vocabulary; reading proficiency; some familiarity with Armenian history and literature; and an adequate exposure to different Armenian scripts throughout history. In the second semester, reading and analyzing texts will continue with a reasonable effort to introduce texts tailored to some of the interests and needs of the students.

### **ARMENIAN 410. Topics in Armenian Language**

*At least two years of coursework in Armenian or permission of instructor. (3). May be elected three times for credit.*

This course is aimed at undergraduate and graduate students with advanced Armenian language proficiency. Topics will vary, focusing on aspects of culture, linguistics, literature, music, religion, film, history, etc. All material will be in Armenian, and the class will be taught in Armenian.

### **ARMENIAN 499. Independent Study in Armenian**

*Consent of department required. (1 - 4). (INDEPENDENT). May be elected three times for credit. May be elected more than once in the same term.*

An independent study course in the area of Armenian language. The intended language of instruction is Armenian.

## **Arts Administration (ARTSADMN)**

### **ARTSADMN 385 / THTREMUS 385. Performing Arts Management**

*Consent of instructor required. May not be repeated for credit.*

An introduction and overview of management issues concerning the non-profit cultural sector.

## **Asian Studies (ASIAN)**

### **ASIAN 200 / HISTORY 203. Introduction to Japanese Civilization: Japan Before Today**

*(3). (HU). May not be repeated for credit.*

This course investigates Japan from the turn of the last millennium--when rival chieftains appealed to the Chinese court for recognition before there was a Japan as such--through the late 20th century--an age of giant cell phones and fears that Japan was going to buy up the US.

### **ASIAN 201. Society and Culture in Contemporary Japan**

*(4; 3 in the half-term). (SS). May not be repeated for credit.*

This course is a general introduction to the forms and patterns of modern Japanese culture. Engaging common American perceptions and misperceptions of Japanese people and culture, we explore major social trends including the education system, family organization, styles of intimacy, and patterns of work.

### **ASIAN 204 / HISTORY 204. East Asia: Early Transformations**

*(4; 3 in the half-term). (HU). (R&E). May not be repeated for credit.*

The course introduces the histories, cultures, and societies of East Asia, including China, Japan and Korea from the archaeological phases through early modern times, ca 1700. It emphasizes social transformation that was made possible through international exchanges of knowledge and goods, technological innovations and adaptations, literacy and thoughts.

### **ASIAN 205 / HISTORY 205. Modern East Asia**

*(4; 3 in the half-term). (SS). (R&E). May not be repeated for credit.*

An interdisciplinary analysis of the impact of the modern world on the traditional cultures of China, Japan, Korea, and related areas, and the subsequent transformation of the societies of these countries, with an



examination of the differing responses of China and Japan to the modern challenge.

**ASIAN 206 / HISTORY 206. Indian Civilization**

(4; 3 in the half-term). (HU). May not be repeated for credit.

A lecture survey of the civilizations of India from earliest times to the present.

**ASIAN 207 / HISTORY 207. Southeast Asian Civilization**

(4; 3 in the half-term). (SS). (R&E). May not be repeated for credit.

A lecture survey of the civilization of Southeast Asia -- both the Indo-China peninsula and the islands from Indonesia to the Philippines -- from earliest times to the present.

**ASIAN 210 / HISTORY 219. The Philippines: Culture and History**

(3). (HU). (R&E). May not be repeated for credit.

This course is an introduction to the historical formation and cultural complexity of the Philippines. It surveys major periods in Philippine history, paying particular attention to the cultural effects of processes and events such as: religious conversion; revolution and nationalism; U.S. Imperialism; modernity, globalization, and migration.

**ASIAN 211 / RELIGION 212 / SEAS 211. Monks, Magic and Mediums: Buddhism in Southeast Asia**

(3). (HU). May not be repeated for credit.

This course introduces undergraduates to Southeast Asian Theravada Buddhism by focusing on popular religion. Various religious actors, sacred objects and ritual activities are investigated, ranging from the normative and orthodox (monks, scripture and meditation) to the unconventional and

stigmatized (spirit mediums, sacred tattoos, and spirit worship).

**ASIAN 220 / RELIGION 202. Philosophy and Religion in Asia**

(4). (HU). May not be repeated for credit.

This course provides a broad overview of Asian philosophies. Its central focus is to examine the relationship between important Asian philosophical concepts and the religious movements associated with them.

**ASIAN 222. Great Books of Japan**

*A knowledge of Japanese is not required.*

(4). (HU). May not be repeated for credit. Taught in English. W (in odd years).

An introduction to the great works of literature that have exerted a determining influence on the lives and culture of the Japanese from ancient times to the present.

**ASIAN 223 / RELIGION 223. Krishna Speaks: Bhagavad-Gita**

(3). (HU). May not be repeated for credit.

This class introduces Hinduism to students through an intensive study of this single most important scriptural text, the Bhagavad-Gita. We spend half the time going over the text-in-translation, chapter by chapter. The other half of the class time is devoted to critical issues relating to the text, i.e., history of the text, its transmission, its location within the history of Hinduism, its connections with political/cultural history, its ancient and modern interpretations.

**ASIAN 225 / RELIGION 225.**

**Introduction to Hinduism**

(3). (HU). May not be repeated for credit.

Hinduism is a major world religion practiced by over a billion people, primarily in South Asia, but it also was the precursor of Buddhism, and along with Buddhism it had a major impact on the civilizations in

East and Southeast Asia. This class will cover its origins and development, its literature, its belief and practices, its unique social structures and doctrines, its interactions with other religions, and finally its confrontation with and accommodation of "modernity."

**ASIAN 230 / PHIL 230 / RELIGION 230.  
Introduction to Buddhism**

(4). (HU). *May not be repeated for credit.  
May not be included in a concentration  
plan in Philosophy.*

**ASIAN 231 / RELIGION 231.  
Introduction to Tibetan Buddhism**

(4). (HU). *May not be repeated for credit.*

This course surveys the development of Buddhism in Tibet. It begins with an introduction to those doctrines and practices of Indian Buddhism that would come to hold an important place in the Tibetan tradition and goes on to examine the process of transmission of Buddhism from India to Tibet.

**ASIAN 232 / AMCULT 234. Zen  
Masters, Dharma Bums, and Drag  
Queens: Buddhism in America**

(3). (HU). *May not be repeated for credit.*

In this course we will consider the various ways Buddhism was and is transmitted to this country and how Buddhist traditions have taken shape within the contexts of colonialism, globalization, and distinctly American philosophical and cultural values. We will be looking at a wide range of sources, including novels, Buddhist teachings, popular culture, contemporary scholarship, and films. All are welcome. No previous experience necessary.

**ASIAN 235. Introduction to Asian  
Studies**

(4). (HU). *May not be repeated for credit.  
Taught in English.*

This introductory course forms an interdisciplinary gateway to the study of Asian cultures. Exploring topics and approaches that cross the national and disciplinary boundaries that have conventionally divided the study of Asia, the course invites students to think thematically and critically across cultural differences and through historical connections.

**ASIAN 241 / HISTORY 251. The  
Chinese Renaissance: Cultural  
Transformations in Eleventh-Century  
China**

(3). (ID). *May not be repeated for credit.*

This course examines the profound economic, political, social, philosophical, religious, artistic, and technological developments in the Song Empire (960-1279). Readings in scholarly articles and translated primary documents reveal a flourishing culture of subtle perception and startling achievement that resembles the European Renaissance both in many of its particulars and in its general significance for human civilization.

**ASIAN 243 / HISTART 243.  
Introduction to South Asian Art: Art of  
India**

(3). (HU). *May not be repeated for credit.*

Studying the visual arts of South Asia constitutes a gateway toward understanding the entirety of the intellectual and cultural heritage of humanity, from antiquity to the present day. The assemblages of objects and images produced and used in South Asia - Buddhist stupas, sprawling temple-cities, embroidered textiles, Mughal paintings, Satyajit Ray films and much else - represent more than the inheritance of South Asia, home to a fifth of the world's population. In addition to introducing these objects and images, this survey course will also

explicate how they are equally the heritage of many other cultures because many of them have emerged from encounters with other mediums and with other civilizations, which, in turn, have been reflected, reshaped, and reformed by the art of subcontinent. This course includes field trips to art and archaeology museums in the Ann Arbor area.

**ASIAN 244. Seeds of Conflict: Intercultural Encounters in Japan from 745-1945**

(3). (HU). *May not be repeated for credit.*

Why are Japan's relations with its neighbors so complicated? We make use of materials from the 8th century through WWII - history, literature, art, and film - to explore the origins and development of Japan's complicated relationship with its neighbors in order to better understand its conflicted place in East Asia today.

**ASIAN 248 / HISTORY 248 / RELIGION 248. Jesus Comes to Asia: Conversion and its Consequences in Asia**  
(4). (HU). (R&E). *May not be repeated for credit.*

This course provides a broad introduction to the study of Christian conversion and its legacy in the regions now known as South, East, and Southeast Asia.

**ASIAN 252. Undergraduate Seminar in Japanese Culture**

*No knowledge of Japanese language is required. (3). (HU). May be elected twice for credit.*

**ASIAN 254. Undergraduate Seminar in Korean Culture**

*No knowledge of Korean language is required. (3). (HU). May be repeated for a maximum of 6 credits.*

This topics course is in the same mold as the other 250 courses in ALC. This course

allows us to offer varying course to introduce aspects of Korean Culture to undergraduates. Topics will be in the area of Humanities, that our faculty specialize in: religion and literature.

**ASIAN 255. Undergraduate Seminar in Asian Studies**

(3). (HU). *May be elected twice for credit. May be elected more than once in the same term.*

This undergraduate seminar offers lower division LSA students a small group learning experience. Students will explore a subject of particular interest in collaboration with a faculty member in the area of Asian studies.

**ASIAN 257. Great Cities in Asia**

(4). (HU). *May be elected twice for credit. No credit granted to those who have taken the course under the same topic.*

This course serves as an introduction to the history and culture of a great city or a group of great cities in Asia (e.g. Tokyo, Seoul, Shanghai, Mumbai). This course focuses on a number of key issues that are critical to making sense of these cities: the relationship between modern and premodern cities, the historical linkages between different Asian cities, and the challenges faced by most Asian cities, including cosmopolitanism, social inequality, suburbanization, pollution, etc.

**ASIAN 258 / ENVIRON 258. Food and Drink of Asia**

(4). (HU). *May not be repeated for credit.*

This course uses food and drink as a window into the culture and history of East Asia, South Asia, and Southeast Asia.

**ASIAN 259 / HISTORY 255. Modern India and South Asia**

(4; 3 in the half-term). (HU). (R&E). *May not be repeated for credit.*

This is an introductory level course on the history of the Indian subcontinent. The course will focus on British colonial rule, independence and partition, and the creation of three new nation-states on the subcontinent: India, Pakistan, and Bangladesh.

**ASIAN 260 / HISTORY 252.**

**Introduction to Chinese Civilization**

(4). (HU). (R&E). *May not be repeated for credit. No assumed knowledge of Chinese history, culture, or language required.*

This course introduces students to major problems and controversies in pre-modern Chinese cultural studies. It covers the political, cultural, social, and material history from the Neolithic period to the Mongol conquest in the 13th century.

**ASIAN 261. Introduction to Modern Chinese Culture**

*No knowledge of Chinese required. (4). (HU). May not be repeated for credit. Taught in English.*

By following modern Chinese cultural history from the late 19th century to the 21st century, we study how various cultural forms (such as literature, visual arts, and cinema) rose in response to historical exigencies and at the same time had significant impact on the course of history. Our goal is to gain a deeper understanding of the complex experience of modernity in China.

**ASIAN 262. Twenty-five Ways that China Changed the World**

(4). (HU). *May not be repeated for credit.*

The media makes much of China's rising stature, predicting that the world will soon look to China for leadership. Yet long before the present moment, Chinese products and institutions shaped the experience of daily life around the globe.

This class investigates the ways that Chinese "things" have changed the world.

**ASIAN 263 / PHIL 263. Introduction to Chinese Philosophy**

(3). (HU). *May not be repeated for credit.*

This course focuses on the major philosophical schools of Classical China from the Warring States period (453-221 BCE) to the end of the Qing dynasty (1644-1911 CE). Special consideration is given to the ethical, religious and political thought of Confucian, Mohist, Daoist schools in early China, and the Neo-Confucian developments in later imperial periods.

**ASIAN 264. Looking at Traditional China Through its Most Famous Novel, The Story of the Stone**

(3). (HU). *May not be repeated for credit.*

The Story of the Stone (Honglou meng) is arguably the most influential work of traditional Chinese literature. It charts the difficult growth into adulthood of a number of adolescent cousins fortunate enough to be living together. This course allows students to explore the many different facets of this complex novel.

**ASIAN 271. Spectacular History of Korea: Visualizing Events**

(3). (HU). *May not be repeated for credit.*

This course offers a close look at major events in modern and contemporary Korea and how these events are represented in texts and images. Its goal is to introduce students to how history is recorded and represented in visual mediums and become spectacular images.

**ASIAN 273 / RCHUMS 273. North Korea: Real and Imagined**

(4). (ID). *May not be repeated for credit.*

This course acts as an introduction to North Korea, examining this controversial state

from the perspective of history, international relations, and contemporary society.

**ASIAN 274 / HISTORY 249.**

**Introduction to Korean Civilization**

(3). (HU). *May not be repeated for credit.*

This course serves as a general introduction to Korean history and culture from earliest times to the present. Topics to be covered include foundation myths, religion, ancient literature, modernization, colonialism, civil war, authoritarianism, rapid industrialization, and democratization in Korea.

**ASIAN 275 / HISTORY 288. India**

**Calling: Culture and Society in Contemporary India**

(3). (HU). *May not be repeated for credit.*

This course proposes to examine modern Indian culture and society. It will focus on three interrelated themes of Indian culture, tracing their transformations from the pre-modern to the modern: religion, gender, and caste. It will pay particular attention to the manner in which various components of Indian culture were constituted in the colonial and postcolonial periods.

**ASIAN 277 / AMCULT 277. From Truman to Trump: Introduction to US-Korea Relations**

(4). (HU). *May not be repeated for credit.*

This course provides an overview of the relations between the US and the two Koreas from the end of WWII to the present by focusing on cultural and material history. Course materials will be drawn from fiction, film, music, television, sports, fashion, and architecture.

**ASIAN 280. Topics in Asian Studies**

(3). (HU). *May be elected twice for credit.*

Provides an opportunity for non-specialists to explore a particular area of Asian culture. It aims to give beginning students a background for the study of Asian topics, as well as special insights into the (literary) traditions, philosophies, and beliefs of different peoples within Asia.

**ASIAN 285 / WGS 285. Love and Intimacy in Asia**

(3). (SS). *May not be repeated for credit.*

This course offers an introduction to recent scholarship on romance and intimacy in Asia to examine how intimate relationships shape human experiences.

**ASIAN 292 / HISTART 292.**

**Introduction to Japanese Art and Culture**

(4). (HU). *May not be repeated for credit.*

*No credit granted to those who have completed or are enrolled in HISTART 495.*

This course takes an interdisciplinary approach to the history of Japanese visual culture, introducing the art of the archipelago from ancient times through the present day. Although primarily a chronological examination of key artistic monuments, it also discusses thematic issues in Japanese art history, such as nature, gender, and modernity.

**ASIAN 297. Mini Course in Asian Studies**

(1 - 3). (HU). *May be elected three times for credit.*

This course is aimed at undergraduate students with an interest in Asian studies. Topics will vary, focusing on aspects of culture, linguistics, literature, performance/theater, religion, film, history, etc. All material will be taught in English.

**ASIAN 300. Love and Death in Japanese Culture**

*A knowledge of Japanese is not required.  
(3). (HU). May not be repeated for credit.*

A critical study of major works of Japanese literature from the eighth through the nineteenth century, with a view to illuminating cultural attitudes towards love and death within the sociopolitical, religious and philosophical contexts.

**ASIAN 302. Rewriting Identities in Modern Japan**

*Knowledge of Japanese is not required. (3).  
(HU). May not be repeated for credit.*

Readings in modern Japanese fiction aiming to examine the shifts in the concept of self and identity under the impact of modernization and Western influence, and in tension with traditional Japanese philosophy.

**ASIAN 303 / RELIGION 303. War Machines: Religious Militant Orders of the World**

*(3). (HU). May not be repeated for credit.*

This course explores the figure of the "Warrior Saint" as it is depicted in some of the better known religious-military orders of the world such as the Khalsa in India, the Japanese Samurai, the Shaolin monks of China, Christian Crusaders and Muslim jihadists in the medieval period.

**ASIAN 304 / HISTART 304. The Art of Yoga**

*(3). (ID). May not be repeated for credit.*

As yoga becomes increasingly popular it is important to query its early development, transformation over the centuries, and the possibilities and perils that it holds forth to its practitioners. Graphing milestones in the history of yoga, this course is also an introduction to South Asian visual, literary, and religious culture.

**ASIAN 305 / RELIGION 305. Religion and Violence in the Secular World**

*(3). (HU). May not be repeated for credit.*

How do we think about religion and violence in a secular world? Through a series of case studies focusing on the world's major religious traditions including Christianity, Islam, Hinduism, Judaism, Sikhism and Buddhism, this course reflects on a variety of contemporary themes including the War on Terror, religious pluralism, the fate of liberal democracy etc.

**ASIAN 307 / HISTORY 308 /**

**RELIGION 307. Eat, Pray, Love: Devotional Traditions in South Asia**

*ASIAN 220 or 225. (3). (HU). May not be repeated for credit.*

This course explores the meaning and location of devotion within Indian religions. Over the semester, the course grapples with the centrality of practice, beyond the world of scripture and sacred texts, in understanding Religion. Focusing primarily on Hindu, Sikh, and Islamic devotional traditions, this course guides students to a deeper and nuanced understanding of the practice of popular religion in the Indian subcontinent today, as well as in the past.

**ASIAN 308 / RCHUMS 308. Arts and Ideas of Modern South and Southeast Asia**

*(3). (HU). (R&E). May not be repeated for credit.*

How have the countries of South and Southeast Asia re-conceptualized their cultures, accommodating to or rejecting Western views in the 20th century? Focusing primarily on India, Thailand and Indonesia, this course examines the aesthetic responses of twentieth century writers, musicians, and dancers as they come into contact with Western ideas.

**ASIAN 310 / WGS 311. Family in Japan**

(3). (SS). *May not be repeated for credit.*

What is the importance of family in contemporary Japan? This course begins to answer this central question by exploring both families as lived experience and Family as a powerful symbol for national unity. Focusing on the ways in which families have been imagined, legislated, lived, and refused, we will examine legal structures and social norms that shape these very personal groups. Including social scientific theory about kinship, the course traces the centrality of family in contemporary life while analyzing debates about family change, social conflict, and personal preferences. Topics include the household registry system, parent-child relationships, family-owned businesses, queer families, divorce, and domestic violence. Course materials include readings and required films, two short papers, and a final paper.

**ASIAN 311. The Image of the Samurai**  
(3). (HU). *May not be repeated for credit.*

Representations of the samurai in literature, drama, art, film, and other forms from the twelfth to twenty-first century; how the samurai became a global icon.

**ASIAN 312. After Defeat: The Cultural History of Postwar Japan**  
(3). (HU). *May not be repeated for credit.*

This course explores the relation of art and politics in Japan from the Occupation era to the 1970s, starting with criticism of the Asia-Pacific War and ending with reassessments of the postwar period itself. Materials include literature, film, visual arts, theater, and philosophy. Attendance at evening film screenings is required.

**ASIAN 314. Strange Ways: Literature of the Supernatural in Pre-modern Japan**

**and China**

(3). (HU). *May not be repeated for credit.*

What is the supernatural? In this course, we will look at the writings and art of pre-modern and early modern Japan and China to explore this question.

**ASIAN 316. Controversies in Contemporary Japan**

(3). (ID). *May not be repeated for credit.*

This course examines three controversies in contemporary Japan in order to understand a spectrum of current problems: life and work in the "lost decades" after the crash of 1989; representation of the Asia-Pacific War in textbooks, popular media, and political performance; and the March 2011 earthquake, tsunami, and nuclear accidents.

**ASIAN 318. HU Topics in Japanese Studies**

*At least one previous course on Japan. Students are not permitted to elect the same topic twice. (3). (HU). May be elected twice for credit. May be elected more than once in the same term.*

Course topics vary. The topics will focus on aspects of Japanese culture and society.

**ASIAN 319 / RELIGION 319. Spirits of Contemporary Japan in Popular Culture**  
ASIAN 200. (3). (HU). *May not be repeated for credit.*

We search for answers within contemporary Japanese culture, focusing media. Taking the meanings of "spirit" in Japan's recent past and present predicaments, we examine themes as Japanese "spirituality" and its relationship to religion; and the current problem of "dispiritedness," and efforts to reinvigorate the victims of those conditions.

**ASIAN 320. Japanese Performance Culture**

(3). (HU). *May not be repeated for credit.*

This course explores Japanese theatrical forms from the 13th- century to the present, including Noh, Bunraku, Kabuki, Takarazuka, and Butoh, with emphasis on understanding these forms' historical emergence. Students will analyze the techniques and politics of Japanese performance traditions as they develop skills of close observation and critical writing about performance.

**ASIAN 321. Make it New: Modernism and Modern Life in Japan**  
(3). (HU). *May not be repeated for credit.*

This course is about the idea and the experience of being "modern" in Japan, as seen in literature, film, arts and philosophy from the 1870s to now. Must modern Japan be "Western"? Is a Japanese modernity possible? We answer these questions as we trace how ideas of being modern evolved.

**ASIAN 322. War Tales: Histories of Violence in Medieval and Early Modern Japan and China**  
(3). (HU). *May not be repeated for credit.*

What is the romance of war? In this course, we will look at the writings and art of medieval and early modern Japan and China to explore how domestic and foreign military conflict are spun into stories.

**ASIAN 324 / HISTORY 325 / ISLAM 325 / MEMS 325 / MIDEAST 375 / RELIGION 325. The History of Islam in South Asia**  
(4). (HU). (R&E). *May not be repeated for credit.*

This course examines the history of Muslim communities and institutions in South Asia. It will consider Muslim political expansion and sovereignty, conversion, the interaction between religious communities, Islamic aesthetics, the impact of colonial rule, India's partition and the creation of

Pakistan, and the contemporary concerns of South Asia's Muslims.

**ASIAN 325 / RELIGION 323. Zen: History, Culture, and Critique**  
(4). (HU). *May not be repeated for credit.*

This course provides an introduction to the religious history, philosophy and practices of Zen Buddhism.

**ASIAN 326. Introduction to Japanese Buddhism**  
ASIAN 230. (3). (HU). *May not be repeated for credit.*

This survey introduces key texts, figures, and practices from over one thousand years of Japanese Buddhism. Students encounter both the history and the continuing relevance of the tradition in areas including ritual life, "popular" and "high" culture, tourism, and ethnonational self-understanding.

**ASIAN 327. Thai Buddhism and Film**  
(3). (HU). *May not be repeated for credit.*

This course will introduce students to the central beliefs, practices, actors and institutions of Buddhism in Thailand through the medium of film. We will explore the complicated relationship between official and unofficial, elite and popular visions of Buddhism in both Thai society and Thai cinema.

**ASIAN 328 / RELIGION 328. Introduction to Theravada Buddhism**  
(3). (HU). *May not be repeated for credit.*

This course will introduce undergraduates to the variety of Theravada Buddhist doctrines, teachings, institutions, actors and practices in South and Southeast Asia. Myth, ritual and symbolism within the tradition will be explored comparatively across a diverse range of societies and cultures, both in the past and in the present.



**ASIAN 329. Buddhism, Politics, and Violence in Modern Asia**

(3). (HU). *May not be repeated for credit.*

Despite its reputation for non-violence, in the modern era Asian Buddhism has been deeply entangled in acts of war, genocide, ethnic cleansing, insurgency and pogroms. This course examines how Buddhist beliefs have fostered both conflict and peace, and how Buddhist institutions have both endorsed and become targets of political violence.

**ASIAN 334. Race, Religion, and Caste in India and America**

(3). (ID). *May not be repeated for credit.*

This course examines the relationship between race, caste, and religion in two very different democracies, India and the United States. Through the comparison of populations in each country, we probe the language and construction of race, nation, religion, color, and ethnicity, as well as the linkages between these categories.

**ASIAN 335 / HISTART 305. Himalayas: An Aesthetic Exploration**

*Undergraduate and graduate students seeking to enroll for this course should have completed at least one course on the arts/languages/religions of South/Central/East Asia. (3). (HU). May not be repeated for credit.*

Studying Himalayan art and architecture offers an opportunity to embark on expeditions to distant frontiers, acquire critical appreciation of the impact of geography on cultural production and gain deeper understanding of historical process that have transpired in this region and continue to exert an influence in our own times.

**ASIAN 336. Controversies in Contemporary India**

(3). (ID). *May not be repeated for credit.*

This course will examine five contemporary and burning issues in Indian society today and use these to delve into larger issues and challenges that face India as a nation and a culture as it finds itself in the twenty-first century.

**ASIAN 337 / RELIGION 337. The Ramayana: Text and Context in an Indian Epic**

*ASIAN 220 or ASIAN 206. (3). (HU). May not be repeated for credit.*

This upper-level undergraduate course intends to familiarize students with the Ramayana as literature, performance, scripture, and ideology in the Indian context. It also intends to de-familiarize students with the normative and well-known versions of this great Indian epic by introducing lesser-known retellings of the tale.

**ASIAN 338. Humanities Topics in South Asian Studies**

*At least one previous course on South Asia. Students are not permitted to elect the same topic twice. (3). (HU). May be elected twice for credit. May be elected more than once in the same term.*

Course topics vary. The topics will focus on aspects of South Asian culture and society.

**ASIAN 340 / HISTORY 340 / MENAS 340 / MIDEAST 340 / REEES 340. From Genghis Khan to the Taliban: Modern Central Asia**

*(4; 3 - 4 in the half-term). (SS). (R&E). May not be repeated for credit.*

This course provides an overview of modern Central Asian history. It focuses on the empires of the last 300 years: especially in Russian and Soviet Central Asia, but also the neighboring areas dominated by Britain and China (Afghanistan, Pakistan, Xinjiang).

**ASIAN 342 / WGS 332. Gender and Power in Southeast Asia**

(3). (HU). May not be repeated for credit.

This course draws from a wide range of material including primary source documents, ethnography, literature, and film, to examine the topics of gender and sexual identities in historical and contemporary Southeast Asia.

**ASIAN 345 / AAS 345 / RCSSCI 346. Genocide and Trauma in Southeast Asia, Africa, and Europe in the Twentieth Century**

(3). (HU). May not be repeated for credit.

This course begins with an introduction to the study of memory, history, and trauma that draws primarily on materials that concern cases of mass violence and its remembrance during the Holocaust before turning to modern examples of genocide in Southeast Asia and Africa.

**ASIAN 346. Controversies in Contemporary Southeast Asia**

*Previous knowledge of Southeast Asia is preferred.* (3). (ID). May not be repeated for credit.

This course examines contemporary controversies in Southeast Asia that organize themselves around three main themes: (1) Space, Place, and Ethnicity; (2) Political Violence; (3) Gender and Sexuality. We will incorporate a wide range of source material from a variety of disciplinary perspectives including anthropology, sociology, political science, and cultural studies. We will also be tracking many of these controversies in real time using social media and the press.

**ASIAN 348. Humanities Topics in Southeast Asian Studies**

*At least one prior course on Southeast Asia. Students are not permitted to elect the same topic twice.* (3). (HU). May be elected twice

*for credit. May be elected more than once in the same term.*

Course topics vary. The topics will focus on aspects of Southeast Asian culture and society.

**ASIAN 349 / PHIL 349. Confucianism: Reinventions of Tradition**

*ASIAN 220 or ASIAN 263/PHIL 263.* (3). (HU). May not be repeated for credit.

This course explores some of the key concepts in Confucianism through studying the foundational texts of Confucianism. It also examines the subsequent unfolding of the Confucian tradition in different cultural milieu and in relation to different audiences.

**ASIAN 350 / RELIGION 351. Gods, Ghosts, and Gangsters: Popular Religion in China**

(3). (HU). May not be repeated for credit.

This course introduces students to the popular religious traditions of China. From divination to demon slayers, from animal spirits to ancestral rites, students are introduced to the texts, visual cultures, and traditions found throughout China and Taiwan.

**ASIAN 351 / ENVIRON 351 / INTLSTD 351. Chinese Food in Crisis: Health, Ecology, and Identity in an Age of Globalization**

*ASIAN 258, ASIAN 366, or coursework in Chinese Studies or Sustainability.* (3). (ID). May not be repeated for credit.

This course looks at the role that culinary globalization has played in reshaping the Chinese diet, along with its implications for health, the environment, and political identity.

**ASIAN 352 / WGS 352. Gender, Sexuality, and Power in Premodern China**

*At least one course in Asian studies or Women's studies. (3). (HU). May not be repeated for credit.*

This course explores gender and sexuality in China before the 20th century. We examine treatises, poetry, letters, plays, novels, and short stories from premodern China by male and female authors to investigate how people conceived of gender and sexuality in China, and how those conceptions changed over time.

**ASIAN 353. China Around the World: Power, Politics, and Translation**

*(3). (HU). May not be repeated for credit.*

This course is an introduction to Chinese literature, focusing on its translation and circulation outside of China from the 17th century to the present. A variety of texts are examined to explore various ways translation shapes Western conceptions of China. We begin by discussing how Chinese literature has been construed as particularly difficult to translate, explore the ways in which the translation and circulation of early Chinese classics was animated by interests in ancient Chinese wisdom, and consider the recent emergence of a global notion of Chinese literature and culture. We conclude by comparing translations of Chinese drama into European languages and their adaptation within China.

**ASIAN 354 / HISTORY 354. War, Rebellion and Revolution in China Through Two Centuries**

*(4; 3 in the half-term). (SS). May not be repeated for credit.*

This course explores rebellions and revolutions in China, from the White Lotus rebellion in the late 18th century through social protests during the last decades of the 20th century. Although the social matter is arranged chronologically, different time

periods are used to highlight different themes in the Chinese "revolutionary tradition".

**ASIAN 355. How Communism Changed China**

*(3). (HU). May not be repeated for credit.*

This course explores the different human experiences of communist revolution in China, asking what communism meant to Chinese people from different parts of society during periods of the twentieth century and how communism changed Chinese culture, including daily life, language, arts and entertainment, education, public space, and social relationships.

**ASIAN 356 / RCHUMS 374.**

**Contemporary Chinese Performance Culture**

*(3). (HU). May not be repeated for credit.*

This course examines twenty-first century Chinese culture through the lens of performance. Starting with the 2008 Beijing Olympic Opening Ceremonies, the course uses significant works as case studies to examine a range of genres in 21st-century Chinese performance culture.

**ASIAN 357 / RCHUMS 358. Sensuous Pleasures: China's Forbidden Novel, Jin Ping Mei**

*Sophomore standing or higher. (3). (HU). May not be repeated for credit.*

This course explores sensual pleasure in the first realistic novel of everyday life in China - Jin Ping Mei, or The Plum in the Golden Vase. Through close reading and visits to performing arts events, we consider how the experience of reading mimics, captures, and expands upon sensuous experiences.

**ASIAN 358. The Art of War: Military Ethics in Ancient China**

*At least one Asian studies course. (3). (HU). May not be repeated for credit.*

The course examines the reception of the Chinese classic, *Art of War*, both within China and in the West.

**ASIAN 359. Crime and Detection in Chinese Literature**

(3). (HU). *May not be repeated for credit.*

This class focuses on the development and place of genres focusing on crime and detection in traditional China and the fate of these genres in Modern China. We investigate the legal system and how it is represented in the stories. The various Chinese genres and subgenres are compared with similar and related genres in the West.

**ASIAN 361. Humanities Topics in Chinese Studies**

*At least one prior course on China.*

*Students are not permitted to elect the same topic twice. (3). (HU). May be elected twice for credit. May be elected more than once in the same term.*

Course topics vary. The topics will focus on aspects of Chinese culture and society.

**ASIAN 362. The Travels of the Monkey King in China and Abroad**

(3). (HU). *May not be repeated for credit.*

The Monkey King is well known in China and abroad, especially among children. He is the star of the famous 16th century novel, *The Journey to the West*, and countless adaptations since. This class looks at the deeper meanings of his story and the reasons for his wide popularity.

**ASIAN 363. Chinese Drama and Theater**

(3). (HU). *May not be repeated for credit.*

Prior to the introduction of modern electronic media, theater served as the mass media of China. It is important enough in the 20th century to be the main medium for political campaigns. This course explores

the development of Chinese theater from its prehistory to the present, both in performance and as reading material.

**ASIAN 364. The Development of Chinese Fiction**

(3). (HU). *May not be repeated for credit.*

Chinese fiction developed from parables and historical narratives into a mature form almost entirely independent of the west until the end of the 19th century. This course charts the evolution of the major Chinese fictional genres, introducing numerous famous works and their vision of traditional Chinese society.

**ASIAN 366. Controversies in Contemporary China**

*ASIAN 260 or ASIAN 261. (3). (ID). May not be repeated for credit.*

This course explores four contemporary controversies in the People's Republic of China. It incorporates a wide range of source material, including primary sources in translation and documentaries. Students acquire the skills to deliver nuanced examinations of issues affected by state censorship, media, and Cold War politics.

**ASIAN 367 / LING 367. Languages of Asia**

(3). (HU). *May not be repeated for credit.*

This course provides students with an exploration of the history of language and Asian regions, including China, Japan, Korea, Mongolia, Indonesia, Vietnam, India, and Pakistan. It offers a broad perspective on the history and culture of the region, as well as a general introduction to linguistic analysis and methodology.

**ASIAN 368 / LING 368. How Different is Chinese?**

(3). (HU). *May not be repeated for credit.*

This course investigates and critically analyzes Western writings about the Chinese language from the 16th century to the present.

**ASIAN 370. Acupuncture: Historical and Contemporary Transformations**

(3). (ID). *May not be repeated for credit.*

This course will survey the modern history and contemporary practice of Traditional Chinese Medicine. In particular, critical attention will be given to current scientific debates about the safety and efficacy of the tradition.

**ASIAN 373 / RCHUMS 373. The Performing Arts in South and Southeast Asia**

(3). (HU). *May not be repeated for credit.*

This course explores how artists put together performances in South and Southeast Asia, through focusing on the ancient Indian epic, The Ramayana. We examine ways that identities are performed locally, nationally and internationally and also ways that performers and analysts from that part of the world approach and discuss the phenomenon of performance.

**ASIAN 374. Korean War in Fiction and Film**

(3). (HU). *May not be repeated for credit.*

An examination of the Korean War and its enduring impact through literary and cinematic representations. Literary texts include fiction and memoirs by Asian and Asian American writers. Special attention is paid to the cultural politics of the Cold War and ideologies of race.

**ASIAN 375. Modern Korean Literature**

(3). (HU). *May not be repeated for credit.*

An overview of major works of modern Korean fiction in English translation.

Explores the relationship between literature and politics within historical contexts of colonialism, civil war, authoritarianism, rapid industrialization, and demonstration.

**ASIAN 376. Controversies in Contemporary Korea**

(3). (ID). *May not be repeated for credit.*

This course examines four contemporary controversies in Korea (South and North) in order to provide a broad understanding of the very recent history of the birthplace of the "Korean Wave" and the "Miracle of the Han River": (1) comfort women, Japanese history textbook controversy, and Dokdo; (2) globalization, economic growth, and the Korean Wave (Hallyu); (3) North Korea and the Axis of Evil; (4) education fever in South Korea.

**ASIAN 377. K-Pop and Beyond: Popular Culture and Korean Society**

(3). (HU). *May not be repeated for credit.*

The course examines popular culture as South Korea's newest and fastest-growing global export. We will approach popular culture as a prism through which to understand the historical forces and politico-economic structures that have shaped contemporary Korea, and as the site of active negotiation in translation and transnationalization of social experience.

**ASIAN 378. Seoul: History and Places**

(3). (ID). *May not be repeated for credit.*

This class offers a historical and cultural survey of Seoul. It explores a multidimensional views of the city's past, present, and future, and encourages students to learn a creative way to know the city and engage with it.

**ASIAN 380. Topics in Asian Studies**

(3). *May be repeated for a maximum of 6 credits.*

**ASIAN 381. Junior/Senior Research Seminar for Majors**

*At least one course in Asian Studies (ASIAN) with a minimum grade of C-. (Prerequisites enforced at registration.) Asian Studies majors with junior or senior standing. (3). May not be repeated for credit. W.*

Readings, discussion, analysis, and short papers on major themes in the field of Asian studies, both pre-modern and modern. Students will be required to pursue a research project of their choice.

**ASIAN 383. Wealth and Poverty in Korea: What it means to be rich (or not) in Korea**

*At least one course in Asian Studies. (3). (HU). May not be repeated for credit.*

This course examines the various ways in which individuals and institutions have tried to come to terms with the concept of wealth and poverty in Korea. Rather than limit the notion of wealth and poverty to the possession of material goods or the lack thereof, this course explores the various ways in which wealth and poverty create and have created meaning, beauty, ugliness, social relationships, and visions of utopia in Korea. There are no prerequisites or exams for this course. Students will be expected to write weekly reading blogs and three drafts of a research paper on wealth and poverty.

**ASIAN 384. Humanities Topics in Korean Studies**

*At least one prior course on Korea. Students are not permitted to elect the same topic twice. (3). (HU). May be elected twice for credit. May be elected more than once in the same term.*

Course topics vary. The topics will focus on aspects of Korean culture and society.

**ASIAN 385. Love in Korean Literature and Cinema**

*(3). (HU). May not be repeated for credit.*

This introductory course to Korean literature and film will focus on the theme of love, broadly defined. We will examine the ways in which love - romantic, filial, familial, brotherly, loyal, aesthetic, mystical, erotic, narcissistic, nationalistic, melodramatic and so on - is represented in premodern, modern, and contemporary Korean literature and film.

**ASIAN 388. Utopia and Dystopia in Korea**

*(3). (HU). May not be repeated for credit.*

In this course, we examine utopian and dystopian ideas in Korean history. We ask how utopian/dystopian visions have been used to generate social changes, to cope with traumatic experiences of history, or to simply explore ambiguities of the human conditions throughout Korea's modern and contemporary history.

**ASIAN 389 / POLSCI 388. Culture in East Asian Business, Past and Present**

*At least one Asian culture course on history, economics, politics, or popular culture. (4). (ID). May not be repeated for credit.*

This course examines the historical and cultural contexts of business in Asia (China, Japan, Korea, Hong Kong, Taiwan, India, and Thailand).

**ASIAN 393 / HISTART 385. Human Rights in China from Classical Times through the 18th Century: a Historical and Cultural Survey**

*(3). (HU). May not be repeated for credit.*

This course surveys debates relevant to human rights issues in China up through the Eighteenth-century. Apart from secondary readings, it focuses on primary sources,

including visual art, poetry, essays, or official documents, to illustrate how issues of equality, justice, or freedom of speech were understood and contested in China.

**ASIAN 395. Honors Thesis**

*Consent of instructor required. Honors candidate in Asian Studies. (1 - 3). (INDEPENDENT). May be repeated for a maximum of 6 credits. Continuing Course. Y grade can be reported at end of the first-term to indicate work in progress. At the end of the second term, the final grade is posted for both term's elections.*

This is a thesis-writing course for Honors concentrators in Asian Studies.

**ASIAN 396. Asian Studies Internship Reflection Seminar**

*(1). May be elected twice for credit.*

An independent study for students to analyze their experiences in an Asian Studies internship, completed the previous term. Special focus is given to how the experiences of such internships can be used to deepen students' understanding of Asian cultures and societies.

**ASIAN 397. Mini Course in Asian Studies**

*At least one course in Asian studies, especially on the topic addressed in the course. (1 - 3). (HU). May be elected three times for credit.*

This course is aimed at undergraduate students with an interest in Asian studies. Topics will vary, focusing on aspects of culture, linguistics, literature, performance/theater, religion, film, history, etc. All material will be taught in English.

**ASIAN 402. East Asian Performance Theory**

*No prerequisites, but previous coursework in drama/performance or Asian culture would be helpful. (3). May be elected twice*

*for credit. Rackham credit requires additional work.*

This course introduces students to the field of performance studies through East Asian performance. We will consider the relationship between performance, critical theory, and the discursive production of "Asia" as an object of study. The two main goals of the course will be 1) to introduce students to the major texts and methodological approaches of Performance Studies and 2) to consider the role performance plays in discussions of East Asian cultural production.

**ASIAN 407 / HISTORY 437. Drug Lords, Prophets, and Adventurers: East Asia in the Age of Global Empire**

*(3). May not be repeated for credit. Rackham credit requires additional work.*

Following China's defeat in the Opium war 1839-42, the Sino-British Treaty of Nanjing opened the first "treaty ports" in East Asia, which have left a complex and contentious legacy. On one hand, the treaty ports in many ways defined the urban experience and most of the ports developed into islands of prosperity. On the other hand, the treaty ports were bastions of foreign privilege and influence. This course will explore the treaty ports by reading both "classical" and more recent scholarship as well as selected primary sources in English. While the primary focus will be on China, Japanese and Korean treaty ports will also be discussed where applicable. The course will be both thematically and chronologically organized, and it will mainly cover the years 1790-1950.

**ASIAN 415 / HISTORY 415. Law and Society in Late Imperial and Modern China**

*Junior or senior standing. No prior knowledge of China or Chinese required.*

*(3). May not be repeated for credit.  
Rackham credit requires additional work.*

The Chinese legal order is one of the great legal traditions that has not only exercised a tremendous influence on other legal systems in East Asia for centuries, but still exerts a considerable influence in China today. In recent years, new research methods and improved access to archival materials have shed new light on many aspects of Chinese legal history. This course explores major topics in Chinese legal history through selected readings of secondary and primary sources, as well as through audiovisual materials and fiction.

**ASIAN 416 / ANTHRCUL 417.**

**Possessing Culture: Mediumship and Ethnography in Southeast Asia**

*Some coursework in cultural anthropology or Southeast Asian studies is useful, but not required. (3). May not be repeated for credit.*

This course examines spirit possession and mediumship in Southeast Asia, focusing in particular on the representation of such phenomena in ethnographic scholarship.

**ASIAN 424 / HISTORY 424. Topics in Modern South Asian History**

*(3 - 4; 3 in the half-term). May be elected three times for credit. May be elected more than once in the same term. Rackham credit requires additional work.*

This topics course explores themes in modern South Asian history, allowing for a deeper engagement at a thematic level rather than chronological. Students are asked to examine modern South Asian history through an analysis of both primary and secondary sources.

**ASIAN 428 / POLSCI 339. China's Evolution Under Communism**

*Upperclass standing. (4; 3 in the half-term). May not be repeated for credit.*

This course is an analysis of developments since 1949 with particular emphasis on the evolution of political control, economic development, and social change and their relationship to ideology.

**ASIAN 430. Philosophy of the Sikh Gurus**

*(3). May not be repeated for credit.*

This course explores key philosophical concepts in the teachings and practice of the Sikh Gurus and how they apply to the contemporary world. Concepts include personal and impersonal notions of God, reality and nihilism, mystical experience, language and self, time and history, love and eroticism, and life and death.

**ASIAN 440. National Cinema of Asia**

*(3). May be repeated for a maximum of 6 credits.*

This course will explore the diverse cinemas of Asia, from their beginnings in one-shot actualities to today's proliferation of electronic media. Analyzing the aesthetic and narrative style of Asian films in the context of their culture and historical moment, we will study everything from popular films to art cinema to animation.

**ASIAN 450 / HISTORY 450. Japan to 1700: Origin Myth to Shogun Dynasty**

*(3). May not be repeated for credit.  
Rackham credit requires additional work.*

This course discusses the history of Japan from prehistoric times to the final, unified Samurai polity. Topics include the rise of the imperial family, changing gender relations, multi-belief system, economic developments, samurai's legal culture and violence.

**ASIAN 451 / HISTORY 451. Japan's Modern Transformations**

*(3). May not be repeated for credit.*



An exploration of the transformation of Japan from a semi-feudal state to a world economic power, with emphasis on the diversity and conflict that has shaped Japan's modern history.

**ASIAN 458 / FTVM 458. Film Culture in Korea**

(3). *May not be repeated for credit.*

This course will explore the history of Korean cinema through the framework of national/transnational cinema discourse, auteur/genre theory, globalization, the division system, and the problem of nation/state which evokes the question of identity. Students will learn Korean cinema through key films, directors, and dominant genres.

**ASIAN 459 / SOC 427. Sociology of Contemporary Korea: Development, Globalization, and Identity**

(3). *May not be repeated for credit.*

This course examines the dramatic and tumultuous transformation of South Korea from a comparative and global perspective. By moving beyond the familiar realm of the American society, students will learn how the Korean case expands, deepens, or revises our understanding of development, inequality, democratization, gender politics, globalization, immigration, and diasporas.

**ASIAN 464 / HISTORY 470 / RELIGION 464. From Mystic Saints to Holy Warriors: Islam in Southeast Asia**

(3). *May not be repeated for credit.*  
*Rackham credit requires additional work.*

Islam has taken many forms in Southeast Asia: from the sometimes otherworldly mysticism of Sufi saints to the hard-liner Islamist agendas of some contemporary jihadists. This course is an interdisciplinary exploration of these various forms of Islamic expression, viewing them through

the lenses of history, culture, politics, and film.

**ASIAN 465 / HISTART 466. Sacred Image/Sacred Place in Japanese Art**

(3). *May not be repeated for credit.*  
*Rackham credit requires additional work.*

This class surveys the religious arts of Japan from pre-history to the present day, with a special focus on different notions of the sacred images and places. It considers how sculpture, painting, architecture, and topography work in concert to produce and condition particular experience of the sacred. The class provides both an overview of the religious currents of Japan as seen through art as well as a thorough introduction to visual analysis of sacred art.

**ASIAN 470. Saga of the Three Kingdoms: From History to Videogames**

*At least one course in Chinese history, literature, or culture; some background in literary criticism recommended.* (3). *May not be repeated for credit. Rackham credit requires additional work.*

This course introduces the saga of the Three Kingdoms as it transforms across media, from history to theater, films to video games. We make our way through China's first novel, Romance of the Three Kingdoms (1522), exploring these multimedia transformations and considering why this story is still so vibrant today.

**ASIAN 475. Japanese Cinema**

*A knowledge of JAPANESE is not required.* (3). *May not be repeated for credit.*

**ASIAN 480. Topics in Asian Studies**

(3). *May be elected four times for credit.*  
*May be elected more than once in the same term.*

Covers issues of relevance to Asia as a whole or to more than one of the

geographical areas covered in the department.

**ASIAN 483. The Lives of the Buddha, from India to Manga**

*(3). May not be repeated for credit.*

For over two thousand years, Buddhists have told and retold the story of the Buddha. This course follows the transformations of his life story from ancient India to modern-day Japan. Students use primary sources in translation -poetry, prose, painting, sculpture, music, film, and manga- to investigate cultural flows across Asia.

**ASIAN 484. Buddhist Tantra**

*ASIAN 230. (3). May be elected twice for credit.*

Upperlevel topics course on Buddhist Tantra.

**ASIAN 485 / RELIGION 485. Religion in China**

*Consent of instructor required. ASIAN 230 or permission of instructor. (3). May be repeated for a maximum of 6 credits.*

This seminar examines the histories, doctrines, and practices of religious traditions in China. It makes extensive use of primary materials (both in Chinese and in translation) and secondary scholarship to investigate the relationships between literature, history, culture, and belief.

**ASIAN 486 / RELIGION 486. Buddhist Meditation**

*ASIAN 230. (3). May not be repeated for credit.*

This course examines the theories, practices, histories, and benefits of Buddhist meditation. Rather than focus on one tradition, the course explores a wide variety of Buddhist meditative traditions such as asceticism, mindfulness, seated meditation,

walking meditation, tantric meditation, koan meditation and so on.

**ASIAN 499. Independent Study-Directed Readings**

*Consent of instructor required. (1 - 4). (INDEPENDENT). May be repeated for a maximum of 8 credits. F, W, Sp/Su, Sp, Su.*

## **Asian Languages (ASIANLAN)**

**ASIANLAN 100. Accelerated Elementary Chinese**

*Consent of instructor required. (3). May not be repeated for credit. No credit granted to those who have completed or are enrolled in ASIANLAN 101, 103, or 104.*

This course is an accelerated version of first semester Chinese meant for students with some Chinese language knowledge. All four language skills will be taught. By its end, students will gain control of the sound system, basic sentence patterns, audio comprehension, daily conversations and the writing system (about 700 characters).

**ASIANLAN 101. First Year Chinese I**

*Native or near-native speakers of Chinese are not eligible for this course. (5). May not be repeated for credit. No credit granted to those who have completed or are enrolled in ASIANLAN 100, 102, 103, or 104.*

ASIANLAN 101 is an introductory course in speaking, understanding, reading and writing Chinese. Students are expected to achieve control of the sound system, basic sentence patterns, aural comprehension, daily conversations and writing characters.

**ASIANLAN 102. First Year Chinese II**

*ASIANLAN 100 or 101 with a minimum grade of C- or by Assignment of ASIANLAN 102 by Placement Test. (Prerequisites enforced at registration.) (5). May not be*

*repeated for credit. No credit granted to those who have completed or are enrolled in ASIANLAN 103 or 104.*

ASIANLAN 102 is a continuation of the First Year Chinese course. In this course, the four skills of listening, speaking, reading and writing are emphasized. Toward the end of the term each student and his/her conversation partner will prepare a 6-minute conversation that will be videotaped and evaluated by the instructors.

**ASIANLAN 103. Intensive First Year Chinese**

*Consent of instructor required. (10). May not be repeated for credit. No credit granted to those who have completed or are enrolled in ASIANLAN 100, 101, 102, or 104.*

ASIANLAN 103 is equivalent to the regular two-semester sequence ASIANLAN 101-102. The student is expected to achieve control of the sound system, to gain the ability to communicate in the Chinese language for daily activities and also to be able to read and write Chinese characters.

**ASIANLAN 104. First Year Chinese for Heritage Speakers**

*By assignment of ASIANLAN 104 by Placement Test. (Prerequisites enforced at registration.) (4). May not be repeated for credit. No credit granted to those who have completed or are enrolled in ASIANLAN 100, 101, 102, or 103.*

This course is designed for students with native or near-native speaking ability in Chinese, but little or no reading and writing ability. ASIANLAN 104 focuses on reading and writing Chinese and cover the regular 101-102 reading and writing materials.

**ASIANLAN 105. Mandarin Pronunciation**

*ASIANLAN 100 or 101. (Prerequisites*

*enforced at registration.) (1). May not be repeated for credit.*

Designed as a supplement to core Chinese courses, this course gives students at varying proficiency levels the opportunity to fine-tune their articulation of standard Mandarin consonants, vowels, and tones. Evaluation is based on rigorous in-class drills and regular oral assignments. Knowledge of Pinyin Romanization is presumed.

**ASIANLAN 108. Chinese Characters**

*ASIANLAN 100 or 101. (Prerequisites enforced at registration.) (1). May not be repeated for credit.*

This course is an introductory study of the origin, composition, development, variations and aesthetic styles of Chinese characters. Students who struggle with writing Chinese characters in their regular Chinese courses are strongly encouraged to take this course.

**ASIANLAN 111. First Year Filipino I**  
*(4). May not be repeated for credit.*

Tagalog/Filipino is the national language of the Philippines. The oral approach is greatly emphasized in the classroom, using questions and answers and short dialogues to develop active use of the language in the most natural way possible. This is complemented by the use of taped lessons.

**ASIANLAN 112. First Year Filipino II**

*ASIANLAN 111 or by assignment of ASIANLAN 112 by Placement Test. (Prerequisites enforced at registration.) (4). May not be repeated for credit. Filipino will serve as medium of instruction.*

Tagalog/Filipino is the national language of the Philippines. The oral approach is greatly emphasized in the classroom, using questions and answers and short dialogues to develop active use of the language in the

most natural way possible. This is complemented by the use of taped lessons.

**ASIANLAN 115. First Year Hindi I**

*(4). May not be repeated for credit. No credit granted to those who have completed or are enrolled in ASIANLAN 117. Students with prior knowledge of Hindi are encouraged to take ASIANLAN 118.*

Hindi is the national language of India. The course meets four hours per week in four sessions. The Devanagari writing system is introduced. The course concentrates on developing skills in reading, writing, speaking, and aural comprehension.

**ASIANLAN 116. First Year Hindi II**

*ASIANLAN 115 or by assignment of ASIANLAN 116 by Placement Test. (Prerequisites enforced at registration.) (4). May not be repeated for credit. No credit granted to those who have completed or are enrolled in ASIANLAN 117.*

Hindi is the national language of India. The course meets four hours per week in four sessions. The Devanagari writing system is introduced. The course concentrates on developing skills in reading, writing, speaking, and aural comprehension.

**ASIANLAN 121. First Year Indonesian I**  
*(4). May not be repeated for credit.*

Indonesian is the sixth most prevalently spoken of the world languages. The elementary course comprises a two-term sequence designed to provide the students with a basic working knowledge of the Indonesian language. The course aims at the acquisition of the four basic language skills--listening, speaking, reading, and writing--in modern Indonesian. The class emphasizes aural-oral exercises and practice and the learning of culture throughout the course.

**ASIANLAN 122. First Year Indonesian II**

*ASIANLAN 121 or by assignment of ASIANLAN 122 by Placement Test. (Prerequisites enforced at registration.) (4). May not be repeated for credit.*

Indonesian is the sixth most prevalently spoken of the world languages. The elementary course comprises a two-term sequence designed to provide the students with a basic working knowledge of the Indonesian language. The course aims at the acquisition of the four basic language skills--listening, speaking, reading, and writing--in modern Indonesian. The class emphasizes aural-oral exercises and practice and the learning of culture throughout the course.

**ASIANLAN 123. First-Year Japanese through Anime and Manga**

*Placement of ASIANLAN 123 on an exam given by the Japanese Language Program. (Prerequisites enforced at registration.) (3). May not be repeated for credit. No credit granted to those who have completed or are enrolled in ASIANLAN 125, ASIANLAN 126, ASIANLAN 127.*

The goal of the course is the simultaneous progression of the four main language skills (speaking, listening, writing, and reading) using Japanese anime and manga. The course will incorporate at length these media forms into class activities to effectively improve students' language skills, as well as to engage students in the learning process.

**ASIANLAN 124. First-Year Japanese through Anime and Manga II**

*ASIANLAN 123 or ASIANLAN 125. (Prerequisites enforced at registration.) (3). May not be repeated for credit. No credit granted to those who have completed or are enrolled in ASIANLAN 126 and ASIANLAN 127.*

The goal of the course is the continued progression of the four main language skills (speaking, listening, writing, and reading) using Japanese anime and manga. The course will incorporate at length these media forms into class activities to effectively improve students' language skills, as well as to engage students in the learning process.

**ASIANLAN 125. First Year Japanese I**  
*(5). May not be repeated for credit. Native or near-native speakers of Japanese are not eligible for this course. No credit granted to those who have completed or are enrolled in ASIANLAN 123, 124, 127, 129 or RCLANG 196.*

The goal of the course is the simultaneous progress of four skills (speaking, listening, writing, and reading) as well as becoming familiar with aspects of Japanese culture which are necessary for language competency. Recitation sessions are conducted in Japanese emphasizing speaking/reading in Japanese contexts at normal speeds. Analyses, explanation, and discussions involving the use of English are specifically reserved for lectures with a linguist.

**ASIANLAN 126. First Year Japanese II**  
*(ASIANLAN 123 or 125) or by Assignment of ASIANLAN 126 by Placement Test. (Prerequisites enforced at registration.) (5). May not be repeated for credit. No credit granted to those who have completed or are enrolled in ASIANLAN 124, 127, or 129 or RCLANG 196.*

The goal of the course is the simultaneous progress of four skills (speaking, listening, writing, and reading) as well as becoming familiar with aspects of Japanese culture which are necessary for language competency. Recitation sessions are conducted in Japanese emphasizing

speaking/reading in Japanese contexts at normal speeds. Analyses, explanation, and discussions involving the use of English are specifically reserved for lectures with a linguist.

**ASIANLAN 127. Intensive First Year Japanese**

*Permission of instructor. (10). May not be repeated for credit. No credit granted to those who have completed or are enrolled in ASIANLAN 124, 125, 126, or 129 or RCLANG 196.*

The goal of the course is the simultaneous progress of four skills (speaking, listening, writing, and reading) as well as becoming familiar with aspects of Japanese culture which are necessary for language competency. Recitation sessions are conducted in Japanese emphasizing speaking/reading in Japanese contexts at normal speeds. Analyses, explanation, and discussions involving the use of English are specifically reserved for lectures with a linguist.

**ASIANLAN 128. Japanese Kanji and Calligraphy: Learning Strategies and Orthography**

*One of ASIANLAN 126, 127, or 129 or RCLANG 196, completed with a minimum grade of C- or better. (Prerequisites enforced at registration.) (2). May not be repeated for credit.*

This course is designed for students who want to learn more about kanji (Chinese characters). It offers two main methods: kanji learning strategies and Japanese calligraphy. Together they facilitate the acquisition of kanji and thus supplement kanji learning in regular Japanese courses.

**ASIANLAN 129. Intensive Japanese I**

*Consent of instructor required. (10). May not be repeated for credit. No credit granted for students who have completed or are enrolled in ASIANLAN 125, 126 or 127.*

A thorough grounding is given in all the language skills (speaking, reading, writing, and listening) in this course. The oral component aims to provide students with the speaking and comprehension skills necessary to function effectively in practical situations. In the reading/writing component, Hiragana, Katakana, and 145 Kanji are introduced.

**ASIANLAN 135. First Year Korean I**  
(5). *May not be repeated for credit. Native or near-native speakers of Korean are not eligible for this course. No credit granted to those who have completed or are enrolled in ASIANLAN 137.*

This first-year course is for those who have no or minimal proficiency in Korean. This course will introduce the basic structure of Korean while focusing on the development of reading, writing and speaking skills.

**ASIANLAN 136. First Year Korean II**  
*ASIANLAN 135 or by assignment of ASIANLAN 136 by Placement Test. (Prerequisites enforced at registration.) (5). May not be repeated for credit. No credit granted to those who have completed or are enrolled in ASIANLAN 137.*

This First-Year course is for those who have no or minimal proficiency in Korean. This course will introduce the basic structure of Korean while focusing on the development of reading, writing and speaking skills.

**ASIANLAN 138. Intensive First Year Korean**  
*Assignment of ASIANLAN 138 by Placement Test. (Prerequisites enforced at registration.) (5). May not be repeated for credit. No credit granted to those who have completed or are enrolled in ASIANLAN 135, 136, or 137.*

This course is designed for students with prior experience in the language, namely the listening and speaking abilities of daily Korean, but who know little of how to read and write in Korean.

**ASIANLAN 145. First Year Punjabi I**  
(4). *May not be repeated for credit.*

This course offers an introduction to spoken and written Punjabi, a major language of northern India and of Pakistan, with some 80 million speakers. It will begin with a concentration on the spoken language, emphasizing oral-aural skills, and introducing the Gurmukhi script.

**ASIANLAN 146. First Year Punjabi II**  
*ASIANLAN 145 or by assignment of ASIANLAN 146 by Placement Test. (Prerequisites enforced at registration.) (4). May not be repeated for credit.*

This course offers an introduction to spoken and written Punjabi, a major language of northern India and of Pakistan, with some 80 million speakers. It will begin with a concentration on the spoken language, emphasizing oral-aural skills, and introducing the Gurmukhi script.

**ASIANLAN 151. First Year Sanskrit I**  
(4). *May not be repeated for credit.*

This course will work toward developing a proficiency with the basic tools necessary to read and write Sanskrit, the classical language of India. Lessons will include study of the script (Devanagari), elementary grammar and vocabulary.

**ASIANLAN 152. First Year Sanskrit II**  
*ASIANLAN 151. (Prerequisites enforced at registration.) (4). May not be repeated for credit. No credit granted to those who have completed or are enrolled in SSEA 369.*

This course will work toward developing a proficiency with the basic tools necessary to read and write Sanskrit, the classical language of India. Lessons will include study of the script (Devanagari), elementary grammar and vocabulary.

**ASIANLAN 161. First Year Thai I**  
(4). *May not be repeated for credit.*

Standard Thai, the language of Thailand, is typical of several ASIANLAN in its grammar and tonal pronunciation. Focus of the course is the use of language in everyday situations. Upon successful completion of the two-term sequence, students will be able to conduct conversation dealing with several survival concerns, e.g., introduction, ordering food, transportation, banking, post-office trip, shopping, etc.

**ASIANLAN 162. First Year Thai II**  
*ASIANLAN 161 or by assignment of ASIANLAN 162 by Placement Test.*  
(Prerequisites enforced at registration.) (4).  
*May not be repeated for credit.*

This is the continuation of the Fall semester Beginning Thai. The class will focus on speaking, reading, and writing skills. Upon successful completion of the two-term sequence, students will be able to conduct conversation dealing with several survival concerns, e.g., introduction, ordering food, transportation, banking, post-office trips, shopping, etc.

**ASIANLAN 171. First Year Urdu I**  
(4). *May not be repeated for credit.*

Urdu is the national languages of Pakistan. The Nastaliq writing system is introduced. The course concentrates on developing skills in reading, writing, speaking, and aural comprehension.

**ASIANLAN 172. First Year Urdu II**  
*ASIANLAN 171 or by assignment of ASIANLAN 172 by Placement Test.*  
(Prerequisites enforced at registration.) (4).  
*May not be repeated for credit.*

Urdu is the national languages of Pakistan. The Nastaliq writing system is introduced. The course concentrates on developing skills in reading, writing, speaking, and aural comprehension.

**ASIANLAN 175. First Year Vietnamese I**  
(4). *May not be repeated for credit.*

The course emphasizes aural-oral practices and vocabulary building. Supplementary materials distributed throughout the course will provide the students some knowledge of the Vietnamese culture. Students will be encouraged to communicate in the target language, and classes will be largely conducted in Vietnamese.

**ASIANLAN 176. First Year Vietnamese II**  
*ASIANLAN 175 or by assignment of ASIANLAN 176 by Placement Test.*  
(Prerequisites enforced at registration.) (4).  
*May not be repeated for credit.*

The course emphasizes aural-oral practices and vocabulary building. Supplementary materials distributed throughout the course will provide the students some knowledge of the Vietnamese culture. Students will be encouraged to communicate in the target language, and classes will be largely conducted in Vietnamese.

**ASIANLAN 185. First Year Bengali I**  
(4). *May not be repeated for credit.*

This is the beginning course in Bengali, one of the major languages of South Asia. Students learn the basics of speaking, oral comprehension, reading, and writing.

**ASIANLAN 186. First Year Bengali II**  
*ASIANLAN 185 or permission of instructor.*  
*(4). May not be repeated for credit.*

This is a continuation of Bengali language, one of the major languages of South Asia. Students learn the basics of speaking, oral comprehension, reading, and writing.

**ASIANLAN 201. Second Year Chinese I**  
*(ASIANLAN 102 or 103) or by Assignment of ASIANLAN 201 by Placement Test.*  
*(Prerequisites enforced at registration.)*  
*Native or near-native speakers of Chinese are not eligible for this course. (5). May not be repeated for credit. No credit granted to those who have completed or are enrolled in ASIANLAN 203. Students who are native or near-native Mandarin Chinese speakers are not eligible for this course.*

This course is a continuation of work begun in ASIANLAN 101-102. The primary goal of the course is achievement of a basic level of reading competence within a vocabulary of 900 characters and accompanying combinations. A closely integrated secondary goal is continued improvement of aural understanding and speaking competence. These goals are approached through classroom drill, out-of-class exercises, and work in the language laboratory.

**ASIANLAN 202. Second Year Chinese II**  
*ASIANLAN 201 with a minimum grade of C- or by Assignment of ASIANLAN 202 by Placement Test. (Prerequisites enforced at registration.) (5). (Lang Req). May not be repeated for credit. No credit granted to those who have completed or are enrolled in ASIANLAN 203. Students who are native or near-native Mandarin Chinese speakers are not eligible for this course.*

This course is a continuation of work begun in ASIANLAN 201. The primary goal of the course is achievement of a basic level of

reading competence within a vocabulary of 900 characters and accompanying combinations. A closely integrated secondary goal is continued improvement of aural understanding and speaking competence. These goals are approached through classroom drill, out-of-class exercises, and work in the language laboratory.

**ASIANLAN 203. Intensive Second Year Chinese**

*ASIANLAN 102 or 103. (Prerequisites enforced at registration.) (10). (Lang Req). May not be repeated for credit. No credit granted to those who have completed or are enrolled in ASIANLAN 201 or 202.*

This course is a continuation of work begun in ASIANLAN 101/102. The primary goal of the course is achievement of a basic level of reading competence within a vocabulary of 900 characters and accompanying combinations. A closely integrated secondary goal is continued improvement of aural understanding and speaking competence.

**ASIANLAN 204. Second Year Chinese for Heritage Speakers**

*ASIANLAN 104 or by assignment of ASIANLAN 204 by Placement Test.*  
*(Prerequisites enforced at registration.) (4). (Lang Req). May not be repeated for credit. No credit granted to those who have completed or are enrolled in ASIANLAN 201, 202, or 203. conducted in Chinese.*

This course is designed for students with native or near-native speaking ability in Chinese, but little or no reading and writing ability. ASIANLAN 204 focuses on reading and writing Chinese and covers the regular 201-202 reading and writing materials.

**ASIANLAN 211. Second Year Filipino I**  
*ASIANLAN 112 or by assignment of ASIANLAN 211 by Placement Test.*



*(Prerequisites enforced at registration.) (4). May not be repeated for credit.*

This course is designed for the student who has some knowledge of Filipino and who wishes to develop some fluency in spoken Filipino and to be acquainted with Filipino literature. It is a two-term sequence which is essentially a continuation of what has been learned in the first year but there will be more emphasis on reading and writing.

**ASIANLAN 212. Second Year Filipino II**

*ASIANLAN 211 or by assignment of ASIANLAN 212 by Placement Test. (Prerequisites enforced at registration.) (4). (Lang Req). May not be repeated for credit.*

This course is designed for the student who has some knowledge of Filipino and who wishes to develop some fluency in spoken Filipino and to be acquainted with Filipino literature. It is a two-term sequence which is essentially a continuation of what has been learned in the first year but there will be more emphasis on reading and writing.

**ASIANLAN 215. Second Year Hindi I**  
*ASIANLAN 116 or 117 or 118 or by assignment of ASIANLAN 215 by Placement Test. (Prerequisites enforced at registration.) (4). May not be repeated for credit. No credit granted to those who have completed or are enrolled in ASIANLAN 217.*

This course is intended to increase students' skills and proficiency in speaking, comprehending, reading and writing the Devanagari (Hindi) script.

**ASIANLAN 216. Second Year Hindi II**  
*ASIANLAN 215 or by assignment of ASIANLAN 216 by Placement Test. (Prerequisites enforced at registration.) (4). (Lang Req). May not be repeated for credit. No credit granted to those who have completed or are enrolled in ASIANLAN 217.*

This course is intended to increase students' skills and proficiency in speaking, comprehending, reading and writing the Devanagari (Hindi) script.

**ASIANLAN 221. Second Year Indonesian I**

*ASIANLAN 122; or by assignment of ASIANLAN 221 by Placement Test. (Prerequisites enforced at registration.) (4). May not be repeated for credit.*

This course is a two-term sequence aimed at increasing the student's proficiency in the four basic language skills--listening, speaking, reading, and writing--in modern Indonesian. Although increased emphasis is given to the development of reading and writing skills, listening and speaking constitute an integral part of the course which is conducted entirely in Indonesian.

**ASIANLAN 222. Second Year Indonesian II**

*ASIANLAN 221 or by assignment of ASIANLAN 222 by Placement Test. (Prerequisites enforced at registration.) (4). (Lang Req). May not be repeated for credit.*

This course is a two-term sequence aimed at increasing the student's proficiency in the four basic language skills--listening, speaking, reading, and writing--in modern Indonesian. Although increased emphasis is given to the development of reading and writing skills, listening and speaking constitute an integral part of the course which is conducted entirely in Indonesian.

**ASIANLAN 225. Second Year Japanese I**  
*One of: ASIANLAN 124, 126, 127, or 129 or RCLANG 196; or by assignment of ASIANLAN 225 by placement test. (Prerequisites enforced at registration.) Native or near-native speakers of Japanese are not eligible for this course. (5). May not be repeated for credit. No credit granted to*

*those who have completed or are enrolled in ASIANLAN 227 or 229 or RCLANG 296.*

Further training is given in all the language skills (listening, speaking, reading, and writing) for students who have acquired a basic language proficiency. Approximately 200 of the essential Chinese characters (Kanji) are covered. Discussions on the social and cultural use of language are provided.

**ASIANLAN 226. Second Year Japanese II**

*ASIANLAN 225; or assignment of ASIANLAN 226 by Placement Test. (Prerequisites enforced at registration.) (5). (Lang Req). May not be repeated for credit. No credit granted to those who have completed or are enrolled in ASIANLAN 227 or 229 or RCLANG 296.*

Further training is given in all the language skills (listening, speaking, reading, and writing) for students who have acquired a basic language proficiency. Approximately 200 of the essential Chinese characters (Kanji) are covered. Discussions on the social and cultural use of language are provided.

**ASIANLAN 227. Intensive Second Year Japanese**

*ASIANLAN 126 or 127 or 129 or RCLANG 196. (Prerequisites enforced at registration.) (10). (Lang Req). May not be repeated for credit. No credit granted to those who have completed or are enrolled in ASIANLAN 225 or 226 or 229 or RCLANG 296.*

Further training is given in all the language skills (listening, speaking, reading, and writing) for students who have acquired a basic language proficiency. Approximately 400 of the essential Chinese characters (Kanji) are covered. Discussions on the

social and cultural use of language are provided.

**ASIANLAN 229. Intensive Japanese II**  
*Consent of instructor required. ASIANLAN 129 or RCLANG 196. Students must have completed the first-year Japanese at the University of Michigan or have equivalent proficiency. (10). (Lang Req). May not be repeated for credit. No credit granted to those who have completed or are enrolled in ASIANLAN 225, 226, and 227.*

The aim of this course is to introduce all the basic grammatical elements with equal emphasis on oral, listening, reading, and writing skills. An additional 165 Kanji are introduced.

**ASIANLAN 235. Second Year Korean I**  
*ASIANLAN 136 or 137 or by assignment of ASIANLAN 235 by Placement Test. (Prerequisites enforced at registration.) Native or near-native speakers of Korean are not eligible for this course. (5). May not be repeated for credit. No credit granted to those who have completed or are enrolled in ASIANLAN 237 or 238.*

This is an intermediate course in spoken and written Korean. It will emphasize the aural/oral skill, but attention will also be given to grammatical structure.

**ASIANLAN 236. Second Year Korean II**  
*ASIANLAN 235 or by assignment of ASIANLAN 236 by Placement Test. (Prerequisites enforced at registration.) (5). (Lang Req). May not be repeated for credit. No credit granted to those who have completed or are enrolled in ASIANLAN 237.*

This is an intermediate course in spoken and written Korean. It will emphasize the aural/oral skill, but attention will also be given to grammatical structure.

**ASIANLAN 238. Intensive Second Year Korean**

*ASIANLAN 138 or by assignment of ASIANLAN 238 by Placement Test. (Prerequisites enforced at registration.) (5). (Lang Req). May not be repeated for credit. No credit granted to those who have completed or are enrolled in ASIANLAN 235, 236, or 237.*

This course is a continuation of ASIANLAN 138 and covers regular ASIANLAN 235 and 236 course materials in a semester. After completing this course, students can continue their study of Korean by enrolling in third-year Korean.

**ASIANLAN 245. Second Year Punjabi I**  
*ASIANLAN 146 or by assignment of ASIANLAN 245 by Placement Test. (Prerequisites enforced at registration.) (4). May not be repeated for credit. No credit granted to those who have completed or are enrolled in SSEA 372.*

This course emphasizes the advanced grammatical constructions, compositions, vocabulary development, and conversational skills of modern Punjabi. Particular attention will be paid to the Punjabi verbs and their classifications.

**ASIANLAN 246. Second Year Punjabi II**  
*ASIANLAN 245 or by assignment of ASIANLAN 246 by Placement Test. (Prerequisites enforced at registration.) (4). (Lang Req). May not be repeated for credit. No credit granted to those who have completed or are enrolled in SSEA 372.*

This course emphasizes the advanced grammatical constructions, compositions, vocabulary development, and conversational skills of modern Punjabi. Particular attention will be paid to the Punjabi verbs and their classifications.

**ASIANLAN 251. Second Year Sanskrit I**  
*ASIANLAN 152. (Prerequisites enforced at*

*registration.) (4). May not be repeated for credit.*

This course is designed to further students skills in writing Sanskrit as well as increase their proficiency in reading and comprehension.

**ASIANLAN 252. Second Year Sanskrit II**

*ASIANLAN 251. (Prerequisites enforced at registration.) (4). (Lang Req). May not be repeated for credit.*

This course is designed to further students skills in writing Sanskrit as well as increase their proficiency in reading and comprehension.

**ASIANLAN 261. Second Year Thai I**  
*ASIANLAN 162, or by assignment of ASIANLAN 261 by placement test. (Prerequisites enforced at registration.) (4). May not be repeated for credit.*

This course continues and extends the four skills students developed in ASIANLAN 161-162 Reading and discussing as well as written assignments from authentic materials will be covered.

**ASIANLAN 262. Second Year Thai II**  
*ASIANLAN 261 or by assignment of ASIANLAN 262 by Placement Test. (Prerequisites enforced at registration.) (4). (Lang Req). May not be repeated for credit.*

This course continues and extends the four skills students developed in ASIANLAN 261 Reading and discussing as well as written assignments from authentic materials will be covered.

**ASIANLAN 271. Second Year Urdu I**  
*ASIANLAN 172 or by assignment of ASIANLAN 271 by Placement Test. (Prerequisites enforced at registration.) (4). May not be repeated for credit.*

Urdu is the national languages of Pakistan. The Nastaliq writing system is introduced. The course concentrates on developing skills in reading, writing, speaking, and aural comprehension.

**ASIANLAN 272. Second Year Urdu II**  
*ASIANLAN 271 or by assignment of ASIANLAN 272 by Placement Test.*  
*(Prerequisites enforced at registration.) (4).*  
*(Lang Req). May not be repeated for credit.*

Urdu is the national languages of Pakistan. The Nastaliq writing system is introduced. The course concentrates on developing skills in reading, writing, speaking, and aural comprehension.

**ASIANLAN 275. Second Year Vietnamese I**  
*ASIANLAN 176 or by assignment of ASIANLAN 275 by Placement Test.*  
*(Prerequisites enforced at registration.) (4).*  
*May not be repeated for credit.*

This two-term course continues to develop the students' four language skills-speaking, listening, reading and writing in Vietnamese.

**ASIANLAN 276. Second Year Vietnamese II**  
*ASIANLAN 275 or by assignment of ASIANLAN 276 by Placement Test.*  
*(Prerequisites enforced at registration.) (4).*  
*(Lang Req). May not be repeated for credit.*

This two-term course continues to develop the students' four language skills-speaking, listening, reading and writing in Vietnamese.

**ASIANLAN 285. Second Year Bengali I**  
*ASIANLAN 186 or permission of instructor.*  
*(4). May not be repeated for credit.*

This is a continuation of Bengali language, one of the major languages of South Asia.

Students learn the basics of speaking, oral comprehension, reading, and writing.

**ASIANLAN 301. Third Year Chinese I**  
*(ASIANLAN 202 or 203) or by Assignment of ASIANLAN 301 by Placement Test.*  
*(Prerequisites enforced at registration.) (5).*  
*May not be repeated for credit. No credit granted to those who have completed or are enrolled in ASIANLAN 303 or 304.*

All four basic skills--reading, writing, listening, and speaking--are stressed. In ASIANLAN 301, along with structured grammatical patterns, students primarily learn the strategies and skills required for reading Chinese newspapers.

**ASIANLAN 302. Third Year Chinese II**  
*ASIANLAN 301 or by Assignment of ASIANLAN 302 by Placement Test.*  
*(Prerequisites enforced at registration.) (5).*  
*May not be repeated for credit. No credit granted to those who have completed or are enrolled in ASIANLAN 303 or 304.*

In ASIANLAN 302, students learn to read various styles and genres of modern Chinese, including fiction, essays, and occasionally poetry.

**ASIANLAN 304. Third Year Chinese for Heritage Speakers**  
*ASIANLAN 204 or by Assignment of ASIANLAN 304 by Placement Test.*  
*(Prerequisites enforced at registration.) (4).*  
*May not be repeated for credit. Taught in Chinese.*

This course is designed for students who have native or near-native speaking ability in Chinese and who have completed Reading and Writing Chinese II. Students primarily learn the strategies and skills required for reading Chinese newspapers and gain a basic understanding of cultural and social aspects of modern China. Instruction and discussion are conducted solely in Chinese.

**ASIANLAN 305. Intermediate Spoken Chinese I**

*ASIANLAN 202 or 203; or by assignment of ASIANLAN 305 by Placement Test.*

*(Prerequisites enforced at registration.) (2). May be elected twice for credit.*

The purpose of ASIANLAN 305 is to continue building on the foundation of spoken competence laid down in first- and second-year Chinese by providing two hours a week for students to talk, talk, talk. This is accomplished through presentation of brief speeches and discussion topics selected by the class.

**ASIANLAN 306. Intermediate Spoken Chinese II**

*(ASIANLAN 202 or 203 or 305) or by Assignment of ASIANLAN 306 by Placement Test. (Prerequisites enforced at registration.) (2). May not be repeated for credit. Native or near-native speakers of Mandarin can not earn credit for this course.*

This course, designed as a supplement to post-second year Chinese core courses, is intended to help non-native speaking students strengthen their oral/aural competence. Students will have two hours a week to talk, talk, and talk. Class sessions are structured around semiweekly themes (different from those of ASIANLAN 305), with one day devoted to theme introduction/discussion, and two days devoted to student presentations and question/answer exchanges. Evaluation is based on aural/oral assignments and oral presentations. Native or near-native speakers of Mandarin can not earn credit for this course.

**ASIANLAN 325. Third Year Japanese I**

*One of: ASIANLAN 226 or 227 or ASIANLAN 229 or RCLANG 296; or by assignment of ASIANLAN 325 by placement test. (Prerequisites enforced at*

*registration.) Native or near-native speakers of Japanese are not eligible for this course. (4). May not be repeated for credit. No credit granted to those who have completed or are enrolled in ASIANLAN 327.*

Advanced training is given in all the language skills. Practice in the use of spoken Japanese is contextualized within simulated Japanese social settings. A variety of selected modern texts (essays, fiction, and newspapers) are read with emphasis on expository style.

**ASIANLAN 326. Third Year Japanese II**

*ASIANLAN 325 or by Assignment of ASIANLAN 326 by Placement Test. (Prerequisites enforced at registration.) (4). May not be repeated for credit. No credit granted to those who have completed or are enrolled in ASIANLAN 327 (or JAPANESE 411).*

Advanced training is given in all the language skills. Practice in the use of spoken Japanese is contextualized within simulated Japanese social settings. A variety of selected modern texts (essays, fiction, and newspapers) are read with emphasis on expository style.

**ASIANLAN 335. Third Year Korean I**

*ASIANLAN 236, 238 or 237; or Equivalent language proficiency from the most recent Korean Placement Test. (Prerequisites enforced at registration.) Native or near-native speakers of Korean are not eligible for this course. (4). May not be repeated for credit.*

Third-Year Korean will help students improve their skills, both spoken and written, up to intermediate-high level.

**ASIANLAN 336. Third Year Korean II**

*ASIANLAN 335. (Prerequisites enforced at registration.) (4). May not be repeated for credit. Students with previous experience*

*with Korean should contact the instructor for placement into the course.*

Third-Year Korean will help students improve their skills, both spoken and written, up to intermediate-high level.

**ASIANLAN 401. Advanced Spoken Chinese I**

*ASIANLAN 302 or by assignment of a 400-level Chinese course by Placement Test. (Prerequisites enforced at registration.) (2). May not be repeated for credit.*

This course aims to further develop the students' ability to use Chinese at advanced levels where they can deliver a formal and professional speech on topics such as politics, the economy, and social issues. Upon completing this course, students will be able to use their language skills to present original research, share an analysis, and express opinions on issues concerning Chinese society and the international community.

**ASIANLAN 402. Advanced Spoken Chinese II**

*ASIANLAN 302 or ASIANLAN 306. (Prerequisites enforced at registration.) Not intended for native speakers of Chinese. (2). May not be repeated for credit.*

Designed as a spoken supplement to post-third-year Chinese courses, this course further develops students' proficiency in listening and speaking at the advanced level. Students develop skills needed to effectively participate in colloquial conversation and seminar-style discussion.

**ASIANLAN 403. Overview of the Chinese Language**

*Completion of at least one 400-level ASIANLAN course. (Prerequisites enforced at registration.) (3). May not be repeated for credit.*

This course is an introduction of basic Chinese linguistics. The class is conducted entirely in Chinese. While continuing to improve the four language skills, the students will learn more about the Chinese language itself, from the deep structure and history to the writing system and certain social aspects of the language.

**ASIANLAN 405. Business Chinese I**

*ASIANLAN 302, ASIANLAN 304; or by assignment of a 400-level Chinese course by Placement Test. (Prerequisites enforced at registration.) Third year proficiency in Chinese or permission of instructor. (3). May not be repeated for credit. Rackham credit requires additional work.*

This course covers China's current economic situation and business environment to provide a comprehensive cultural background for students. Reading, writing and oral requirements are implemented through technology-supported activities, and by presenting business information in various forms.

**ASIANLAN 406. Business Chinese II**

*ASIANLAN 302, ASIANLAN 304, or by assignment of ASIANLAN 406 by Placement Test, or by permission of instructor. (Prerequisites enforced at registration.) (3). May not be repeated for credit. Conducted in Chinese.*

This course focuses on practical language skills that are most helpful in actual business interactions with Chinese-speaking communities. Classroom activities, largely in the form of real world simulation, will be based on authentic documents and correspondence as well as a textbook.

**ASIANLAN 407. Advanced Chinese Reading and Writing I**

*ASIANLAN 302 or 304. (Prerequisites enforced at registration.) (2). May not be repeated for credit.*

This course will guide advanced Chinese language students in improving their reading abilities through selected texts and their writing abilities through frequent and varied assignments.

**ASIANLAN 408. Advanced Reading and Writing Chinese II**

*ASIANLAN 302 or ASIANLAN 304.*

*(Prerequisites enforced at registration.) Not intended for native speakers of Chinese. (2). May not be repeated for credit.*

This course is one of the two courses in the Advanced Reading and Writing Chinese series. It guides students to read through selected texts of various styles and understand its content with analysis of its linguistic features. Students also have frequent writing practices related to the readings.

**ASIANLAN 409. Classical Chinese in Modern Context**

*ASIANLAN 302 or 304. (3). May not be repeated for credit. Conducted in Chinese.*

In this course the styles of written Chinese of imperial China from prose to poetry are selectively introduced.

**ASIANLAN 410. Media Chinese I**

*(ASIANLAN 302 or 304) or by Assignment of ASIANLAN 410 by Placement Exam.*

*(Prerequisites enforced at registration.) (3). May not be repeated for credit.*

This course is designed to meet the needs of our post-second year Chinese studying students. The course will develop students' ability to obtain information through Chinese TV, radio and newspaper. Both listening and reading skills are emphasized in classroom activities.

**ASIANLAN 411. Advanced Filipino I**

*ASIANLAN 212, or by assignment of ASIANLAN 411 by placement test.*

*(Prerequisites enforced at registration.) (3). May be elected twice for credit. Rackham credit requires additional work.*

Various approaches will be used to improve students' proficiency in reading, writing, and speaking the Tagalog/Filipino language. Students will be assigned a composition on various topics to write each week.

**ASIANLAN 412. Advanced Filipino II**

*ASIANLAN 411 or by assignment of ASIANLAN 412 by Placement Test.*

*(Prerequisites enforced at registration.) (3). May be elected twice for credit. Rackham credit requires additional work.*

Various approaches will be used to improve students' proficiency in reading, writing, and speaking the Tagalog/Filipino language. Students will be assigned a composition on various topics to write each week.

**ASIANLAN 417. Advanced Hindi I**

*ASIANLAN 216 or 217 or by assignment of ASIANLAN 417 by Placement.*

*(Prerequisites enforced at registration.) (3). May be elected twice for credit. Rackham credit requires additional work.*

The course is intended to further students' skills in speaking and aural comprehension as well as increase their proficiency in reading and writing both Hindi.

**ASIANLAN 418. Advanced Hindi II**

*ASIANLAN 417 or by assignment of ASIANLAN 418 by Placement Test.*

*(Prerequisites enforced at registration.) (3). May be elected twice for credit. Rackham credit requires additional work.*

The course is intended to further students' skills in speaking and aural comprehension as well as increase their proficiency in reading and writing both Hindi.

**ASIANLAN 419. Advanced Indonesian I**  
*ASIANLAN 222, or by assignment of  
ASIANLAN 419 by placement test.  
(Prerequisites enforced at registration.) (3).  
May be elected twice for credit. Rackham  
credit requires additional work.*

The course work is designed to improve the student's command of basic grammatical structures as well as to build advanced vocabulary. Social-cultural orientation will increase the student's familiarity with the important socio-linguistic aspects of Indonesian language use.

**ASIANLAN 420. Advanced Indonesian II**  
*ASIANLAN 419 or by assignment of  
ASIANLAN 420 by Placement Test.  
(Prerequisites enforced at registration.) (3).  
May be elected twice for credit. Rackham  
credit requires additional work.*

The course work is designed to improve the student's command of basic grammatical structures as well as to build advanced vocabulary. Social-cultural orientation will increase the student's familiarity with the important socio-linguistic aspects of Indonesian language use.

**ASIANLAN 425. Media Japanese I**  
*ASIANLAN 326 or 327. (Prerequisites  
enforced at registration.) ASIANLAN 326  
with B- or above or pass a placement test.  
(3). May not be repeated for credit.*

Students will learn contemporary Japanese language as well as about culture and society through the media.

**ASIANLAN 426. Advanced Spoken Japanese**  
*ASIANLAN 326. (Prerequisites enforced at  
registration.) (2). May not be repeated for  
credit.*

This course aims to equip students in developing advanced communication skills

in Japanese. In addition, the course will focus on the acquisition of linguistic, pragmatic, and sociocultural competence as well as critical thinking skills.

**ASIANLAN 429. Business Japanese I**  
*ASIANLAN 326 or 327. (Prerequisites  
enforced at registration.) ASIANLAN 326  
with B- or above or pass a placement test.  
(3). May not be repeated for credit.  
Rackham credit requires additional work.*

This course aims to further develop Japanese language competence through readings and discussions on business related topics. The main emphasis of the course is to advance student's reading, listening, and speaking skills and to increase vocabulary essential to discussions of business and social issues.

**ASIANLAN 430. Business Japanese II**  
*ASIANLAN 326. (Prerequisites enforced at  
registration.) ASIANLAN 429, one previous  
400-level Japanese language course, or  
permission of instructor. (3). May not be  
repeated for credit. Rackham credit  
requires additional work.*

This course aims to further develop Japanese language competence through readings and discussions on business-related topics. The main emphasis of the course is to advance student's reading, listening, and speaking skills and to increase vocabulary essential to the discussion of business and social issues.

**ASIANLAN 433. Classical Japanese I**  
*ASIANLAN 226 or 227. (Prerequisites  
enforced at registration.) (4). May not be  
repeated for credit.*

An introduction to the classical written language, with emphasis upon grammar, syntax, and various classical written styles.

**ASIANLAN 435. Advanced Reading and Writing in Korean**



*ASIANLAN 336. (Prerequisites enforced at registration.) (2). May not be repeated for credit.*

This course focuses on enhancing reading and writing skills in Korean at the fourth-year level. Students will engage with materials in different genres on topics related to Korean history, culture, and society, while developing reading strategies for improving comprehension, and advanced techniques for both academic and everyday writing.

**ASIANLAN 436. Advanced Spoken Korean**

*ASIANLAN 336. (Prerequisites enforced at registration.) (2). May not be repeated for credit.*

The aim of Advanced Spoken Korean is to improve students' speaking skills at the advanced level by studying and discussing materials related to Korean current issues. Students will improve their speaking skills by giving weekly presentations as well as participating in in-class discussion sessions.

**ASIANLAN 438. Media Korean**

*ASIANLAN 336 or permission of instructor. Consent of instructor required. (Prerequisites enforced at registration.) Minimum of Third-Year proficiency in Korean. (3). May not be repeated for credit.*

The aim of this course is to improve students' advanced/upper-level Korean language skills by studying and discussing materials related to Korean current events. Students use various media materials such as Korean newspapers and news programs.

**ASIANLAN 439. Academic Japanese I**  
*ASIANLAN 326 with A- or above or pass a placement test. Students must also have mastery of over 1500 kanji and a solid foundation in grammar and reading. (2). May not be repeated for credit. Rackham credit requires additional work.*

This course focuses on the development of competence in academic Japanese, especially proficiency in reading and writing, to enhance students' academic language ability for research using Japanese source materials or study at a Japanese university. Skills covered include rapid reading (skimming and scanning skills), intensive reading for comprehension, lecture comprehension, effective note-taking, participation in discussions and the appropriate organization of research projects and presentations.

**ASIANLAN 440. Academic Japanese II**  
*ASIANLAN 326. (Prerequisites enforced at registration.) ASIANLAN 439, one other 400-level Japanese language course, or permission of instructor. (2). May not be repeated for credit. Rackham credit requires additional work.*

This course focuses on the development of proficiency in academic Japanese, especially in academic reading and writing, to enhance students' ability to do research using Japanese source materials or study at a Japanese university. Skills covered include rapid reading (skimming and scanning skills), intensive reading for comprehension, and academic writing using advanced academic vocabulary and structure.

**ASIANLAN 441. Practicum in Japanese Translation (Hon'yaku jisshu)**

*ASIANLAN 326 completed with a minimum grade of B+ or better. (Prerequisites enforced at registration.) ASIANLAN 326 with a minimum grade of B+ or permission of instructor. For non-native speakers of Japanese: JLPT N2, Placement test, and/or knowledge of 800 kanji. For non-native speakers of English: TOEFL IBT 100 or above. (3). May be elected twice for credit.*

This introductory course of translation is designed for students who have or will have some experience in Japanese translation but have never been formally trained. Students with advanced-level Japanese acquire the basic tools necessary to translate from the source to the target language.

**ASIANLAN 442. Practicum in Japanese Interpreting**

*Consent of instructor required. ASIANLAN 326 required. ASIANLAN 441 or another 400-level Japanese language course. This course is for students with a high level of Japanese proficiency. (3). May not be repeated for credit.*

This course introduces interpreting between Japanese and English. Students will acquire the basic tools necessary to orally translate between the source language and the target language, while enhancing their Japanese skills. Training includes note taking, sight translation, consecutive interpreting, and simultaneous interpreting.

**ASIANLAN 445. Chinese Language Pedagogy**

*ASIANLAN 402 or 4th year proficiency. (3). May not be repeated for credit.*

This introduction to Chinese language pedagogy exposes prospective teachers to up-to-date pedagogical theories. It also enhances basic teaching skills needed to satisfactorily conduct instructions in different Chinese courses at different levels. The ultimate aim of this course is to educate and assist participants to be competitive job candidates and qualified teachers for Chinese teaching at college, K-12, and private language schools.

**ASIANLAN 450. Japanese Pedagogy I**  
*4th year proficiency in Japanese Language. (3). May not be repeated for credit. Rackham credit requires additional work.*

Students gain a foundation in Japanese pedagogy by learning the basics of teaching pronunciation, grammatical structure, and the three components of the Japanese writing system. They also learn how to give lectures and conduct drill sessions, and make lesson plans, teaching materials and tests. Emphasis is placed on techniques of ensuring students master the four key areas: speaking, listening, reading and writing.

**ASIANLAN 461. Advanced Thai I**  
*ASIANLAN 262, or by assignment of ASIANLAN 461 by placement test. (Prerequisites enforced at registration.) (3). May be elected twice for credit. Rackham credit requires additional work.*

In this course students will complete the move from material written specifically for foreign language-learners to "real" Thai, including such genres as newspaper articles, essays, and fiction.

**ASIANLAN 462. Advanced Thai II**  
*ASIANLAN 461 or by assignment of ASIANLAN 462 by Placement Test. (Prerequisites enforced at registration.) (3). May be elected twice for credit. Rackham credit requires additional work.*

In this course students will complete the move from material written specifically for foreign language-learners to "real" Thai, including such genres as newspaper articles, essays, and fiction.

**ASIANLAN 471. Advanced Urdu I**  
*ASIANLAN 272 or by assignment of ASIANLAN 471 by Placement Test. (Prerequisites enforced at registration.) (3). May be elected twice for credit. Rackham credit requires additional work.*

This course is a continuation of ASIANLAN 272. Students will continue to learn to speak Urdu at an advanced level, as

well as continue to learn to read and write the script.

**ASIANLAN 472. Advanced Urdu II**

*ASIANLAN 471 or by assignment of ASIANLAN 472 by Placement Test.*

*(Prerequisites enforced at registration.) (3). May be elected twice for credit. Rackham credit requires additional work.*

This course is a continuation of ASIANLAN 471. Students will continue to learn to speak Urdu at an advanced level, as well as continue to learn to read and write the script.

**ASIANLAN 475. Advanced Vietnamese I**  
*ASIANLAN 276 or by assignment of ASIANLAN 475 by Placement Test.*

*(Prerequisites enforced at registration.) (3). May be elected twice for credit. Rackham credit requires additional work.*

A wide selection of materials, ranging from literary books to newspapers, folk stories and other economic and cultural articles, will provide the students opportunities to get acquainted with various socio-cultural aspects of Vietnam.

**ASIANLAN 476. Advanced Vietnamese II**

*ASIANLAN 475, or by assignment of ASIANLAN 476 by placement test.*

*(Prerequisites enforced at registration.) (3). May be elected twice for credit. Rackham credit requires additional work.*

A wide selection of materials, ranging from literary books to newspapers, folk stories and other economic and cultural articles, will provide the students opportunities to get acquainted with various socio-cultural aspects of Vietnam.

**ASIANLAN 479. Teaching Korean in the Community**

*ASIANLAN 336 or advanced Korean language proficiency. (2).*

*(EXPERIENTIAL). May be elected twice for credit. Offered mandatory credit/no credit.*

Experiential learning course that places advanced Korean speakers in teaching environments within the community. In partnership with Community High School and Ann Arbor Korean School, University of Michigan students will advise student projects related to Korean language and culture or serve as teaching assistants.

**ASIANLAN 480. Topics in Asian Languages**

*Students should not elect the same topic twice. (1 - 4). May be elected three times for credit. May be elected more than once in the same term.*

This course is aimed at undergraduate and graduate students with advanced Asian language proficiency. Topics will vary, with the goal of the course being to gain additional proficiency in the target language as well as to introduce new concepts not taught in other Asian language courses regularly offered.

**ASIANLAN 499. Independent Language Study**

*Permission of Instructor. (1 - 5).*

*(INDEPENDENT). May be repeated for a maximum of 8 credits. May be elected more than once in the same term.*

This course will allow students to do additional academic work towards mastering an Asian language.

**Asian/Pacific Island Amer Std  
(ASIANPAM)**

**ASIANPAM 102. First Year Seminar in Asian/Pacific Islander American Studies**

*Enrollment restricted to first-year students, including those with sophomore standing. (3). (SS). May not be repeated for credit.*

This course is designed to introduce students to a wide variety of topics and issues in Asian/Pacific Islander American Studies in a seminar format from a Social Science perspective. It will enable students to have contact with regular faculty in a small-class experience and to elicit their active participation in the topics under discussion.

**ASIANPAM 103. First Year Seminar in Asian/Pacific Islander American Studies**  
*Enrollment restricted to first-year students, including those with sophomore standing. (3). (HU). May not be repeated for credit.*

This course is designed to introduce students to a wide variety of topics and issues in Asian/Pacific Islander American Studies in a seminar format from a Humanities perspective. It will enable students to have contact with regular faculty in a small-class experience and to elicit their active participation in the topics under discussion.

**ASIANPAM 204. Themes in Asian/Pacific Islander American Studies**  
*(3 - 4; 3 in the half-term). (HU). May be elected twice for credit. May be elected more than once in the same term.*

This course is intended for first year students, sophomores and juniors as specific illustrations of the issues raised and the approaches used by American Studies scholars. It is an interdisciplinary approach to a social, cultural, or literary theme in Asian/Pacific Islander American Studies.

**ASIANPAM 214 / AMCULT 214. Introduction to Asian/Pacific American Studies**  
*(3 - 4). (HU). (R&E). May not be repeated for credit.*

An overview of the historical experiences, contemporary community issues, and cultural and artistic expressions of Asian Americans and Pacific Islander Americans in the U.S.

**ASIANPAM 301. Topics in Asian/Pacific Islander American Studies**

*(1 - 4). May be elected twice for credit. May be elected more than once in the same term.*

This course provides undergraduates the opportunity to explore a specific topic in ethnic life in depth using an interdisciplinary approach.

**ASIANPAM 310. Asian/Pacific Islander American Studies and the Social Sciences**  
*(3). (SS). May be repeated for a maximum of 6 credits. May be elected more than once in the same term.*

This course serves as a 300-level social science course in Asian/Pacific Islander American Studies the content of which varies from term to term.

**ASIANPAM 311. Asian/Pacific Islander American Studies and the Humanities**  
*(1 - 4). (HU). May be elected twice for credit. May be elected more than once in the same term.*

This course serves as a 300-level humanities course in Asian/Pacific Islander American Studies the content of which varies from term to term.

**ASIANPAM 324 / AMCULT 324 / ENGLISH 381. Asian American Literature**  
*(3). (HU). May not be repeated for credit.*

This course considers a range of topics in the study of Asian American literature. It raises questions concerning the canon of texts to be studied, the cultural construction of Asian American literature, race and

ethnicity in America, and the ways in which these texts challenge and expand our understanding of American literature.

**ASIANPAM 325 / AMCULT 325 / ENGLISH 388. Pacific Literary and Cultural Studies**

(3). (HU). May not be repeated for credit.

This course will introduce students to major authors and texts of Pacific and Pacific Islander American literature. We will attend to issues of representation, form and genre, identify, history, social and political movements, gender, sexuality, class, and race.

**ASIANPAM 352 / AMCULT 352. Asian/Pacific Islander American Cultural Performance**

(4; 3 in the half-term). (HU). May not be repeated for credit.

Critical examination of collegiate culture night shows, focusing on Asian/Pacific Islander American communities, and including processes of preparation and production as well as the content of these shows. Discussion of the multiple levels of meaning and representation that operate in these shows.

**ASIANPAM 353 / AMCULT 353 / HISTORY 454. Asians in American Film and Television**

(4; 3 in the half-term). (ID). (R&E). May not be repeated for credit.

This course will examine how film and television have reflected and shaped Asian culture and identity in American history. Through screenings of feature films and documentaries produced by Asian Americans and non-Asians, we will study the shifting representations of Asians across historical periods from the 19th century to the present.

**ASIANPAM 359 / AMCULT 359. South Asian Diaspora in America**

Not available to students who have completed AMCULT/ASIANPAM 311 when taught with the topic "South Asian Diaspora in America". (Prerequisites enforced at registration.) (3). (HU). May not be repeated for credit.

This course teaches students about the long history of migration of people from South Asia to North America, from the earliest settlers who arrived in the 19th century to the contemporary moment. Students also read how writers, filmmakers, and other artists have explored the experiences of diaspora and immigration.

**ASIANPAM 363 / AMCULT 363 / WGS 363. Asian/Pacific Islander American Women**

(3). May not be repeated for credit.

This is an upper-division, interdisciplinary course focusing on the experiences of Asian American and Pacific Islander American women in the United States from historical, anthropological, sociological, and psychological and literary perspectives.

**ASIANPAM 372 / AMCULT 372. Hula - Creative Practice**

Not available to students who have completed AMCULT 355 when taught with the topic "The Hula" (topic #1). (Prerequisites enforced at registration.) (3). (CE). May not be repeated for credit.

An introduction to the performance rudiments of the Hawaiian hula tradition, as they are contextualized within a system of cultural expectations of behavior.

**ASIANPAM 388. Field Study**

Consent of instructor required. Sophomore standing. (1 - 4). (EXPERIENTIAL). (INDEPENDENT). May be repeated for a maximum of 8 credits. Offered mandatory credit/no credit.

A field study is available to undergraduates who are interested in exploring new areas in the field of Asian/Pacific Islander American Studies beyond the Michigan campus. These include internship opportunities. Each student makes individual arrangements with a faculty member in the student's area of interest.

**ASIANPAM 389. Reading Course in Asian/Pacific Islander American Studies**  
*Consent of instructor required. (1 - 4). (INDEPENDENT). May not be repeated for credit. No more than 6 credits of directed readings/internships may be counted toward the American Culture major.*

An independent study course available to undergraduates who are interested in designing a reading list for the purpose of exploring new areas in the field of Asian/Pacific Islander American Studies. Each student makes individual arrangements with a faculty member in the student's area of interest.

**ASIANPAM 498. Capstone Seminar in Asian/Pacific Islander American Studies**  
*(3 - 4; 3 in the half-term). May be elected twice for credit. May be elected more than once in the same term.*

## **Astronomy (ASTRO)**

**ASTRO 101. Introductory Astronomy: The Solar System and the Search for a new Earth**  
*A basic high school math and science background. (4). (NS). (BS). (QR/2). May not be repeated for credit. No credit granted to those who have completed or are enrolled in ASTRO 115. F, W.*

This class explores how data from NASA probes and other telescopes are used to

understand the formation of our solar system, explain the features of our planets and their moons, and search for planets outside our own Solar System.

**ASTRO 102. Introductory Astronomy: Stars, Galaxies, and the Universe**  
*A basic high school math and science background. (4). (NS). (BS). (QR/2). May not be repeated for credit. No credit granted to those enrolled in or have completed ASTRO 104, ASTRO 142, or ASTRO 201. F, W.*

Students discover the nature of stars, black holes, luminous nebulae, supernovae, galaxies, and what is ultimately in store for the universe in this concept-focused course. Explore the roles of light, energy, and gravity in astronomy. There are three weekly lectures, a discussion period, and observational activities.

**ASTRO 104. Alien Skies: A Tour Through the Universe**  
*(3). (NS). (BS). (QR/2). May not be repeated for credit. No credit granted to those enrolled in or have completed ASTRO 102, 142, or 201.*

"Travel" to different locations in the Universe to view it from different perspectives. The skies, sights, and properties of these destinations serve as springboards to understanding the nature of the Universe and its astounding diversity.

**ASTRO 105. The Cosmos Through the Constellations**  
*(3). (NS). (BS). (QR/2). May not be repeated for credit.*

Tour the constellations visible this season, and explore topics in both basic and frontier astronomy by examining notable astronomical phenomena associated with these star patterns. This course also relates mythology linked to the origin of the

constellations and discusses celestial cartography.

**ASTRO 106. Aliens**

*(1). (NS). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in ASTRO 115.*

This mini-course discusses the ongoing search for extraterrestrial life. It focuses on scientific hurdles that lie within our understanding about the number of potential environments suitable for life in the Galaxy, the development of life, its evolution, and the technical challenges of interstellar travel and communication.

**ASTRO 107. The Dark Side of the Universe**

*(1). (NS). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in ASTRO 102, 104, 142, or 201.*

We explore the dark components of the universe - those that we cannot directly see with our eyes - including Dark Energy, Dark Matter, and Black Holes. We find out how scientists infer their existence and measure their properties from observations of the visible parts of our Universe.

**ASTRO 115. Introductory Astrobiology: The Search for Life in the Universe**

*Basic high school math and science background. (3). (NS). (BS). (QR/2). May not be repeated for credit. No credit granted to those who have completed or are enrolled in ASTRO 101.*

This course covers one of the most exciting areas of modern astronomy: understanding our own origins and the search for life elsewhere. First, we survey our understanding of life's origin on the Earth. Second, we apply this knowledge by exploring our own solar system and asking what planets or moons could potentially harbor life. Third, we move beyond our star

system to outline the search for other planets in the Galaxy, speculate on the existence of life in the Universe, and consider the possibility of start travel sometime in the future.

**ASTRO 127. Naked Eye Astronomy**

*(1). (NS). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in ASTRO 105 or ASTRO 188.*

Students learn about the nature of the most common astronomical objects that can be observed by eye, such as the Sun, Moon, planets, stars, comets, and meteors. The motion of these objects in the sky is studied along with their influence of the Earth.

**ASTRO 142. From the Big Bang to the Milky Way**

*(3). (NS). (BS). (QR/2). May not be repeated for credit. No credit granted to those who have completed or are enrolled in: ASTRO 102, 104, or 201; or PHYSICS 112.*

This introductory course follows the evolution of the Universe from the Big Bang to the formation of galaxies such as the Milky Way with an emphasis in our current understanding of its formation, evolution, and make-up.

**ASTRO 182. Interdisciplinary Topics in Astronomy**

*(3 - 4; 2 - 3 in the half-term). (ID). May be elected three times for credit. May be elected more than once in the same term.*

This interdisciplinary topics course examines a range of astronomical phenomena and fundamental physical concepts from an interdisciplinary perspective. Specific topics will vary by term.

**ASTRO 183 / SPACE 103. Introduction to Space Weather**

(3). (NS). (BS). *May not be repeated for credit.*

"Space Weather" is an emerging discipline of space science that studies the conditions in space that impact society and Earth's technological systems. Space weather is a consequence of the behavior of the sun, the nature of Earth's magnetic field and atmosphere, and our location in the solar system.

**ASTRO 201. Introduction to Astrophysics**

*Calculus and physics at the high school or university level is strongly recommended. (4). (NS). (BS). (QR/1). May not be repeated for credit.*

Discover the extraordinary nature of astronomy, e.g. stars, black holes, galaxies, dark matter, and the universe. This course uncovers the astrophysics behind the most important and common astronomical phenomena in our universe. A major topic is stars and their lives, which can end violently through supernova explosions, leaving behind black holes or neutron stars. This is followed by the study of the Milky Way and its content, other galaxies, and how unseen "dark" matter shapes the universe we see today. We conclude with the origin of the universe and the limitations of looking back in time.

**ASTRO 206. Black Holes: The Triumph of Gravity**

*Any one of: PHYSICS 135, 139, 140 or 160. (Prerequisites enforced at registration.) 3 credits of any Astronomy course, with the exception of ASTRO 183 and ASTRO 261. (3). (NS). (BS). (QR/1). May not be repeated for credit.*

This class deals with the basic theoretical and observational properties of astrophysical black holes, from stellar-mass objects arising from the death of massive

stars, to super-massive black holes lurking at the center of galaxies, including our own Milky Way. Covered topics include: black hole event horizons, accretion power, relativistic jets, black holes in X-ray binary systems, galactic super-massive black holes, Sgr A\*, black hole feedback, evaporation and the Hawking effect.

**ASTRO 220. New Discoveries in Astronomy**

*Any one of: PHYSICS 112, ASTRO 101, 102, 104, 105, 115, 142, or 201.*

*(Prerequisites enforced at registration.) (3). (NS). (BS). (QR/2). May be repeated for a maximum of 6 credits. Credit granted for a combined total of 6 credits in ASTRO 220 and ASTRO 420.*

Discuss the latest discoveries in astronomy with leading scientists from around the nation. In this course, the Astronomy Department's weekly professional visitors will also make simplified in-class presentations on their research. Students will have the opportunity to discuss the techniques, significance, and scientific context with both the visitor and the instructor.

**ASTRO 232. Honors Core in Natural Science**

*Consent of department required. (4). (NS). (BS). (QR/2). May be elected twice for credit. May be elected more than once in the same term.*

This course introduces Honors students to a range of questions, ideas and techniques to ask, 'Are we alone?' Do intelligent extraterrestrials (ETs) exist? If they exist, have they been here before? Can we - should we - try to communicate? Would we even recognize ETs if we met them?

**ASTRO 255 / EARTH 255. Earth and Space Sciences for Elementary School Educators**

*High school mathematics and physics*



*recommended. (3). (NS). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in ASTRO 101 or 115, or EARTH 171(or GEOSCI 171) or AOSS 171 or BIOLOGY 110 or ENSCEN 171 or ENVIRON 110.*

This course covers introductory Earth and Space Sciences for undergraduate students specializing in Elementary Education. It covers the discovery of the place of the Earth in the universe and its origin; discusses plate tectonics, volcanoes, and earthquakes; and addresses the major components of the climate system (atmosphere, oceans, and cryosphere).

**ASTRO 261 / NAVSCI 301. Navigation**  
*(3). (BS). May not be repeated for credit. F.*

The purpose of this course is to educate students in all aspects of marine navigation, from getting a vessel underway from port through open ocean navigation using both celestial and electronic means. The content of the course is divided into three major areas. The first section focuses on piloting, emphasizing the safe navigation of vessels in coastal waters. This section provides an introduction to navigational instruments and aids to navigation. The second section concerns celestial navigation, the ability to determine position through observation of celestial bodies. Students learn how to determine position based on the use of the sextant and various almanacs and mathematical tables. The third section of the course considers electronic navigation.

**ASTRO 300 / HISTORY 300. The Beginning and The End: A History of Cosmology**  
*(3). (ID). May not be repeated for credit.*

This course discusses the development of modern cosmology, both observational and theoretical, since the late eighteenth century.

**ASTRO 301 / HISTORY 301. Discovery of the Universe**  
*(3). (ID). May not be repeated for credit.*

This course surveys the ways and means by which men and women have learned about the nature of the stellar and galactic systems from the early modern period to the growth of radio astronomy. Course materials come from writings by scientists as well as modern studies of the history of the physical sciences and the growth of "big" science. This course covers developments in astronomical research in Europe (mostly in theory) and the Americas (mostly in observation).

**ASTRO 305. Astronomy in the Community**

*Consent of instructor required. At least 3 credits in Astronomy. (1 - 3). (BS). (EXPERIENTIAL). May be repeated for a maximum of 9 credits.*

In this experiential course, students gain experience in education and public outreach by participating in and organizing activities such as astronomy open houses, telescope viewings, planetarium shows, Astronomy tutoring, and peer coaching. By working with the Astronomy faculty and staff on these activities, students expand their own understanding of astronomy and develop skills in communicating scientific principles and discoveries to the general public.

**ASTRO 361. Astronomical Techniques**  
*ASTRO 201 or permission of instructor. (4). (BS). May not be repeated for credit. F.*

Topics include astronomical instrumentation, techniques for obtaining observational data, and the reduction and analysis of observations. Emphasis is placed on obtaining and analyzing data in such fields as astronomy, interferometry and spectroscopy.

**ASTRO 389. Individual Studies in Astronomy**

*Consent of instructor required. (1 - 3). (INDEPENDENT). May be repeated for credit.*

**ASTRO 399. Introduction to Research**

*Consent of instructor required. (1 - 3). (BS). (INDEPENDENT). May be repeated for credit. Continuing Course. Y grade can be reported at end of the first-term to indicate work in progress. At the end of the second term, the final grade is posted for both term's elections.*

**ASTRO 402. Stellar Astrophysics**

*MATH 215, 255 or 285, and prior or concurrent enrollment in PHYSICS 340 or PHYSICS 360, or graduate standing. (Prerequisites enforced at registration.) MATH 216, 256 or 286 and ASTRO 201. (3). (BS). May not be repeated for credit. F.*

Examines the appearance, structure, and evolution of stars. Covers the physical processes that cause stars to have their observed structures; energy generation through nucleosynthesis; the physical laws that lead to the structure of stars; the transfer of radiation through the outer parts of the star; how spectroscopic information informs us as to the composition and motion of stars; and the late stages of stellar evolution and death.

**ASTRO 404. Galaxies and the Universe**

*MATH 215, 255 or 285, and prior or concurrent enrollment in PHYSICS 340 or PHYSICS 360, or graduate standing. (Prerequisites enforced at registration.) MATH 216, 256 or 286 and ASTRO 102, 142 or 201. (3). (BS). May not be repeated for credit. W.*

Examines the properties of galaxies, large-scale structure in the universe, and cosmological models. The basic aspects of galaxies are explained, orbital theory, spiral arms, the missing mass in galaxies, galaxy

evolution, and the starburst phenomenon. The clustering of galaxies, the hot intracluster medium and the dynamical evolution of clusters. Expansion of the universe, the cosmic microwave background, the inflationary universe, Big Bang nucleosynthesis, and the origin and growth of structure in the universe.

**ASTRO 405. High Energy Astrophysics**

*MATH 216, 256 or 286, ASTRO 201, PHYSICS 340 or 360, and prior or concurrent enrollment in PHYSICS 390. (3). (BS). May not be repeated for credit. W.*

Examines the underlying astrophysics of violent astronomical phenomena that produce energetic particles under exotic circumstances. Covers high-energy radiation processes and basic fluid mechanics. The physics are applied to accretion onto black holes and other compact objects and the astronomical phenomena that result. Includes study of supernovae, the origin of X-ray and Gamma-ray background radiation fields, Gamma-ray bursts, and cosmic rays.

**ASTRO 406. Computational Astrophysics**

*Prior or concurrent enrollment in MATH 216, 256 or 286, prior or concurrent enrollment in PHYSICS 235, 240 or 260, and some knowledge of programming. (3). (BS). May not be repeated for credit. F.*

Computational Astrophysics develops a practical working knowledge of the most widely used numerical methods in astrophysics. The theory underlying the methods is one important aspect of the course, but theory is put into practice by development and use of numerical routines (some already written) in the computer environment. With an emphasis on astrophysical issues, we first cover some of the most common scientific numerical

methods, such as interpolation, curve fitting, root finding, quadrature, numerical integration of differential equations, and matrix solutions to sets of linear equations. Fourier methods are widely used throughout astrophysics, and both the basic theory and the most useful applications are presented. The last major topic is the numerical statistical analysis, with particular emphasis on the peculiarities and pitfalls associated with real astronomical data.

**ASTRO 420. New Discoveries in**

**Astronomy for Advanced Students**

*ASTRO 201, and one of: PHYSICS 140, 160, or 123. (Prerequisites enforced at registration.) (3). (BS). May be repeated for a maximum of 6 credits. Credit granted for a combined total of 6 credits in ASTRO 220 and ASTRO 420.*

Discuss the latest discoveries in Astronomy with leading scientists from around the nation. In this course, the Astronomy Department's weekly professional visitors make simplified in-class presentations on their research. Students will have the opportunity to discuss the techniques, significance, and scientific context with both the visitor and the faculty instructor. There will be both preparatory and follow-up discussion before and after the visit for students to gain a complete understanding of the context, motivation, methodology, and scientific discoveries associated with each project presented. Students will discuss the presentations in the advanced context of the professional scientific literature.

**ASTRO 429. Scientific Writing and Communication in Astronomy**

*ASTRO 201 or graduate standing. (Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit. W.*

The purpose of the course is to train students for some of the communication

tasks required of practicing researchers. Students are taught approaches for writing abstracts, papers, proposals, meeting posters, policy documents, as well as oral presentation techniques. This procedure includes analyzing the audience and purpose for the writing, selecting and organizing material, constructing an argument, and preparing and editing the text itself. There is a strong emphasis on practice in both writing and oral communications.

**ASTRO 461. Ground-Based Observatories**

*Consent of department required. ASTRO 201 and ASTRO 361. (3 in the half-term). (BS). May not be repeated for credit. Sp. (Kitt Peak National Observatory, Arizona).*

In this immersion course held in residence at Kitt Peak National Observatory, Arizona, we discuss the scientific, technical, and political aspects of ground-based research observatories. The course features the MDM Observatory, of which UM is a consortium member. We also take advantage of the many other, nearby astronomical facilities, both on- and off-site, to study the variety of instrumentation and telescope properties. Students use MDM telescopes to carry out small science projects. We also examine observatories in the context of their natural and sociopolitical environment, and their relationship to local communities, with emphasis on education and public outreach.

**Business Administration (BA)**

**BA 476 / HISTORY 476. American Business History**

*Junior, senior, or graduate standing. (3). May not be repeated for credit.*

In this course, the origins, the development, and the growth of businesses are studied. The course traces the beginnings of American business enterprise from Europe and describes business activities during the American colonial, revolutionary, and pre-Civil War periods. It then discusses economic aspects of the Civil War, post-civil War industrial growth, business consolidation and the antitrust movement, economic aspects of World War I, business conditions during the 1920s, effects of the 1929 depression and the New Deal upon business, economic aspects of World War II, post-war business developments, the crash of 2007-2008 and some current business trends. The topics are enlivened by discussions of business personalities.

**BA 499 / GERMAN 430. Doing Business in German**

*One 300-level course taught in German or permission of instructor. (3). May not be repeated for credit. W. Taught in German.*

This course introduces students to the language of German business and gives them insight into Germany's place in the global economy. The course is organized around major business and economic topics, such as: the geography of business and industry in German; the European Union and Germany's role therein; traffic, transportation and trade; social structure; economic structure; ecology. In addition to the basic text, students will read actual business, merchandising, and advertising material; newspapers and magazines. There will also be short videos on business and related topics.

**Bosnian, Croatian, and Serbian (BCS)**

**BCS 131. First-Year  
Bosnian/Croatian/Serbian I**

*(4). May not be repeated for credit. May not be repeated for credit.*

The major objective of this course is to build a solid foundation in the basic grammatical patterns of written and spoken Bosnian, Croatian and Serbian. Students are simultaneously introduced to both the Cyrillic and Latin alphabets, with exercises in reading, writing, and speaking including drill in the language laboratory.

**BCS 132. First-Year  
Bosnian/Croatian/Serbian II**

*BCS 131. (4). May not be repeated for credit. May not be repeated for credit.*

Continuation of Bosnian/Croatian/Serbian 131. Presentation of basic grammatical information, with exercises in reading, writing, and speaking.

**BCS 231. Second-Year  
Bosnian/Croatian/Serbian I**

*BCS 132. (Prerequisites enforced at registration.) (4). May not be repeated for credit. May not be repeated for credit.*

Emphasis is placed first on reading Bosnian, Croatian, and Serbian literature and secondly on developing increased competency in speaking and writing. Extensive use of audio and video materials."

**BCS 232. Second-Year  
Bosnian/Croatian/Serbian II**

*BCS 231. (Prerequisites enforced at registration.) (4). (Lang Req). May not be repeated for credit. May not be repeated for credit.*

A survey of Bosnian, Croatian and Serbian literature from its origins to the present day with emphasis on 19th and 20th centuries. Readings are in English, but qualified

candidates are expected to analyze the material in the original.

**BCS 350 / JUDAIC 350 / REEES 350.**

**Legacy of the Holocaust in Yugoslav Culture: How and Why We Need to Narrate the Holocaust**

(3). (HU). (R&E). *May not be repeated for credit.*

The course explores new texts about the Holocaust written in response to the resurrection of racist ideologies in the context of post-Communist Eastern Europe, the EU enlargement, as well as a persistent global economic and social crisis. Readings include fictional and testimonial narratives, theoretical and documentary material.

**BCS 439. Directed Reading of Bosnian/Croatian/Serbian Literature**

*Consent of instructor required. (1 - 4). (INDEPENDENT). May be repeated for a maximum of 8 credits.*

Intensive reading of selected works of nineteenth and twentieth centuries.

**BCS 450. In No Man's Land: Walls, Migrations and Human Trafficking in the Balkans and Mediterranean**

(3). *May not be repeated for credit.*

This course explores the issue of contemporary humanitarian crisis on the Balkan and Mediterranean migration routes, as represented in documentary and feature film.

**Bioinformatics and Computational Biology (BIOINF)**

**BIOINF 463 / BIOPHYS 463 / MATH 463. Mathematical Modeling in Biology**  
*MATH 214, 217, 417, or 419; and MATH*

*216, 256, 286, or 316. (3). (BS). May not be repeated for credit.*

An introduction to the use of continuous and discrete differential equations in the biological sciences. Modeling in biology, physiology and medicine.

**Biological Chemistry (BIOLCHEM)**

All courses in Biological Chemistry (BIOLCHEM) are listed in the Online *Schedule of Classes* under the Medical School. Courses not listed in the LSA Course Catalogue and not cross-listed through an LSA department count as non-LSA course work (see “Non-LSA Course Work” on the LSA website).

The following count as LSA courses for LSA degree credit.

**BIOLCHEM 398. Undergraduate Research in Biochemistry**

*Consent of instructor required. Junior standing and permission of the Biological Chemistry Professor who will supervise the research. (1 - 4). (BS). (INDEPENDENT). May be repeated for a maximum of 4 credits.*

Independent undergraduate research in biochemistry.

**BIOLCHEM 415. Introductory Biochemistry**

*One semester of organic chemistry. (3). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in BIOLOGY 310 or 311, MCDB 310 or 311, CHEM 451, or BIOLCHEM 451 or 515. F.*

This course provides a broad survey for students majoring in science and healthcare. Students explore the molecular basis of life, including the structures and functions of proteins, enzymes, lipids, carbohydrates, and nucleic acids. Topics include bioenergetics, metabolism, signal transduction and genetics, with emphasis on health, disease, physiology and medicine.

**BIOLCHEM 416. Introductory Biochemistry Laboratory**

*Qualitative analysis; prior or concurrent election of BIOLCHEM 415 or 451/452 or CHEM 451/452. (3). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in BIOLOGY 429 or BIOLCHEM 516. F.*

**BIOLCHEM 451 / CHEM 451.**

**Advanced Biochemistry:**

**Macromolecular Structure and Function**

*CHEM 215, 260, 351 and BIOLOGY 171 or 172. (4). (BS). May not be repeated for credit. F.*

Taught from a chemical perspective with emphasis on understanding biochemical phenomena through chemical structure and mechanism, this course is intended for students pursuing the BS concentration in biochemistry. It provides an in-depth treatment of such topics as protein/nucleic acid structure, protein folding/stability, enzyme mechanisms/kinetics, bioenergetics/ photosynthesis, and the regulation of metabolic pathways.

**BIOLCHEM 452 / CHEM 452.**

**Advanced Biochemistry: Cellular Processes**

*CHEM 351 or MCDB 310 or BIOLCHEM 415, (completed with a minimum grade of C- or better). Consent of instructor required. (Prerequisites enforced at registration.) (4). (BS). May not be repeated for credit. W.*

This course focuses on the biochemistry of fundamental cellular processes. Topics include mechanisms for the integration of metabolism in both bacterial cells and in multicellular organisms, the process of gene expression focusing on the biochemistry of gene transcription, and mRNA translation. It generally emphasizes chemistry and enzymology of metabolic transformations, enzyme reaction mechanisms, and protein and nucleic acid structure and function.

**BIOLCHEM 499. Biochemical Research for Undergraduates: Laboratory**

*Consent of instructor required. BIOLCHEM 415 or 451/452; permission of the course director. (1 - 6; 1 - 4 in the half-term). (BS). (INDEPENDENT). May be repeated for credit. F, W, Sp/Su.*

**BIOLCHEM 673 / CHEM 673. Kinetics and Mechanism**

*CHEMBIO 501 or its equivalent, undergrad calculus. Physical Chemistry is recommended. (2). (BS). May not be repeated for credit.*

This course will cover the investigation of enzyme mechanisms with an emphasis on ligand binding to macromolecules, transient kinetics, steady-state kinetics, and inhibition. The kinetic and thermodynamic concepts that govern the action of enzymes will be explored.

## **Biology (BIOLOGY)**

**BIOLOGY 101 / ENVIRON 101. Food, Energy, and Environmental Justice**

*(4). (NS). (BS). May not be repeated for credit. Credit is granted for a combined total of 17 credits elected in introductory biology. F.*

In recent years it has become apparent that current energy and food sourcing is damaging the environment from global warming to pesticide runoff. This course treats the issues of energy, food, and the environment from a biological and sociopolitical point of view. It emphasizes the historical trajectories that generated current conditions and the scientific options for revamping our energy and food systems to make them more consistent with environmental sustainability.

**BIOLOGY 102. Practical Botany**  
(4). (NS). (BS). *May not be repeated for credit. W.*

This course is an introductory course about plants and how they are used by people.

**BIOLOGY 105. Biology of Nutrition**  
(4). (NS). (BS). *May not be repeated for credit. Credit is granted for a combined total of 17 credits elected in introductory biology. F.*

This course is a natural science course for undergraduates to learn about general nutrition. The course will give students a biologically sound foundation on which to make judgments about personal and public health, related to food production and consumption.

**BIOLOGY 107. Evolution of Life**  
*Some exposure to biology at the high school level is assumed.* (3). (NS). (BS). *May not be repeated for credit.*

This course provides an introduction to biological evolution. We consider: the evidence for evolution; an overview of the evolution of cells, organisms, and viruses; evolutionary themes of natural selection, chance, and cooperation; and the consequences of an evolutionary world view for understanding disease, biological diversity, and human culture.

### **BIOLOGY 108. Introduction to Animal Diversity**

(4). (NS). (BS). *May not be repeated for credit. W.*

This course will introduce students to the amazing diversity of animals in our world. We will discuss how animals within this diversity manage to survive, function, reproduce, and behave in their natural environment.

**BIOLOGY 109. Ecological Knowledge and Environmental Problem Solving**  
(3). (NS). (BS). *May not be repeated for credit. W.*

The main point is to gain an understanding of the types of scientific knowledge that are needed to solve environmental problems, and to develop an appreciation of problem-solving skills. This course uses a case study approach, and takes the perspective that science consists of the creation and testing of theory.

### **BIOLOGY 110 / CLIMATE 171 / EARTH 171 / ENVIRON 110 / RCNSCI 110. Introduction to Global Change: The Science Behind Sustainability**

(4). (NS). (BS). *May not be repeated for credit. Satisfies the geography requirement for State of Michigan certification for social studies teachers. F.*

Students learn about the evolution of the universe, Earth, our changing environment and our planets living organisms. Global Change I, which is part of the GC curriculum, assumes no prior science background. Homework and laboratories use computer-based systems modeling and analysis, and includes a group presentation.

**BIOLOGY 112. The Evolutionary Influence of Humans**  
(1). (NS). (BS). *May not be repeated for credit.*

The purpose of this course is to examine how humans have influenced the evolutionary trajectory of almost every species they have encountered, either directly or indirectly.

**BIOLOGY 115. Microbes: Our Ancient Frenemies**

(1). (NS). (BS). *May not be repeated for credit.*

Microbiology is one of the most diverse and important fields of science, yet it remains one of the most underappreciated. Microbes have altered the planet, altered our evolutionary history, and made it possible for our very existence. In this course, we will discuss how they shaped our past as well as how they may impact our future.

**BIOLOGY 116. Biology of Sex**

(3). (NS). (BS). *May not be repeated for credit.*

Sex is not universally used by living organisms for reproduction. When and how it evolved, and the various mechanisms in which it operates is a primary concern for most biological disciplines. This course will cover the origins, mechanisms and implications sexuality has for biodiversity. The human aspects of sexual biology will be examined in terms of how we fit into the concepts.

**BIOLOGY 118. AIDS and Other Health Crises**

(3). (NS). (BS). *May not be repeated for credit. W.*

A course focused on concepts of health and disease and their impact on society as well as the impact of social structures on health and disease. Topics include AIDS, syphilis, cholera, tuberculosis, influenza, and plague.

**BIOLOGY 120. First Year Seminar in Biology**

*Enrollment restricted to first-year students, including those with sophomore standing.*

(3). (NS). (BS). *May not be repeated for credit.*

These seminars, which are restricted to first-year students, are small-group classes (approximately 15-25 students) taught by regular and emeritus faculty.

**BIOLOGY 121. Topics in Biology**

(1 - 4). (NS). (BS). *May be elected four times for credit. May be elected more than once in the same term.*

This course is designed to acquaint students with an (introductory) area of biology that is not a usual part of the Biology Department curriculum.

**BIOLOGY 130. Animal Behavior**

(4). (NS). (BS). *May not be repeated for credit. F.*

This course is an introduction to the behavior of animals in their natural environment. Students gain a background in evolution and learn how to use natural selection to understand why animals behave the way they do.

**BIOLOGY 144. Decoding Your DNA: Implications for You and Society**

(3). (NS). (BS). *May not be repeated for credit.*

This course aims for students (including those who may not necessarily focus on a career in science) to acquire an understanding of how the genomics revolution is transforming many facets of our society.

**BIOLOGY 171. Introductory Biology: Ecology and Evolution**

(4). (NS). (BS). *May not be repeated for credit. BIOLOGY 171 and 172 can be taken in either order.*



BIOLOGY 171 is a one-term introductory course in ecology and evolutionary biology that imparts factual and conceptual knowledge on the origin and complex interactions of the earth's biodiversity and ecosystems. Its goal is to help students to develop scientific hypothesis-testing, critical-thinking and writing skills.

BIOLOGY 171 is part of a two-semester introductory unit that includes BIOLOGY 172 and 173.

**BIOLOGY 172. Introductory Biology - Molecular, Cellular, and Developmental**

*Prior or concurrent enrollment in CHEM 130. (4). (NS). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in BIOLOGY 174. BIOLOGY 171 and 172 can be taken in either order.*

BIOLOGY 172 is a one-term introductory course in molecular, cellular, and developmental biology that imparts factual and conceptual knowledge on how cells, organs, and organisms work. One of its goal is to help students develop scientific hypothesis-testing, critical-thinking and writing skills. BIOLOGY 172 is part of a two-semester introductory unit that includes BIOLOGY 171 and 173.

**BIOLOGY 173. Introductory Biology Laboratory**

*One of: BIOLOGY 171, 172, 174, 191, or 195. (Prerequisites enforced at registration.) Students should have completed one of the introductory lecture courses [either BIOLOGY 171 or (172 or 174)] and be concurrently enrolled in the other. (2). (NS). (BS). May not be repeated for credit.*

BIOLOGY 173 is an integrative, project-based, one-term introductory laboratory course intended for majors in any of the

biological sciences, other science programs, and pre-professional studies.

**BIOLOGY 174. Introduction to Cell and Molecular Biology**

*Prior or concurrent enrollment in CHEM 130. (4). (NS). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in BIOLOGY 172.*

This course covers fundamental topics in biochemistry, cellular and molecular biology. Students gain an appreciation for how biology fits into their daily lives. Learning occurs through a problem-solving collaborative approach rather than a lecture format.

**BIOLOGY 191. Introductory Biology**

*(3). (NS). (BS). May not be repeated for credit. Offered mandatory credit/no credit.*

This is a shell course that will allow students with introductory experience in biology at other institutions to qualify for Accelerated Introductory Biology (BIOLOGY 192). Credit is granted for this course by Program in Biology request only after an evaluation of an external institution's introductory biology program. This is not a live course and cannot be taken in residence at U-M.

**BIOLOGY 192. Accelerated Introductory Biology**

*BIOLOGY 191 (Transfer) or BIOLOGY 195 (AP). (Prerequisites enforced at registration.) (4). (NS). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in BIOLOGY 171, 172, or 174.*

This course is an accelerated Introductory Biology course for students whose previous biology coursework was substantial but not equivalent to the Introductory Biology sequence (BIO 171 & 172/174). This course will cover essential topics in cell and

molecular biology, ecology, and evolution to prepare students for more advanced courses in biology.

**BIOLOGY 197. Science Writing for Everyday Life**

(4). (BS). May not be repeated for credit.

This course will introduce students to writing in the sciences, from everyday creative writing to scientific lab reports.

**BIOLOGY 200. Undergraduate Tutorial**

*Consent of instructor required. Permission of faculty member in biology. (1 - 3).*

*(INDEPENDENT). May be repeated for a maximum of 6 credits. F, W, Sp/Su, Sp, Su.*

This course is intended for sophomores learning research and laboratory techniques, working under close supervision of a faculty member. It may also be used for directed readings at an appropriate level. It includes reading on a significant topic and regular consultation with the faculty member chosen to supervise the work. The required paper could be on the scientific literature in a broad field, on biological issues on which the student may want to do continuing work, or on the detailed results of research in a biological specialty. Conferences, seminars, readings, and assigned writings are used to develop critical perspectives on modern biological problems and to provide breadth and sense of historical continuity in biological thought.

**BIOLOGY 201. Intermediate Topics in Biology**

*BIOLOGY 171 and either 172 or 174; or BIOLOGY 192; or BIOLOGY 195. (1 - 4). (NS). (BS). May be elected three times for credit. May be elected more than once in the same term.*

This course is an intermediate topics course intended for majors in the Program in Biology. Topics will vary by term and

specific descriptions will be provided for each offering.

**BIOLOGY 202. Mathematics of Life: Introduction to Quantitative Biology**

*MATH 115 or equivalent (MATH 120, 156, or 185). (Prerequisites enforced at registration.) (4). (BS). May not be repeated for credit.*

This course gives majors in biology and related fields the opportunity to master the quantitative skills - including the elements of logic, statistics, probability, dynamics, data visualization, and scientific computing - needed to excel in the increasingly quantitative biological and biomedical sciences.

**BIOLOGY 205. Developmental Biology**

*BIOLOGY 171 and either 172 or 174; or BIOLOGY 192; or BIOLOGY 195.*

*(Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit.*

This course is designed to give students an introduction to animal and plant developmental biology. The course covers embryological, genetic and molecular biological approaches towards studying how development occurs. Topics include: cell movement during gastrulation, control of cell division, cell-cell communication and regulation of gene expression.

**BIOLOGY 207. Microbiology**

*BIOLOGY 171, (172 or 174), & 173; BIOLOGY 192 & 173; or BIOLOGY 195 & 173. (Prerequisites enforced at registration.) (4). (NS). (BS). May not be repeated for credit. Satisfies a Biology laboratory requirement. F and W.*

The lectures will trace the history of microbiology, microbial growth and metabolism, microbial diversity, and the importance of microbes in the environment, industry and medicine. The laboratory sessions introduce microscopy, aseptic

technique, staining, and the isolation, culture and identification of microbes from the local environment.

**BIOLOGY 212. Plants and Human Health**

*BIOLOGY 171 and either 172 or 174; or BIOLOGY 192; or BIOLOGY 195. (Prerequisites enforced at registration.) (3). (NS). (BS). May not be repeated for credit.*

Plants are the ultimate source of all human food and most medicine, and also play essential roles in environment for healthy human life. In this course, students learn basic botany, human use of plants as food and medicine, and the important relationship between environment and human health.

**BIOLOGY 222. Principles of Cellular and Molecular Neuroscience**

*BIOLOGY 172 (OR 174), 192, OR 195; and CHEM 130 or CHEM 210 (or placement in CHEM 210 by orientation exam). (Prerequisites enforced at registration.) (4). (NS). (BS). May not be repeated for credit. MCDB 351.*

This course will introduce students to the cellular and molecular mechanisms that allow nervous systems to generate signals, and how these signals are used. Among the topics that will be covered are how information in the environment is transformed into electrical signals, how axons rapidly carry electrical information over long distances, how neurons communicate with each other at synapses, how the nervous system develops and how the brain's synaptic networks extract useful information to give rise to conscious perceptions and to movements.

**BIOLOGY 225. Principles of Human and Animal Physiology**

*BIOLOGY 171 and either 172 or 174; or BIOLOGY 192; or BIOLOGY 195. (Prerequisites enforced at registration.)*

*Prior or concurrent enrollment in CHEM 210. (3). (NS). (BS). May not be repeated for credit. F and W.*

Lectures concerned with mechanisms by which animals function. Emphasis on physiology of the whole animal, including consideration of functional systems (e.g., digestion, circulation, etc.).

**BIOLOGY 226. Human and Animal Physiology Laboratory**

*BIOLOGY 173. (Prerequisites enforced at registration.) Prior or concurrent enrollment in BIOLOGY 225. (2). (NS). (BS). May not be repeated for credit. Satisfies a Biology laboratory requirement or an elective requirement in most biology majors and minors. F, W.*

These laboratory exercises deal (usually concurrently) with topics covered in lecture - mechanisms by which animals function.

**BIOLOGY 230. Introduction to Plant Biology**

*BIOLOGY 171, (172 or 174), & 173; or BIOLOGY 192 & 173; or BIOLOGY 195 & 173. (4; 5 in the half-term). (NS). (BS). May not be repeated for credit. F; Sp/Su at the Biological Station. Satisfies a Biology laboratory requirement.*

This course presents a broad, integrated overview of plant biology including economic and environmental aspects. The main themes are plant diversity, structure, function, development, and ecology.

**BIOLOGY 232. Honors Core in Biology**  
*Consent of department required. (4). (NS). (BS). May be elected twice for credit. May be elected more than once in the same term.*

As part of the Honors Core Curriculum, this course introduces Honors students to the fields, questions and meta-questions, and methodologies of the Natural Sciences; in this case, Biology. The course uses both

contemporary technology and time-honored methodologies to examine theoretical concepts, problems, and case studies; the course uses a variety of formats and strategies.

**BIOLOGY 241. Health, Biology, and Society: What is Cancer?**

*(4). (ID). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in AMCULT 241.*

This course explores the question "What is Cancer?" from the natural sciences, social sciences, and the humanities, and seeks to educate and train students in a multidimensional and holistic understanding of health and society. One goal of the course is to provide an integrated overview of how scholars in various fields approach broad and complicated topics.

**BIOLOGY 242. Honors Core Writing in Biology**

*Consent of department required. (4). (NS). (FYWR). (BS). May be elected twice for credit. May be elected more than once in the same term.*

As part of the Honors Core Curriculum, this course introduces Honors students to the fields, questions and meta-questions, and methodologies of the Natural Sciences; in this case, Biology. The course uses both contemporary technology and time-honored methodologies to examine theoretical concepts, problems, and case studies; the course uses a variety of formats and strategies.

**BIOLOGY 252. Vertebrate Evolution and Diversity**

*BIOLOGY 171, (172 or 174), & 173; or BIOLOGY 192 & 173; or BIOLOGY 195 & 173. (4). (BS). May not be repeated for credit. Satisfies a Biology laboratory requirement. F.*

Lecture and laboratory course on the evolution and diversity of vertebrate animals. Lectures cover major evolutionary trends in the structure, function, and diversity of vertebrates as well as the interrelationships among vertebrate groups. Laboratory includes detailed comparative study of representative vertebrates and survey of morphological diversity across many groups.

**BIOLOGY 255 / ENVIRON 255. Plant Diversity**

*(4). (NS). (BS). May not be repeated for credit. Satisfies a Biology laboratory requirement.*

This course examines plant diversity by groups, ranging from algae and nonvascular plants through primitive vascular plants and culminating in flowering plants. Using an evolutionary perspective, it treats plants as organisms and emphasizes the innovations and structural adaptations of the various plant groups as well as life history strategies. Weekly field trips allow exploration of local natural areas.

**BIOLOGY 256. Environmental Physiology of Animals**

*BIOLOGY 171, 172 or 174, & 173; or BIOLOGY 192 & 173; or BIOLOGY 195 & 173. (Prerequisites enforced at registration.) AP Physics or PHYSICS 135, 140 or 160 or equivalent; and AP Math or MATH 115 or 116 or equivalent. (3). (NS). (BS). May not be repeated for credit.*

Discover intriguing research being done by environmental physiologists, ecological morphologists and evolutionary physiologists! Learn about applications to environmental health and animal conservation. Investigate how evolutionary history influences animal form and function. Learn how physiological and functional patterns relate to the diversity of

Earth's habitats. Learn from human, vertebrate, and invertebrate examples.

**BIOLOGY 272. Fundamentals of Cell Biology**

*BIOLOGY 171 and BIOLOGY 172 (OR 174) OR BIOLOGY 192 OR BIOLOGY 195; and CHEM 130 or CHEM 210 (or placement in CHEM 210 by orientation exam). (Prerequisites enforced at registration.) (4). (NS). (BS). May not be repeated for credit.*

This course will expand upon the essential concepts and principles that guide our current understanding of cellular structure, function, and behavior.

**BIOLOGY 281 / ENVIRON 281. General Ecology**

*BIOLOGY 171, (172 or 174), & 173; or BIOLOGY 192 & 173; or BIOLOGY 195 & 173; AND a laboratory course in CHEM. (3). (NS). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in EEB 381 or ENVIRON 381. F and W.*

The course introduces the basic concepts and principles of ecology as applied to the study of individuals, populations, and communities of both plants and animals.

**BIOLOGY 288. Animal Diversity**

*BIOLOGY 171, (172 or 174), & 173; or BIOLOGY 192 & 173; or BIOLOGY 195 & 173. (4). (NS). (BS). May not be repeated for credit. Satisfies a Biology laboratory requirement.*

BIOLOGY 288 will provide biology majors with a survey of the animal phyla in the context of discussions of major issues in ecology and evolution. Students will see the diversity of behavior, mating systems, life history, and diverse interactions.

**BIOLOGY 299. Undergraduate Research in Biology, Health, and Society**

*Consent of instructor required. Eight or more credits of BIOLOGY courses; 3.0 or greater GPA. (1 - 3). (INDEPENDENT). May be repeated for a maximum of 12 credits.*

Intended only for Biology, Health, and Society (BHS) majors who want to pursue interdisciplinary research (i.e., on a theme incorporating research outside of traditional biology lab work). Students will need to conduct original research on an approved topic related to health and/or society and its impacts on or interactions with biology. Literature surveys or reviews are not eligible.

**BIOLOGY 305. Genetics**

*BIOLOGY 171 and either 172 or 174; or BIOLOGY 192; or BIOLOGY 195. (Prerequisites enforced at registration.) Prior or concurrent enrollment in CHEM 210. (4). (BS). May not be repeated for credit. F, W, Sp.*

This introduction to genetics includes the following sections: DNA and chromosomes; gene transmission in Eukaryotes; linkage and recombination; genes and enzymes, the genetic code, and mutation; recombinant DNA, RFLP mapping, the Human Genome Project; gene regulation, transposons; population genetics; and quantitative genetics.

**Biomedical Engineering (BIOMEDE)**

**BIOMEDE 410 / MACROMOL 410 / MATSCIE 410. Design and Applications of Biomaterials**

*MATSCIE 220 or 250 with a grade of C- or better; or graduate standing. (Prerequisites*

*enforced at registration.) (3). (BS). May not be repeated for credit.*

Biomaterials and their physiological interactions. Materials used in medicine/dentistry: metals, ceramics, polymers, composites, resorbable, smart, natural materials. Material response/degradation: mechanical breakdown, corrosion, dissolution, leaching, chemical degradation, wear. Host responses: foreign body reactions, inflammation, wound healing, carcinogenicity, immunogenicity, cytotoxicity, infection, local/systemic effects.

**BIOMEDE 500 / UC 500. Biomedical Engineering Seminar**

*(1). (BS). May not be repeated for credit. This course has a grading basis of "S" or "U".*

This seminar will feature various bioengineering-related speakers.

## **Biophysics (BIOPHYS)**

**BIOPHYS 116. Introduction to Medical Imaging**

*Enrollment restricted to first-year students, including those with sophomore standing. (3). (NS). (BS). May not be repeated for credit.*

This first year seminar surveys the methods of modern medical imaging for clinical and scientific purposes, highlighting basic concepts in chemistry, physics, and biochemistry and the biophysical foundations upon which all current tools for biomedical imaging rest. We explore the historical development of the underlying science of radiography, computed

tomography (x-rays of a selected plane of the body), diagnostic ultrasound, nuclear medicine, and magnetic resonance imaging. This seminar also touches on the societal implications of imaging such as radiation risks, health care costs, and future directions in medical research.

**BIOPHYS 117. Introduction to Programming in the Sciences**

*(3). (MSA). (BS). May not be repeated for credit.*

This hands-on interactive course introduces students to the basic functional aspects of using a modern, UNIX-based computer and associated languages and editing tools, C-shell, Bash shell, vi and/or emacs editors. Additionally, an introduction to basic computer languages Python and Matlab will occur through structured programming assignments that transform basic mathematical problems into computer algorithms.

**BIOPHYS 120 / PHYSICS 122. The Discovery of the DNA Double Helix and its Hidden Mysteries**

*(3). (NS). (BS). (QR/1). May not be repeated for credit.*

Intended for students interested in the natural sciences and medicine, this course uses modern techniques to explore the scientific journey leading to the discovery of the structure of DNA. It presents demonstrations of state-of-the-art biophysical laboratory techniques now widely used in biophysical studies of DNA and other biomolecules, including NMR, single molecule techniques, and X-ray crystallography.

**BIOPHYS 123. The Science of Food and Cooking (Soft Matter and Kitchen Science)**

*(3). (NS). (BS). May not be repeated for credit.*

This course uses food and the act of food preparation as a tool to learn a broad array of basic scientific concepts, ranging from the scientific method to fundamental principles in physics, chemistry, and biology. The in-class portion of this course will include lectures, cooking demonstrations, and laboratory exercises. Outside of class, you will have traditional reading and problem-based assignments in addition to practical cooking tasks. At the end of the course, you will have been exposed to the fundamental basis of many traditional food preparation techniques as well as several more modern uses of molecular gastronomy.

**BIOPHYS 130. DNA Origami**

(3). (NS). (BS). *May not be repeated for credit.*

This hands-on First-Year Seminar course explores the theory and methods behind synthetic biology, focusing on one particular technology called DNA origami, which uses folded DNA as building blocks to construct nano-scale objects via self-assembly. This class covers the theoretical underpinnings of DNA origami, then students will work in groups to design, construct, and characterize DNA origami objects.

**BIOPHYS 280. Biophysics**

**Undergraduate Research (UROP)**

(1 - 4). (EXPERIENTIAL). *May be repeated for a maximum of 8 credits. Credit is granted for a combined total of 8 credits in any UROP research courses.*

This course gives students in UROP (Undergraduate Research Opportunity Program) the opportunity to engage in independent research in a research laboratory under the supervision of a Biophysics faculty member.

**BIOPHYS 290 / PHYSICS 290. Physics of the Body and Mind**

*PHYSICS 125 or 135 or 140 or 160.*

*(Prerequisites enforced at registration.)*

*MATH 115 or equivalent AP credits. (3).*

*(NS). (BS). (QR/2). May not be repeated for credit.*

The course discusses and explores basic physical concepts, and apply them to the human body, organs, and cells. Its aim is to provide understanding of biological function in terms of fundamental physics principles. It is intended for students interested in the application of physics to biology, biochemistry, physiology, psychology, genetics, medicine, bioengineering and related life sciences.

**BIOPHYS 370 / CHEM 370 / PHYSICS 370. Physical and Chemical Principles Behind Biology and Medicine**

*MATH 215 or CHEM 262; and PHYSICS 235, 239 (AP), or 240. (Prerequisites enforced at registration.) CHEM 130 or placement in 210. (3). (NS). (BS). May not be repeated for credit. No credit granted to students who have completed or are enrolled in CHEM 260 or PHYSICS 390.*

This course is an introduction to the fundamental physical and chemical principles of biophysics. It covers quantum aspects of matter, thermodynamics, kinetics and statistical mechanics in the context of biological applications.

**BIOPHYS 399. Research in Biophysics**

(1 - 4). (BS). (INDEPENDENT). *May be repeated for a maximum of 8 credits.*

This course gives biophysics concentrators the opportunity to engage in independent research in a research laboratory under the supervision of a faculty member.

**BIOPHYS 415. Directed Study**

(1 - 4). (BS). (INDEPENDENT). *May be*

*elected twice for credit. May be elected more than once in the same term.*

A program of supervised study agreed upon by a student and a member of the faculty.

**BIOPHYS 417 / CHEM 417 / PHYSICS 417. Dynamical Processes in Biophysics**  
(MATH 216 or 256 or 286 or 296 or 316 or CHEM 262) and (BIOPHYS 370 or PHYSICS 340 or PHYSICS 360 or PHYSICS 370 or CHEM 463 or CHEM 370). (Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit.

The physical basis of diffusive processes in biology and biochemistry, and optical spectroscopic means for measuring its rates. Topics include: membrane electrical potentials, nerve impulses, synaptic transmission, the physics of chemoreception by cells, motion and reaction kinetics of membrane components, optical microscopy, visible and UV light absorption, fluorescence and phosphorescence, quasielastic light scattering, mathematics of random fluctuations, and chaotic processes in biology.

**BIOPHYS 420 / MCDB 420. Structural Biology: The Architecture of Life**  
Previous or concurrent enrollment in CHEM 351, MCDB 310, or BIOLCHEM 415; or graduate standing. (Prerequisites enforced at registration.) CHEM 230 or CHEM 260 or BIOPHYS 370. (3). (BS). May not be repeated for credit.

This course covers topics including structure and folding of biological molecules, biochemistry of cellular processes, biochemical approaches, reaction rate and enzyme kinetics.

**BIOPHYS 421. Structural Biology: Biophysical Controversies**  
Previous or concurrent enrollment in CHEM 351, MCDB 310, or BIOLCHEM

415. (3). (BS). May not be repeated for credit.

This course aims to address scientific controversies in structural biology through a discussion-based process. Additionally, it will introduce students to the major structural biological determination techniques. The strengths and weaknesses of these techniques will be explored through examples in the primary literature, as well as how to avoid the pitfalls of their misuse.

**BIOPHYS 422 / CHEM 422. Experimental Methods in Structural Biology**  
(CHEM 260 or BIOPHYS 370) and (CHEM 351, MCDB 310 or BIOLCHEM 415) and previous or concurrent enrollment in BIOPHYS 420 or 421. (Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit.

This course offers a detailed introduction to the fundamental physical principles behind key structural techniques including X-ray crystallography, NMR spectroscopy, and cryo-electron microscopy. Students will gain hands-on experience with data processing, analysis, and structure calculations/model building.

**BIOPHYS 435. Biophysical Modeling**  
CHEM 262 or MATH 216; or graduate standing. (Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit. Rackham credit requires additional work.

This course explores biophysical modeling and the associated computational tools on length scales ranging from atomistic simulations to multicellular networks.

**BIOPHYS 440 / CHEM 440. Biophysics of Diseases**  
BIOPHYS 370 or CHEM 370 or PHYSICS



370. (3). (BS). May not be repeated for credit.

This course deconstructs current and emerging diseases in terms of the malfunctioning of nucleic acids, proteins, and membranes and the interactions between them. The diseases covered includes Alzheimer's, Parkinson's, Creutzfeldt-Jakob disease (or Mad-Cow disease), HIV, a variety of bacterial infections, and other biological disorders.

**BIOPHYS 450 / PHYSICS 450.**

**Laboratory Techniques in Biophysics**

*BIOPHYS 370 or CHEM 370 or PHYSICS 370; or PHYSICS 390; or CHEM 452 or BIOLCHEM 452; or graduate standing. (Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit. Rackham credit requires additional work.*

This laboratory course teaches essential laboratory skills in biophysics through hands-on experiments, computational work, and a supporting lecture.

**BIOPHYS 454 / CHEM 454. Biophysical Chemistry II: Macromolecular Structure and Dynamics**

*CHEM 453 or 463, and CHEM 451/452 or equivalent. (3). (BS). May not be repeated for credit. W.*

This course builds on the CHEM 451-453 sequence and aims at providing an understanding of the structure and dynamics of biological macromolecules. After introducing the necessary nomenclature and reviewing thermodynamic principles, modern techniques to characterize the structure and dynamics of biopolymers will be the focus. Sedimentation, electrophoresis, mass spectrometry, X-ray diffraction, scattering, and spectroscopic techniques such as absorption, circular dichroism, fluorescence and NMR will be covered. Both physical principles and

practical applications in the Life Sciences will be highlighted.

**BIOPHYS 463 / BIOINF 463 / MATH**

**463. Mathematical Modeling in Biology**

*MATH 214, 217, 417, or 419; and MATH 216, 256, 286, or 316. (3). (BS). May not be repeated for credit.*

An introduction to the use of continuous and discrete differential equations in the biological sciences. Modeling in biology, physiology and medicine.

**BIOPHYS 495. Senior Seminar in Biophysics**

*BIOPHYS 450 or PHYSICS 450; or graduate standing. (Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit. Rackham credit requires additional work.*

This course speaks to the exchange of scientific information through professional publications and meetings. Students focus on how to write scientific papers and present at conferences and develop these skills through practical exercises.

**BIOPHYS 498. Senior Thesis**

*BIOPHYS 399. (1 - 4). (BS). (INDEPENDENT). May not be repeated for credit.*

This course gives biophysics concentrators the opportunity to cap their educational experience with a senior thesis based on their research.

**BIOPHYS 499. Honors Thesis**

*BIOPHYS 399. (1 - 4). (BS). (INDEPENDENT). May not be repeated for credit.*

This course gives biophysics concentrators the opportunity to cap their educational experience with an honors thesis based on their research.

**BIOPHYS 520 / CHEM 520. Methods of Biophysical Chemistry**

*CHEM 463, BIOLCHEM 415, or CHEM 420; permission of course director. (3). (BS). May not be repeated for credit. F.*

This course provides an overview of key methodologies of contemporary biophysics and biophysical chemistry. Principles of structure determination by X-ray diffraction, solution and solid-state NMR and electron microscopy will be covered. A variety of optical spectroscopic techniques, including UV/Vis, fluorescence, circular dichroism and cell imaging will be discussed. Methods for the separation and study of biological macromolecules and membranes including ultracentrifugation, chromatography, electrophoresis, mass spectrometry and calorimetry will be introduced.

**BIOPHYS 521 / CHEM 521. Principles of Biophysical Chemistry**

*CHEM 461, BIOLCHEM 415, and CHEM 430; and permission of course director. (3). (BS). May not be repeated for credit. W.*

This course discusses aspects of protein and nucleic acid structure and dynamics, the nature of underlying forces and interactions that control biopolymer processes, and aspects of dynamics in the context of function. Emphasis will be laid on theories from thermodynamics and statistical mechanics that form the basis of physical models for processes and processing in these systems.

**Biostatistics (BIOSTAT)**

Courses in the School of Public Health are listed in the *Schedule of Classes* under the School of Public Health. Courses not listed in the LSA Course Catalogue and not cross-

listed through an LSA department count as non-LSA course work (see “Non-LSA Course Work” on the LSA website).

The following count as LSA courses for LSA degree credit.

**BIOSTAT 449 / STATS 449. Topics in Biostatistics**

*STATS 401, 403, or 425 or permission of instructor. (3). (BS). May not be repeated for credit.*

Introduction to biostatistical topics: clinical trials, cohort and case-control studies; experimental versus observational data; issues of causation, randomization, placebos; case control studies; survival analysis; diagnostic testing; image analysis of PET and MRI scans; statistical genetics; longitudinal studies; and missing data.

**Catalan (CATALAN)**

**CATALAN 291 / SPANISH 291.**

**Introduction to Catalan Language and Culture**

*SPANISH 275, 276, or SPANISH 277; or SPANISH 278 (or 290) or AMCULT 224 or LATINOAM 224; or RCLANG 324.*

*(Prerequisites enforced at registration.) (3). May not be repeated for credit.*

This course is an introduction to Catalan language, culture, and history. Students will learn the language through a communicative approach.

**CATALAN 405 / SPANISH 405.**

**Advanced Catalan Language, Culture, and Society**

*CATALAN 291/SPANISH 291.*

*(Prerequisites enforced at registration.) (3). May not be repeated for credit. Rackham credit requires additional work.*

This course is a continuation of CATALAN 291/SPANISH 291. Throughout the semester we will continue to learn and expand our knowledge of Catalan culture, society, arts, politics, and language.

**CATALAN 441 / SPANISH 441. Topics in Catalan Literature and Culture**

*Nine credits chosen between SPANISH 279 and 399; or two RCLANG 324 and six credits chosen between SPANISH 279 and 399. (Prerequisites enforced at registration.) (3). May not be repeated for credit.*

This course offers an examination of the different artistic and literary movements that developed in Catalonia from the 19th century to the present time, and that had an impact on Catalan literary and cultural production.

## **Civil & Environmental Engin (CEE)**

**CEE 307 / ENVIRON 407. Sustainable Cities**

*Junior or Senior standing and two environmental science classes. (3). (BS). May not be repeated for credit.*

Achieving sustainable urban environments requires an interdisciplinary, systems-level approach to ensure cities are both environmentally and economically sustainable. This course explores how multiple disciplines can be integrated to identify and discuss this broad goal, including law, public health, engineering, finance, communication, land planning, and construction.

**CEE 581 / EARTH 581. Aquatic Chemistry**

*CHEM 130 and senior or graduate standing. (3). (BS). May not be repeated for credit.*

Chemical principles applicable to the analysis of the chemical composition of natural waters and engineered water treatment systems; covers acid-base, precipitation-dissolution, complexation, and oxidation-reduction reactions; emphasis on graphical, analytical, and computer-speciation methods; presented in the context of contemporary environmental issues including water quality, climate change, and pollution prevention and abatement.

## **Chemical Engineering (CHE)**

**CHE 412 / MACROMOL 412 / MATSCIE 412. Polymeric Materials**

*MATSCIE 220 or 250, and CHEM 210 with a grade of C- or better; or graduate standing. (Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit.*

The synthesis, characterization microstructure, rheology, and processing of polymeric materials. Polymers in solution and in the liquid, liquid-crystalline, crystalline, and glassy states. Engineering and design properties, including viscoelasticity, yielding, and fracture. Forming and processing methods. Recycling and environmental issues.

**CHE 512 / MACROMOL 512 / MATSCIE 512. Polymer Physics**  
*Senior or graduate standing in engineering or physical science. (3). (BS). May not be repeated for credit.*

**CHE 559 / MACROMOL 559 / MATSCIE 559. Foundations of Nanotechnology II**

*Senior or graduate standing. (3). (BS). May not be repeated for credit.*

This course will cover the synthesis and processing of nano-sized metal, metal oxide, and semiconductor powders. It will also include organic/inorganic and nanobiomaterials. Emphasis will be on particle properties and their use in making nanostructured materials with novel properties.

## Chemistry (CHEM)

### **CHEM 105 / CLIMATE 105 / ENSCEN 105 / ENVIRON 105. Our Changing Atmosphere**

*(3). (NS). (BS). May not be repeated for credit.*

The science of the greenhouse effect, stratospheric ozone depletion, polar ozone holes, and urban smog. These phenomena and their possible consequences are discussed, along with the properties and behavior of the atmosphere and its components of the environment.

### **CHEM 120. First Year Seminar in Chemistry**

*Enrollment restricted to first-year students, including those with sophomore standing. (3). (NS). (BS). May not be repeated for credit.*

These seminars, which are restricted to first-year students, are small group classes (approximately 15-25 students) taught by regular and emeritus faculty.

### **CHEM 125. General Chemistry Laboratory I**

*Concurrent enrollment in CHEM 126. (Prerequisites enforced at registration.) To*

*be elected by students who are eligible for (or enrolled in) CHEM 130, and concurrent enrollment in CHEM 126. (1). (NS). (BS). May not be repeated for credit. F, W, Su.*

A three-hour laboratory with a focus on experiment design, data analysis, and oral communication skills.

### **CHEM 126. General Chemistry Laboratory II**

*Concurrent enrollment in CHEM 125. (Prerequisites enforced at registration.) To be elected by students who are eligible for (or enrolled in) CHEM 130, and concurrent enrollment in CHEM 125. (1). (NS). (BS). May not be repeated for credit. F, W, Su.*

A three-hour laboratory accompanied by a biweekly one hour discussion with a focus on experiment design, data analysis, and oral communication skills.

### **CHEM 130. General Chemistry: Macroscopic Investigations and Reaction Principles**

*Three years of high school math or MATH 105; one year of high school chemistry recommended. Placement by testing, or permission of Chemistry department. (3). (NS). (BS). (QR/2). May not be repeated for credit. Intended for students without AP credit in Chemistry. Neither CHEM 130, nor AP credits earned for CHEM 130, count toward the minors in Chemistry. F, W, Su.*

This General Chemistry course provides an introduction to the major concepts of chemistry, including the microscopic picture of atomic and molecular structure, periodic trends in the chemical reactivity, the energetics of chemical reactions, and the nature of chemical equilibria.

### **CHEM 209. Structure and Reactivity Seminar**

*CHEM 210 enforced co enrollment and permission by department. Consent of*

*department required. (Prerequisites enforced at registration.) (1). (NS). (BS). May not be repeated for credit. Offered mandatory credit/no credit.*

This course focuses on the skills and strategies recommended for success in university-level learning, as applied to the goals and objectives of introductory organic chemistry as a specific context.

**CHEM 210. Structure and Reactivity I**

*High school chemistry. Placement by examination during Orientation. To be taken with CHEM 211. (3). (NS). (BS). May not be repeated for credit. No credit granted to those who have completed CHEM 215. F, W, Su.*

This is the first course in a two-term sequence in which the major concepts of chemistry are introduced in the context of organic chemistry.

**CHEM 211. Investigations in Chemistry**

*To be taken concurrently with CHEM 210. (2). (NS). (BS). May not be repeated for credit. Students who have completed CHEM 216 will not receive credit for CHEM 211. F, W, Su.*

An introduction to laboratory techniques in chemistry using inorganic and organic compounds, with emphasis on thin layer chromatography, stoichiometry, acid-base chemistry, and microscale organic reactions.

**CHEM 215. Structure and Reactivity II**

*CHEM 210/211. To be taken with CHEM 216. (3). (NS). (BS). May not be repeated for credit. F, W, Sp.*

Continuation of CHEM 210. Students get further practice in applying the major concepts of chemistry to predicting the physical and chemical properties of organic compounds, including macromolecules, both synthetic and biological.

**CHEM 216. Synthesis and Characterization of Organic Compounds**

*CHEM 210/211. Must be taken with CHEM 215. (2). (NS). (BS). May not be repeated for credit. F, W, Sp.*

CHEM 216 builds on the experimental approach started in CHEM 211. Students participate in planning exactly what they are going to do in the laboratory by being given general goals and directions that have to be adapted to fit the specific project they will be working on. They use microscale equipment, which requires them to develop manual dexterity and care in working in the laboratory. They also evaluate the results of their experiments by checking for identity and purity using various chromatographic and spectroscopic methods.

**CHEM 218. Independent Study in Biochemistry**

*Consent of instructor required. For students with less than junior standing. (1). (INDEPENDENT). May be repeated for a maximum of 4 credits. F, W, Sp/Su, Sp, Su.*

Undergraduate Biochemistry research for students with junior standing. May be elected more than once for a maximum of 4 credits towards the degree.

**CHEM 219. Independent Study in Chemistry**

*Consent of instructor required. For students with less than junior standing. (1). (INDEPENDENT). May be repeated for a maximum of 4 credits. F, W, Sp/Su, Sp, Su.*

Undergraduate Chemistry research for students with less than junior standing. Students concentrating in Biochemistry should elect 218 rather than 219.

**CHEM 220. Teaching Experience for Undergraduates**

*Consent of instructor required. (1 - 3). (INDEPENDENT). May be repeated for a maximum of 4 credits.*

Students will participate in a faculty supervised instructional and/or instructional development activity. These activities might include, but are not limited to: (a) facilitating peer-led study groups for students enrolled in chemistry courses; (b) meeting regularly with discussion and laboratory sessions; (c) participating with faculty and graduate instructors in instructional activities; or (d) assisting in the development, testing, and implementation of teaching materials.

**CHEM 230. Physical Chemical Principles and Applications**

*CHEM 215/216. Students who plan to continue beyond a fourth term in Chemistry would typically enroll in CHEM 260/241/242 instead of CHEM 230; credit will not be given for both of these courses. (3). (NS). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in CHEM 260. F, W, Sp.*

CHEM 230 is an intro to the physical principles underlying some of the major topics of inorganic and analytical chemistry. The liquid and solid states of matter, phase transitions, solutions, electrochemistry, coordination complexes, spectroscopy, and the principles of thermodynamics that explain observed chemical reactions will be studied from the viewpoint of the experimental scientist, with an emphasis on the application of chemical principles to a wide range of professions.

**CHEM 241. Introduction to Chemical Analysis**

*Prior or concurrent enrollment in CHEM 230 or 260, and concurrent enrollment in CHEM 242. (2). (NS). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in CHEM 245. F, W.*

Introduction to the chemical basis of both classical wet analysis methods and modern instrumental analysis methods. Course emphasize statistical methods and the analytical applications of equilibria, electrochemistry, spectroscopy, and radioactivity.

**CHEM 242. Introduction to Chemical Analysis Laboratory**

*Prior or concurrent enrollment in CHEM 230 or 260, and concurrent enrollment in CHEM 241. (2). (NS). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in CHEM 246 or CHEM 247. F, W.*

Introductory laboratory in wet chemical and modern instrumental analysis. Experiments emphasize equilibria, separations, electrochemistry, and spectroscopy.

**CHEM 245. Biomedical Analytical Chemistry**

*CHEM 130 or equivalent. CHEM 245 must be taken concurrently with the accompanying lecture/laboratory offerings, CHEM 246/247. (2). (NS). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in CHEM 241.*

This course addresses the principles of analytical chemistry relevant to the practice of modern clinical chemistry measurement techniques. These techniques are employed routinely to detect the levels of physiological species in blood and urine samples.

**CHEM 246. Biomedical Analytical Chemistry Laboratory I**

*CHEM 130 or equivalent. CHEM 246 (LEC/LAB) must be taken concurrently with CHEM 245 and CHEM 247. (1). (NS). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in CHEM 242.*

The focus of this lecture/laboratory course is training students on the basic laboratory methods used in performing quantitative measurements of physiologically important species (glucose, potassium, salicylate, urea, creatinine, etc.) in simulated blood and urine samples using electrochemical, spectroscopic and separation techniques.

**CHEM 247. Biomedical Analytical Chemistry Laboratory II**

*CHEM 130 or equivalent. CHEM 247 must be taken together with CHEM 245 and CHEM 246. (1). (NS). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in CHEM 242.*

This lecture/laboratory course focuses on basic laboratory methods used in performing quantitative measurements of physiologically important species (glucose, potassium, salicylate, urea, creatinine, etc.), as well as in simulated blood and urine samples using electrochemical, spectroscopic and separation techniques.

**CHEM 260. Chemical Principles**

*CHEM 210/211, MATH 115, and prior or concurrent enrollment in PHYSICS 135 or 140 or 160. (3). (NS). (BS). May not be repeated for credit. No credit granted for students who have completed or are enrolled in BIOPHYS 370. F, W, Sp.*

Introduction to the quantal nature of matter, basic chemical thermodynamics, and chemical kinetics. Description of the fundamental physical principles that underlie spectroscopic and electrochemical analysis.

**CHEM 261. Introduction to Quantum Chemistry**

*CHEM 215/216, MATH 115, and prior or concurrent enrollment in PHYSICS 140 (or 160). CHEM 261 is intended primarily for Chemical Engineering students. (1). (BS).*

*May not be repeated for credit. No credit granted to those who have completed or are enrolled in CHEM 260. CHEM 261 is intended for Chemical Engineering students only. F, W, Sp.*

**CHEM 262. Mathematical Methods for Physical Scientists**

*MATH 115 and 116. (4). (MSA). (BS). (QR/1). May not be repeated for credit.*

This course provides students with a comprehensive and rigorous introduction to the mathematical concepts and tools most relevant to the chemical sciences. Topics covered include linear algebra, multivariable calculus, ordinary and partial differential equations, probability and statistics. These mathematical concepts and tools are key for the development of group theory, quantum chemistry, chemical thermodynamics and chemical kinetics.

**CHEM 290. Sophomore Seminar**

*CHEM 210. (3). (NS). (BS). May not be repeated for credit.*

This course will expose students to important current aspects of chemistry that are relevant to everyone's lives. Representative topics may include the development of pharmaceuticals, the synthesis of new materials, or the invention of new energy sources.

**CHEM 302. Inorganic Chemistry: Molecules, Materials and Applications in Energy**

*CHEM 210/211 or 215/216. (3). (NS). (BS). May not be repeated for credit. A student can receive credit for only one of CHEM 302 or CHEM 303. F, W.*

This course is an introduction to the principles of inorganic chemistry. We will explore theories of chemical bonding in molecules and extended solids, and apply them toward understanding chemical reactivity and physical properties of matter.

We will draw from research examples in alternative energy technologies (storage and conversion) where appropriate.

**CHEM 303. Introductory Bioinorganic Chemistry: The Role of Metals in Life**  
*CHEM 210/211 or 215/216. (3). (NS). (BS). May not be repeated for credit. A student can receive credit for only one of CHEM 302 or CHEM 303.*

An alternative to the CHEM 302 requirement for Chemistry and Biochemistry majors, the course covers fundamental principles of inorganic chemistry in the context of the role of metals in biological systems. Special emphasis is put on the role of metals in biological systems, and the connection between fundamental (classroom) knowledge of biological processes with respect to metals, and their relation to commonly known phenomena--diseases, pollution, alternative energies, evolution, industrial processes, etc.

**CHEM 351. Fundamentals of Biochemistry**  
*Completion of BIOLOGY 172 or equivalent; CHEM 210 and completion or concurrent in CHEM 215. (4). (NS). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in MCDB 310 or BIOLCHEM 415. F, W.*

This course is designed to serve as an introduction to biochemistry for students intending to pursue the BS concentration in biochemistry and for others who are interested in gaining an overview of the fundamental chemistry underlying cellular functions. The material includes an introduction to the structures of biological macromolecules and an overview of the fundamental cellular processes associated with metabolism, biosynthesis, and replication. It is taught from a chemical

perspective with an emphasis of understanding biochemical phenomena through chemical structure and mechanism.

**CHEM 352. Introduction to Biochemical Research Techniques**  
*Current or prior enrollment in CHEM 351. (2). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in CHEM 353. F, W.*

This laboratory course is designed to introduce students to widely used techniques in contemporary biochemistry and analysis of biochemical data. Topics include techniques for the purification and characterization of proteins, enzymes and nucleic acids and some introduction to computational biochemistry and bioinformatics.

**CHEM 353. Introduction to Biochemical Research Techniques and Scientific Writing**  
*(3). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in CHEM 352.*

This laboratory course is designed to introduce students to widely used techniques in contemporary biochemistry and analysis of biochemical data. Topics include techniques for the purification and characterization of proteins, enzymes and nucleic acids and some introduction to computational biochemistry and bioinformatics. Students will also receive instruction in scientific writing

**CHEM 370 / BIOPHYS 370 / PHYSICS 370. Physical and Chemical Principles Behind Biology and Medicine**  
*MATH 215 or CHEM 262; and PHYSICS 235, 239 (AP), or 240. (Prerequisites enforced at registration.) CHEM 130 or placement in 210. (3). (NS). (BS). May not be repeated for credit. No credit granted to students who have completed or are*



enrolled in CHEM 260 or PHYSICS 390. F, W.

This course is an introduction to the fundamental physical and chemical principles of biophysics. It covers quantum aspects of matter, thermodynamics, kinetics and statistical mechanics in the context of biological applications.

**CHEM 398. Undergraduate Research in Biochemistry**

*Consent of instructor required. Junior standing, and permission of a Biochemistry concentration advisor and the professor who will supervise the research. (1 - 4). (BS). (INDEPENDENT). May be repeated for a maximum of 4 credits. F, W, Sp/Su, Sp, Su.*

Undergraduate Biochemistry research for students with junior standing or above. Students concentrating in Chemistry should elect 399 rather than 398.

**CHEM 399. Undergraduate Research**

*Consent of instructor required. Junior standing, and permission of a chemistry concentration advisor and the professor who will supervise the research. (1 - 4). (BS). (INDEPENDENT). May be repeated for a maximum of 4 credits. F, W, Sp/Su, Sp, Su.*

**CHEM 402. Intermediate Inorganic Chemistry**

*CHEM 302 or CHEM 303, and 461/462. (3). (BS). May not be repeated for credit. F.*

CHEM 402 is a second term course in inorganic chemistry at the undergraduate level. It has as a prerequisite CHEM 302. The goals of the course are two-fold. On the one hand, it will build upon the concepts presented in the earlier course. Topics included here will emphasize the interrelations of ideas presented earlier in the curriculum. For example, discussion can include the relation between oxidation and

reduction to acidity, periodic trends in acids and bases, the relation of hard and soft ideas to molecular orbital theory, periodic trends in standard reduction potentials, the relation of molecular structure to conductivity and magnetism and so forth. The key topics to be covered in this portion of the course include acid-base chemistry, theories of bonding, periodic properties and d-metal complexes. The course goes on to cover additional topics selected from issues in catalysis, bioinorganic chemistry, structure-property relations, solid state chemistry, organometallic chemistry, kinetics of organometallic reactions, f-block compounds, electron deficient clusters and quantum models of structure and bonding.

**CHEM 415. Responsible Conduct in Chemical Research**

*(1). May be elected twice for credit. May be elected more than once in the same term.*

Every discipline at the University of Michigan engages in research. The approach to performing research varies significantly between disciplines. Half of the course will be discipline-specific research methods and half will be the responsible conduct of research (RCR). This course will teach research methods for the natural sciences. Topic areas include: appropriate citation of sources and avoiding plagiarism; authorship and publication practices and responsibilities; acquisition, management, ownership and sharing of data; research misconduct, including data fabrication and falsification; personal, professional and financial conflicts of interest; supervisory and mentoring relationships and responsibilities; responsibilities of collaborative research; protection of human beings and welfare of laboratory animals when research involves human participants and animal subjects. This will include an overview of example research projects, the methods for

performing research, and the tools needed. The mechanisms for communicating research, such as conferences, articles, papers and books will be discussed. In addition there are areas common to conducting research in any discipline, such as appropriate citation of sources, authorship practices, acquisition, management and sharing of data.

**CHEM 417 / BIOPHYS 417 / PHYSICS 417. Dynamical Processes in Biophysics**  
(MATH 216 or 256 or 286 or 296 or 316 or CHEM 262) and (BIOPHYS 370 or PHYSICS 340 or PHYSICS 360 or PHYSICS 370 or CHEM 463 or CHEM 370). (Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit.

The physical basis of diffusive processes in biology and biochemistry, and optical spectroscopic means for measuring its rates. Topics include: membrane electrical potentials, nerve impulses, synaptic transmission, the physics of chemoreception by cells, motion and reaction kinetics of membrane components, optical microscopy, visible and UV light absorption, fluorescence and phosphorescence, quasielastic light scattering, mathematics of random fluctuations, and chaotic processes in biology.

**CHEM 419. Intermediate Physical Organic Chemistry**  
CHEM 210 and CHEM 215. (3). (BS). May not be repeated for credit.

The mechanistic underpinnings of key reactions in organic synthesis are discussed in the context of the primary literature.

**CHEM 420. Intermediate Organic Chemistry**  
CHEM 215 and 216 or their equivalents. (3). (BS). May not be repeated for credit.

An exploration of selected topics in organic chemistry that builds on the basic concepts of structure and reactivity considered in the first courses in organic chemistry.

**CHEM 422 / BIOPHYS 422. Experimental Methods in Structural Biology**  
(CHEM 260 or BIOPHYS 370) and (CHEM 351, MCDB 310 or BIOLCHEM 415) and previous or concurrent enrollment in BIOPHYS 420 or 421. (Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit.

This course offers a detailed introduction to the fundamental physical principles behind key structural techniques including X-ray crystallography, NMR spectroscopy, and cryo-electron microscopy. Students will gain hands-on experience with data processing, analysis, and structure calculations/model building.

**CHEM 425. Special Topics in Organic Chemistry**  
CHEM 215. (3). (BS). May not be repeated for credit.

This course will provide a broad and deep overview of strategies and tactics used in the synthesis of organic molecules.

**CHEM 436. Polymer Synthesis and Characterization**  
CHEM 260. (3). (BS). May not be repeated for credit. W odd years.

A lecture and laboratory course that introduces students to the special techniques used to study macromolecules.

**CHEM 440 / BIOPHYS 440. Biophysics of Diseases**  
BIOPHYS 370 or CHEM 370 or PHYSICS 370. (3). (BS). May not be repeated for credit.

This course deconstructs current and emerging diseases in terms of the malfunctioning of nucleic acids, proteins, and membranes and the interactions between them. The diseases covered includes Alzheimer's, Parkinson's, Creutzfeldt-Jakob disease (or Mad-Cow disease), HIV, a variety of bacterial infections, and other biological disorders.

**CHEM 447. Physical Methods of Analysis**

*CHEM 260 or 370 and 241/242. (3). (BS). May not be repeated for credit. F, W.*

The course introduces the student to the principles and techniques of modern analytical chemistry. Atomic and molecular spectroscopy, mass spectrometry, and chromatographic separation techniques are stressed. Some discussion of contemporary electrochemistry is included. The principles of data collection and the processing and representation of analytical signals are introduced.

**CHEM 451 / BIOLCHEM 451.**

**Advanced Biochemistry:**

**Macromolecular Structure and Function**

*CHEM 215, 260, 351 and BIOLOGY 171 or 172. (4). (BS). May not be repeated for credit. F.*

Taught from a chemical perspective with emphasis on understanding biochemical phenomena through chemical structure and mechanism, this course is intended for students pursuing the BS concentration in biochemistry. It provides an in-depth treatment of such topics as protein/nucleic acid structure, protein folding/stability, enzyme mechanisms/kinetics, bioenergetics/ photosynthesis, and the regulation of metabolic pathways.

**CHEM 452 / BIOLCHEM 452.**

**Advanced Biochemistry: Cellular Processes**

*CHEM 351 or MCDB 310 or BIOLCHEM 415, (completed with a minimum grade of C- or better). Consent of instructor required. (Prerequisites enforced at registration.) (4). (BS). May not be repeated for credit. W.*

This course focuses on the biochemistry of fundamental cellular processes. Topics include mechanisms for the integration of metabolism in both bacterial cells and in multicellular organisms, the process of gene expression focusing on the biochemistry of gene transcription, and mRNA translation. It generally emphasizes chemistry and enzymology of metabolic transformations, enzyme reaction mechanisms, and protein and nucleic acid structure and function.

**CHEM 453. Biophysical Chemistry I: Thermodynamics and Kinetics**

*CHEM 260 (or CHEM 261 and CHEM 330), CHEM 451, PHYSICS 240, and MATH 215 or CHEM 262. (3). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in CHEM 463. F.*

First in a two-semester Biophysical Chemistry sequence for biochemistry concentrators. Emphasis on topics and applications relevant to biochemistry and modern biophysical chemistry, building on CHEM 260. Rigorous mathematical theory of classical thermodynamics will be developed, including applications to entropy, heat engines, solution properties, and phase and chemical equilibrium. Modern statistical thermodynamics, modern theories of fundamental reaction rates and enzyme kinetics and molecular transport theories will be described and developed.

**CHEM 454 / BIOPHYS 454. Biophysical Chemistry II: Macromolecular Structure and Dynamics**

*CHEM 453 or 463, and CHEM 451/452 or*

*equivalent. (3). (BS). May not be repeated for credit. W.*

This course builds on the CHEM 451-453 sequence and aims at providing an understanding of the structure and dynamics of biological macromolecules. After introducing the necessary nomenclature and reviewing thermodynamic principles, modern techniques to characterize the structure and dynamics of biopolymers will be the focus. Sedimentation, electrophoresis, mass spectrometry, X-ray diffraction, scattering, and spectroscopic techniques such as absorption, circular dichroism, fluorescence and NMR will be covered. Both physical principles and practical applications in the Life Sciences will be highlighted.

**CHEM 455. Special Topics in Biochemistry - Nucleic Acids**

*CHEM 351, BIOLCHEM 415, MCDB 310 (or equivalent). (3). (BS). May not be repeated for credit.*

This course will provide both a broad and deep overview of the structure, function and biology of both DNA and RNA. We will explore important examples from the current literature and the course content will evolve accordingly.

**CHEM 461. Physical Chemistry I**

*CHEM 260 or 370 or BIOPHYS 370 or PHYSICS 370; and PHYSICS 240 or 235; and MATH 215 or CHEM 262. Should be elected concurrently with CHEM 462. (3). (BS). May not be repeated for credit. F.*

This course provides an introduction to quantum mechanics and its application to chemistry. It is the second of a 3-term sequence in physical chemistry and builds on material introduced in CHEM 260. The Schrodinger Equation is solved in one, two, and three dimensions for important chemical problems. Group theory and

quantum chemistry are used to understand chemical bonding and advanced spectroscopy.

**CHEM 462. Computational Chemistry Laboratory**

*MATH 215, and prior or concurrent enrollment in CHEM 461. (1). (BS). May not be repeated for credit. F.*

**CHEM 463. Physical Chemistry II**

*CHEM 461/462. (3). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in CHEM 453. W.*

This is the third of a three-term sequence in physical chemistry and focuses on thermodynamics and kinetics. Both classical thermodynamics (entropy, phase, and chemical equilibrium) and statistical thermodynamics are discussed.

Fundamental theories underlying chemical kinetics are discussed and solid state structures are introduced.

**CHEM 465. Special Topics in Physical Chemistry**

*CHEM 461 or equivalent course in quantum mechanics, CHEM 262 or MATH 215/216 or equivalent. (3). (BS). May not be repeated for credit.*

This course will provide a broad and deep introduction into the energy levels and selection rules for molecular spectroscopy. We will also look at applications of the principles discussed in the original literature. These applications range atmospheric science to materials science to biophysics and beyond.

**CHEM 467 / CLIMATE 467 / EARTH 465 / ENSCEN 467 / ENVIRON 467.**

**Biogeochemical Cycles**

*MATH 116, CHEM 210, and PHYSICS 240 (or 260). (4). (BS). May not be repeated for credit. F, W.*

The biogeochemical cycles of water, carbon, nitrogen, and sulfur; the atmosphere and oceans as reservoirs and reaction media; the fate of natural and man-made sources of carbon, nitrogen, and sulfur compounds; the interactions among the major biogeochemical cycles and resultant global change; greenhouse gases, acid rain and ozone depletion.

**CHEM 474. Environmental Chemistry**  
*CHEM 260 and (CHEM 241 or CHEM 245). (3). (BS). May not be repeated for credit.*

This course is the study of natural processes in the atmosphere, hydrosphere, and lithosphere, as well as how mankind alters these systems. Natural cycles in the environment, perturbations due to human activity, steps being taken to mitigate these effects, and the impacts on human health and climate will be covered.

**CHEM 482. Synthesis and Characterization**  
*CHEM 215/216. Prior or concurrent enrollment in CHEM 302 or CHEM 303. (3). (BS). May not be repeated for credit.*

This course introduces students to advanced techniques used in synthesis, purification, and characterization of inorganic and organic compounds.

**CHEM 483. Advanced Methods in Physical Analysis**  
*CHEM 447 and 461/462; and concurrent enrollment in CHEM 463. (3). (BS). May not be repeated for credit.*

This course explores methods for the measurement of the physical and spectroscopic properties of substances and the application of these methods in instrumental analysis. The course is focused on essential laboratory principles and operations as they relate to the

physicochemical properties of organic, inorganic, and macromolecular chemical species. Experiments study the areas of equilibria, chemical structure, chemical change, and computer simulation and calculation. Emphasis is placed on the effective design of experiments together with synergistic coupling of modern instrumentation and computers. The course includes literature searches for physical data. Laboratory reports constitute an important component of the course.

**CHEM 498. Undergraduate Honors Thesis in Biochemistry**  
*Consent of instructor required. CHEM 398 and permission of instructor. (1). (BS). (INDEPENDENT). May not be repeated for credit. Continuing Course. Y grade can be reported at end of the first-term to indicate work in progress. At the end of the second term, the final grade is posted for both term's elections. To be elected in the term in which an Honors student presents a thesis.*

To be elected in the term in which an Honors student presents a thesis on undergraduate research.

**CHEM 499. Undergraduate Thesis**  
*Consent of instructor required. CHEM 399 and permission of instructor. (1). (BS). (INDEPENDENT). May not be repeated for credit. Continuing Course. Y grade can be reported at end of the first-term to indicate work in progress. At the end of the second term, the final grade is posted for both term's elections. To be elected in the term in which an Honors student presents a thesis.*

A course for students who present an undergraduate thesis as a result of research.

**CHEM 507. Inorganic Chemistry**  
*CHEM 461. (3). (BS). May not be repeated for credit. F.*

**CHEM 511 / MATSCIE 510. Materials Chemistry**

*CHEM 461, BIOLCHEM 415, CHEM 430; and permission of course director. (3). (BS). May not be repeated for credit.*

This course presents concepts in materials chemistry. The main topics covered include structure and characterization, macroscopic properties and synthesis and processing.

**CHEM 520 / BIOPHYS 520. Methods of Biophysical Chemistry**

*CHEM 463, BIOLCHEM 415, or CHEM 420; permission of course director. (3). (BS). May not be repeated for credit.*

This course provides an overview of key methodologies of contemporary biophysics and biophysical chemistry. Principles of structure determination by X-ray diffraction, solution and solid-state NMR and electron microscopy will be covered. A variety of optical spectroscopic techniques, including UV/Vis, fluorescence, circular dichroism and cell imaging will be discussed. Methods for the separation and study of biological macromolecules and membranes including ultracentrifugation, chromatography, electrophoresis, mass spectrometry and calorimetry will be introduced.

**CHEM 521 / BIOPHYS 521. Principles of Biophysical Chemistry**

*CHEM 461, BIOLCHEM 415, and CHEM 430; and permission of course director. (3). (BS). May not be repeated for credit.*

This course discusses aspects of protein and nucleic acid structure and dynamics, the nature of underlying forces and interactions that control biopolymer processes, and aspects of dynamics in the context of function. Emphasis will be laid on theories from thermodynamics and statistical mechanics that form the basis of physical models for processes and processing in these systems.

**CHEM 538 / MACROMOL 538. Organic Chemistry of Macromolecules**

*CHEM 215/216, and CHEM 230 or 260. (3). (BS). May not be repeated for credit. W.*

**CHEM 540. Organic Principles**

*CHEM 210 and CHEM 215. (3). (BS). May not be repeated for credit.*

**CHEM 541. Advanced Organic Chemistry**

*CHEM 540. (3). (BS). May not be repeated for credit. W.*

**CHEM 542. Applications of Physical Methods to Organic Chemistry**

*CHEM 260, 241/242, and 312. (3). (BS). May not be repeated for credit.*

Applications of infrared, ultraviolet and nuclear magnetic resonance spectroscopy, optical rotary dispersion, mass spectrometry and other physical methods to the study of the structure and reactions of organic compounds.

**CHEM 550 / EDUC 554. Chemistry Education Research and Practice**

*CHEM 210. (3 - 4). May not be repeated for credit.*

This course will prepare future secondary and post-secondary chemistry educators to translate chemistry education research into effective classroom practice. Students will read and critically evaluate literature from top Chemistry Education and Science Education Journals. Students will learn about, prepare, and test their own formative and summative assessments. Students will practice student-centered classroom techniques and reflect on and develop their own teaching identity and style. Students will learn about issues of diversity and equity and learn strategies to foster inclusivity in the science classroom.

**CHEM 570. Molecular Physical Chemistry**

(3). (BS). May not be repeated for credit.

Basic concepts in modern chemical physics including molecular symmetry, group theory, operators, and introduction to the electronic structure of atoms and molecules.

**CHEM 575. Chemical Thermodynamics**

CHEM 461. (3). (BS). May not be repeated for credit.

**CHEM 580. Molecular Spectra and Structure**

CHEM 570 or permission of instructor. (3). (BS). May not be repeated for credit. W.

**CHEM 673 / BIOLCHEM 673. Kinetics and Mechanism**

CHEMBIO 501 or its equivalent, undergrad calculus. Physical Chemistry is recommended. (2). (BS). May not be repeated for credit.

This course will cover the investigation of enzyme mechanisms with an emphasis on ligand binding to macromolecules, transient kinetics, steady-state kinetics, and inhibition. The kinetic and thermodynamic concepts that govern the action of enzymes will be explored.

**Japanese Studies (CJS)**

**CJS 281. Study Abroad in Japan**

Consent of instructor required. (1 - 3). (EXPERIENTIAL). May be elected twice for credit.

Required course for participants in the CJS Japan Course Connections short-term study abroad program. Students meet with the trip leader to discuss travel requirements, safety, and cultural norms, and receive basic language instruction. This course prepares

students for travel abroad and increases their understanding of Japanese culture through experiential learning.

**CJS 451. Topics in Japanese Studies**

Junior/Senior or Graduate students. (3). May be repeated for a maximum of 9 credits. May be elected more than once in the same term. Rackham credit requires additional work.

This course draws on the expertise and research interests of visiting professors in residence, preeminent experts in their respective Japanese Studies subfields. It covers a broad range of the most current topics and methodologies in areas such as Japanese politics, religion, history, drama, film, music, psychology, and popular culture. Classes are taught in English and intended for Juniors, Seniors, and Graduate Students interested in various aspects of Japanese Studies as well as MA candidates in the Center for Japanese Studies.

**Classical Archaeology (CLARCH)**

**CLARCH 103. Great Discoveries in Archaeology**

(3). (HU). May not be repeated for credit.

This course introduces students to archaeology through the concept of the discovery. We first examine archaeological discoveries in Africa several million years ago and then travel around the world, ending in Michigan. Students learn the primary fields of archaeological research, and also re-evaluate their idea of a "great discovery".

**CLARCH 104. Ancient Cities**

(3 - 4). (HU). *May not be repeated for credit.*

Get introduced to the whole span of ancient Mediterranean cities in this course. From the earliest urban centers in the East to the rise of Constantinople, the course covers cities like Troy, Mycenae, Athens, Rome and Pompeii, offering a broad comparative perspective on one of humankind's greatest accomplishments.

**CLARCH 220 / HISTART 220. Great Buildings of Ancient Greece and Rome**  
(4; 3 in the half-term). (HU). *May not be repeated for credit.*

Architecture provides a unique perspective on classical civilization. Buildings such as the Parthenon and the Colosseum are marvels of both engineering and design, and they still have great expressive power. This course introduces students to key monuments of Greek and Roman architecture from prehistoric to early mediaeval times.

**CLARCH 221 / HISTART 221. Introduction to Greek Archaeology**  
(4; 3 in the half-term). (HU). *May not be repeated for credit. F.*

The archaeology of Crete and Greece to the age of Alexander and the contributions made to the history of civilization through excavation.

**CLARCH 222 / HISTART 222. Introduction to Roman Archaeology**  
(4; 3 in the half-term). (HU). *May not be repeated for credit. W.*

**CLARCH 223 / CLCIV 223. Greeks and Barbarian**  
(4). (HU). (R&E). *May not be repeated for credit.*

In the first millennium BCE, Greek adventurers, traders, colonists, and mercenaries traveled all over the ancient world, from Gibraltar to Afghanistan, from Egypt to the Black Sea. This course offers an archaeological perspective on the interactions between Greeks and non-Greeks and how those experiences helped shape both groups.

**CLARCH 250. Topics in Classical Archaeology**  
(2 - 3). (HU). *May be repeated for a maximum of 6 credits. May be elected more than once in the same term.*

This course offers the opportunity to explore various topics in Classical Archaeology in an introductory fashion focusing on material culture. Topics such as empire, gender, identity, landscape and urban structures are possible topics. Topics may also include those that study other ancient cultures in comparison to those of the ancient Mediterranean.

**CLARCH 323. Introduction to Field Archaeology**  
(4; 3 in the half-term). (HU). *May not be repeated for credit.*

This course interprets 'field archaeology' in its widest sense. Lectures will discuss individual techniques (from excavation to computer analysis) and numerous issues (such as the problem with archaeology's 'Indiana Jones' reputation). Students will become aware of the importance of archaeology not only in creating our images of the past, but of the present as well.

**CLARCH 327 / CLCIV 327 / MIDEAST 355 / RELIGION 326. Jews in the Roman Mediterranean: Archaeology, Religion, and Culture**  
(3). (ID). *May not be repeated for credit.*



An introductory survey course on the history of the Jews in the Roman and Byzantine worlds, from the arrival of the Romans in the East in the first century BCE through the Arab conquests in the seventh and eighth centuries CE.

**CLARCH 350. Topics in Classical Archaeology**

*CLARCH 221, 222, or 323. (3). (HU). May be repeated for a maximum of 12 credits.*

This course offers the opportunity to explore various topics in Classical Archaeology such as empire, gender, identity, landscape, memory, political architecture, religion, and urban structures, or to study particular sites or archaeological techniques.

**CLARCH 375 / GREEKMOD 375. Engaging Antiquity: Heritage, Museums, Media, Tourism, and Communities**  
*(3). (HU). May not be repeated for credit.*

How do we experience the past in the present? We explore different "sites" of such encounters: from Spartacus and the Vikings to Game of Thrones, gaming and advertising, urban and tourist development, the ethical and legal implications of antiquities trade, the role of museums, and the agency of communities.

**CLARCH 380 / HISTART 380. Minoan and Mycenaean Archaeology**

*Consent of instructor required. Upperclass standing, CLARCH/HISTART 221 and 222, and permission of instructor. (3). May not be repeated for credit.*

A systematic, thematically-organized survey of the archaeology and art of the Aegean world in the Bronze Age, from the rise of state-level societies (the Minoans of Crete and the Mycenaeans of mainland Greece), to their collapse in the Greek 'Dark Ages'.

**CLARCH 382 / CLCIV 382. Food in the Ancient World: Subsistence and Symbol**  
*(3). (HU). May not be repeated for credit.*

This course examines patterns of food production and consumption in the ancient Mediterranean world in order to observe the organization and symbolic construction of communities through time. Manners of eating and drinking - or starving - in Greek, Hellenistic and Roman society will be focus for attention.

**CLARCH 389 / CLCIV 379 / HISTART 389. Pompeii**  
*(3 - 4). (HU). May not be repeated for credit.*

This course uncovers the urban fabric of Pompeii (Italy) as revealed by more than two centuries of excavation. We look at how it was laid out, at public and private buildings and their decoration, and at its the wider cultural, geographical and historical contexts. Using archaeology and translated texts, we explore aspects of the lives of the inhabitants, including their economy; social interaction; politics; and, choices.

**CLARCH 420 / HISTART 430. Greece before History: The Art and Archaeology of Greek Lands ca 3500 to 700 BCE**  
*(3). May not be repeated for credit.*

This course explores the origins, character and collapse of complex societies of the Late Bronze Age in the Aegean. Sources of evidence include architecture, artifacts, mortuary practices and the distribution of sites within the wider landscape. We also explore recent work on documentary sources, including the linear B (Mycenean) tablets.

**CLARCH 424 / HISTART 424. Archaeology of the Roman Provinces**  
*Upperclass standing, and CLARCH/HISTART 221 or 222. (3). May not be repeated for credit.*

**CLARCH 425. Hellenistic and Republican Roman Architecture**

*CLARCH 222. (3). May not be repeated for credit. Rackham credit requires additional work.*

This course covers the architecture of first millennium BCE Italy. It provides a sense of how later Roman architecture came into being by retracing its origins from the Iron Age to the Etruscan period. Hellenistic Italian architecture is analyzed within its proper Mediterranean context.

**CLARCH 426. Roman Imperial Architecture**

*CLARCH 222/HISTART 222. (3). May not be repeated for credit. Rackham credit requires additional work.*

This course surveys the architecture of the Roman empire from the reign of Augustus at the turn of the millennium to the reign of Justinian in the mid-sixth century A.D. Special attention is paid to the urban development of Rome as an imperial capital, and to the Romanization of indigenous peoples through Western Europe and the Mediterranean world.

**CLARCH 433 / HISTART 433. Greek Sculpture**

*Upperclass standing, some preparation in Classical Civilization, Classical Archaeology or History of Art. (3; 2 in the half-term). May not be repeated for credit. Rackham credit requires additional work.*

History of Greek sculpture from the 8th century to the 4th century BCE. Treats free-standing statuary and relief and architectural sculpture in stone, bronze, terracotta, and gold and ivory. Examines evolving functions of Greek sculpture, and relationships between stylistic development and social and political change.

**CLARCH 435 / HISTART 435. The Art and Archaeology of Asia Minor**

*Upperclass standing. (3). May not be repeated for credit.*

**CLARCH 439 / HISTART 439. Greek Vase Painting**

*Upperclass standing. (3; 2 in the half-term). May not be repeated for credit.*

**CLARCH 440 / HISTART 440. Cities and Sanctuaries of Classical Greece**

*Upperclass standing, and a course in archaeology. (3; 2 in the half-term). May not be repeated for credit.*

**CLARCH 470. Upper Level Topics in Classical Archaeology**

*(2 - 4). May be elected twice for credit.*

This course offers the opportunity to explore various topics in Classical Archaeology in depth. Topics such as empire, gender, identity, landscape, memory, political architecture, religion, and urban structures, or to study particular sites or archaeological techniques.

**CLARCH 482. Ceramic Analysis**

*(3). May not be repeated for credit. Rackham credit requires additional work.*

Pottery is one of the most common artifact types found during archaeological fieldwork. This course provides students with an array of practical and theoretical tools for working with ancient pottery, from analyzing fabrics and forming methods, to addressing the scale of production and broad-scale distribution patterns.

**CLARCH 495. Senior Honors Research**

*Consent of instructor required. Upperclass standing. (1 - 3). (INDEPENDENT). May be repeated for a maximum of 6 credits.*

This course is intended for Honors concentrators writing a thesis in Classical Archaeology.

**CLARCH 496. Practicum in Museum Studies**

*Junior or seniors, or permission of*

*instructor. (1 - 3). (EXPERIENTIAL). May be repeated for a maximum of 6 credits.*

This practicum, intended primarily but not exclusively for Honors concentrators in Classical Archaeology, will allow students to acquire technical and research skills in the field of museum studies.

**CLARCH 497. Practicum in Field Archaeology**

*Junior or seniors. (1 - 3). (EXPERIENTIAL). May be repeated for a maximum of 6 credits.*

This practicum, intended primarily but not exclusively for Honors concentrators in Classical Archaeology, will allow students to acquire technical and research skills in the practice of field archaeology.

**CLARCH 499. Supervised Reading**

*Consent of instructor required. (1 - 3). (INDEPENDENT). May be repeated for credit. May be elected more than once in the same term. F, W, Sp, Su.*

**CLARCH 534 / HISTART 534. Ancient Painting**

*Upperclass standing, HISTART 101 and either HISTART/CLARCH 221 or 222. (3). May not be repeated for credit. Rackham credit requires additional work.*

**CLARCH 536 / HISTART 536.**

**Hellenistic and Roman Sculpture**  
*HISTART 101; one of CLARCH 221 or 222 or HISTART 221 or 222; and Upperclass standing. (3). May not be repeated for credit. Rackham credit requires additional work.*

## **Classical Civilization (CLCIV)**

Classical Civilization is an exploration of the life and culture of the ancient Greeks and Romans. Students examine almost

every aspect of ancient life – art, architecture, social/political problems and events, and the literature of these cultures. Knowledge of Greek or Latin is not required for this program, but highly recommended.

**CLCIV 101. Classical Civilization I: The Ancient Greek World (in English)**

*(4). (FYWR). May not be repeated for credit. No credit granted to those who have completed or are enrolled in GTBOOKS 191 or 201. F.*

An introduction to the civilization of ancient Greece from the beginning through the Hellenistic age. Through the reading of literature that ranges from comedy to philosophy, we confront the contradictions of this complex society. There are approximately 75-100 pages of reading per week, two short projects, a midterm and a final examination. No previous knowledge is required.

**CLCIV 102. Classical Civilization II: The Ancient Roman World (in English)**

*(4). (HU). May not be repeated for credit. W.*

An introduction to the civilization of ancient Rome from the beginnings through the beginnings of Christianity. Requires no knowledge of Greek or Latin.

**CLCIV 120. First-year Seminar in Classical Civilization (Humanities)**

*Enrollment restricted to first-year students, including those with sophomore standing. (3). (HU). May be repeated for a maximum of 6 credits.*

This course introduces students in a small group seminar to a variety of topics in Classical Civilizations. Course content will vary each term.

**CLCIV 121. First-year Seminar in Classical Civilization (Composition)**

*Enrollment restricted to first-year students, including those with sophomore standing. (4). (FYWR). May not be repeated for credit.*

**CLCIV 125. Mini Course in Classical Civilization**

*(1). (HU). May be repeated for a maximum of 3 credits. May be elected more than once in the same term.*

Special topics in Classical Civilization offered in a mini course format.

**CLCIV 157 / PHIL 157. Introduction to Ancient Philosophy**

*(3). (HU). May not be repeated for credit.*

Many of the central questions in Western philosophy were first formulated by thinkers in ancient Greece and Rome. This course provides an introduction to those questions and a wide range of answers, as well as to the methods ancient philosophers used to address them. We will read key ancient texts, including some by the early Greek thinkers, such as Democritus; several dialogues of Plato; selected passages from Aristotle's ethics, psychology, and natural science; and works by Epicureans and Stoics, whose schools of thought were influential in the Hellenistic and Imperial periods.

**CLCIV 217. Minicourse on the Origins of Medical Terminology**

*(1). May not be repeated for credit.*

This minicourse introduces students interested in the health-care professions to the origins of modern medical terminology from ancient Greek and Latin. The minicourse is designed to boost vocabulary acquisition and facilitate student access to current scientific, literary, and cultural discourse on the medical sciences.

**CLCIV 220. Music in the Ancient World**  
*CLCIV 101 or CLCIV 102. (3). (HU). May not be repeated for credit.*

In this class we will introduce the various aspects of music in the ancient world, from theory to practice. Focus will be on the primary sources (textual and visual) and their modern interpretation. We will also listen to modern reconstruction's of actual ancient musical pieces.

**CLCIV 223 / CLARCH 223. Greeks and Barbarian**

*(4). (HU). (R&E). May not be repeated for credit.*

In the first millennium BCE, Greek adventurers, traders, colonists, and mercenaries traveled all over the ancient world, from Gibraltar to Afghanistan, from Egypt to the Black Sea. This course offers an archaeological perspective on the interactions between Greeks and non-Greeks and how those experiences helped shape both groups.

**CLCIV 250. Topics in the Ancient World**  
*(2 - 3). (HU). May be repeated for a maximum of 6 credits. May be elected more than once in the same term.*

This course will explore various topics in the ancient world such as politics, gender, identity, culture, memory, and religion or to study particular individuals of significance.

**CLCIV 253. The Mediterranean: Classical Studies**

*(3). (HU). May not be repeated for credit.*

This interdisciplinary course studies the Mediterranean Sea as a geographical space and contact zone, and as a field of study, from the late antique to modern period. It incorporates visual and material culture, as well as historical and literary sources from the Mediterranean basin. This course is part

of the cross-disciplinary team-taught course "The Mediterranean."

**CLCIV 257 / HISTORY 257 / JUDAIC 257. Ancient Law**

(4; 3 in the half-term). (HU). May not be repeated for credit.

This course is an historical and comparative introduction to the study of law, thus exposing students to a variety of ancient and medieval legal cultures across the globe. Besides grappling with the basic question of what law actually is, we investigate how law was made and justified, how laws were involved in governing and regulating human relations and transactions, and shifting notions of justice. We examine a range of famous and lesser-known legal sources and materials (codes, narratives, documents, trial records, cases, rituals, performances and ceremonies) as well as literature drawn from history, anthropology, and political theory.

**CLCIV 260. Sex and Gender in the Ancient World**

(3). (HU). May not be repeated for credit.

This course examines conceptions of sexuality and gender in ancient literature and culture, primarily as expressed in literary and archaeological sources. We ultimately aim to read and assess key famous modern treatments of Greco-Roman sexuality and gender, such as Foucault, Butler, and Davidson.

**CLCIV 277 / ENVIRON 277 / HISTORY 277. Environmental History of the Ancient Mediterranean**

(3). (HU). May not be repeated for credit.

This course concerns the ecology and environmental history of the Mediterranean during the Greek and Roman Periods. Students will be introduced to the discipline of environmental history through case studies drawn from various regions within

the broader Mediterranean basin. Attention will also be given to perceptions of the natural world in ancient literature.

**CLCIV 288 / PHIL 288. Ancient Greek and Roman Philosophy**

(4; 3 in the half-term). (HU). May not be repeated for credit.

This course is a survey of ancient Greek & Roman philosophy, one of the foundations of the Western philosophy, exercising an influence still felt today. We will examine a selection of writings from Presocratics, Sophists, Socrates, Plato, Aristotle, Cyrenaics, Cynics, Epicureans, Stoics, and Sceptics.

**CLCIV 302 / HISTORY 302. The Roman Republic**

(4). (HU). May not be repeated for credit.

This course surveys the political and social history of the Roman Republic from the archaic period to the death of Julius Caesar in 44 BCE.

**CLCIV 303 / HISTORY 303 / WGS 303. Women in the Ancient Mediterranean**

(3). (HU). May not be repeated for credit.

This is a course about women's lives during approximately 1,000 years of history (c. 600 BCE - 400 CE). Our focus will be the multicultural world of the Roman Empire, which, at its height, encompassed the entire Mediterranean region. We will examine the changing roles of women in the political, domestic, and religious spheres, as well as how women were implicated in major cultural transformations, such as the rise of Christianity. Students will explore issues of status, power, sexuality, and the family through sources that include literary texts, medical treatises, material culture, and works of art.

**CLCIV 327 / CLARCH 327 / MIDEAST 355 / RELIGION 326. Jews in the Roman Mediterranean: Archaeology, Religion, and Culture**

*(3). (ID). May not be repeated for credit.*

An introductory survey course on the history of the Jews in the Roman and Byzantine worlds, from the arrival of the Romans in the East in the first century BCE through the Arab conquests in the seventh and eighth centuries CE.

**CLCIV 328. Ancient Languages and Scripts**

*(3). (HU). May not be repeated for credit.*

A general introduction to the study of ancient languages and the origin and development of their scripts and literatures. Topics examined include decipherment, ascertaining ancient pronunciation, linguistic prehistory and change, and the history and study of Greek and Latin.

**CLCIV 342. Sexuality and Sexual Stereotype in Greek and Roman Culture**

*(3 - 4). (HU). May not be repeated for credit.*

The main aim of this course will be to consider how sexuality is constructed in the literature of the Greeks and the Romans. Subjects addressed will include sexual stereotype and role-reversal; the power relations of gender; homosexuality and heterosexuality; virginity and prostitution; sexuality and violence.

**CLCIV 345. Slavery and Ethnicity in the Ancient World**

*Junior standing; general familiarity with American history. (3). (HU). (R&E). May not be repeated for credit.*

Slavery was widespread in ancient Greece and Rome and was crucial to the social, economic and cultural flourishing of these societies. Nevertheless, the ugly reality of

ancient slavery is seldom confronted directly in studies of the ancient world. This course aims to redress this imbalance by offering a detailed examination of the role of slavery in Greek and Roman society.

**CLCIV 350. Topics in Classical Civilization**

*CLCIV 101 and 102. (3). (HU). May be repeated for a maximum of 6 credits.*

This course offers the opportunity to explore aspects of Classical Civilization such as war, slavery, law, festivals, government, drama, and other genres of ancient literature.

**CLCIV 354 / MIDEAST 354 / RELIGION 353. Ancient Jerusalem: Archaeology, Religion, and Culture**

*(3). (ID). May not be repeated for credit.*

The centrality of Jerusalem in our modern society requires no elaboration. This course reconstructs the history of ancient Jerusalem in its Graeco-Roman, and Byzantine contexts. It examines archaeological remains, inscriptions, coins, and artistic depictions, and studies the multi-faceted literary tradition that preserved the story of this ancient place.

**CLCIV 367 / PHIL 391. Plato**

*One philosophy class. (3; 2 in the half-term). (HU). May not be repeated for credit.*

This course offers students an in-depth examination of Plato's philosophy by focusing on a particular theme or set of works (which may change from year to year).

**CLCIV 368 / PHIL 392. Aristotle**

*(3; 2 in the half-term). (HU). May not be repeated for credit.*

This course offers students an in-depth examination of Aristotle's philosophy by

focusing on a particular theme or set of works (which may change from year to year).

**CLCIV 369 / PHIL 393. Post-Aristotelian Philosophy**

(3; 2 in the half-term). (HU). May not be repeated for credit.

This course offers students an in-depth examination of some of the philosophical movements and figures after Aristotle, including Epicureans, Stoics, Sceptics, and Neoplatonists, by focusing on a particular school or theme (which may change from year to year).

**CLCIV 371. Sport in the Ancient Greek World**

(4). (HU). May not be repeated for credit.

In creating the modern Olympic games, Baron Pierre de Coubertin claimed that he was recreating the games that had been held in Greece for a thousand years in antiquity. His fanciful recreation of the games (aided by some fanciful contemporary scholarship) has shaped contemporary views on sport in profound ways. In Classical Civilization 371 we will be examining the myths associated with Greek Sport and the realities as they emerged for our sources to create a more accurate dialogue between ancient and modern sport and exploring the ways games were held, the role of the games in creating community, ideas of professionalism and the conjunction of sports with education in both antiquity and the twentieth century.

**CLCIV 372. Sports and Daily Life in Ancient Rome**

(4; 3 in the half-term). (HU). May not be repeated for credit.

Covers all aspects of daily life, recreation and sports in Rome and Italy including bathing, gladiators, charioteers, and the City of Rome.

**CLCIV 375. War in Greek and Roman Civilization**

(4). (HU). May not be repeated for credit.

An examination of the connection between the evolution of war and classical civilizations from the emergence of the Greek state to the late Roman Empire (c. 600 BC to 400 AD).

**CLCIV 379 / CLARCH 389 / HISTART 389. Pompeii**

(3 - 4). (HU). May not be repeated for credit.

This course uncovers the urban fabric of Pompeii (Italy) as revealed by more than two centuries of excavation. We look at how it was laid out, at public and private buildings and their decoration, and at its wider cultural, geographical and historical contexts. Using archaeology and translated texts, we explore aspects of the lives of the inhabitants, including their economy; social interaction; politics; and, choices.

**CLCIV 380 / HISTORY 381 / JUDAIC 380 / RELIGION 382. The Beginnings of Judaism: From Ethnicity to Religion**

(3). (ID). May not be repeated for credit. No credit granted for students who have taken both ACABS 322 and ACABS 326.

This is an introduction to Jewish history and culture as it emerged in the sixth century B.C.E. until the Persian and Islamic conquests in the seventh century. We will try to understand how the "varieties of Judaism" emerged from the religion and culture of Israelite origins in the context of Near Eastern and Mediterranean imperial and cultural history.

**CLCIV 381 / RELIGION 381. Magic and Witchcraft**

(4). (HU). May not be repeated for credit.

This course explores magic and witchcraft as a cultural phenomenon. We will examine

magic and witchcraft from several cross-cultural perspectives, then trace the development of magic and witchcraft and the witch stereotype in history, literature, and art from classical antiquity, through the middle ages, to the early modern period in Europe and America.

**CLCIV 382 / CLARCH 382. Food in the Ancient World: Subsistence and Symbol**  
(3). (HU). *May not be repeated for credit.*

This course examines patterns of food production and consumption in the ancient Mediterranean world in order to observe the organization and symbolic construction of communities through time. Manners of eating and drinking - or starving - in Greek, Hellenistic and Roman society will be focus for attention.

**CLCIV 385. Greek Mythology**  
(4). (HU). *May not be repeated for credit.*

The myths are studied systematically both as the background of Greek religious and literary forms and with reference to their influence on modern literature.

**CLCIV 388 / PHIL 388. History of Philosophy: Ancient**  
*One philosophy course with a grade of at least a C-. (Prerequisites enforced at registration.) Knowledge of Greek or Latin is not required. (4; 2 in the half-term).*  
(HU). *May not be repeated for credit.*

Western philosophy from its historical beginning through the Hellenistic period and including the pre-Socratics, Plato, Aristotle, Epicurus, Stoicism, and Scepticism.

**CLCIV 392 / HISTORY 292. Ancient Medicine in Greece & Rome**  
(4). (HU). *May not be repeated for credit.*

This course thematically examines the historical reception of the theories and

practices of Greco-Roman physicians. By examining ancient Greek medicine in light of the modern fields of pathology, surgery, pharmacology, therapy, obstetrics, psychology, anatomy, medical science, ethics, and education, the student will gain not only a better understanding of the foundations of Western medicine but also an appreciation for how medical terms, theories, and practices take on different meanings with changes in science and society.

**CLCIV 393. Plato's Dialogues in English**  
(3). (HU). *May not be repeated for credit.*

In this course we will read twelve of Plato's dialogues and will explore issues in Plato's ethics, psychology, epistemology, politics, and metaphysics. We will discuss methods of interpreting Plato's works as well as the implications of his critique of writing for understanding the dialogues. Finally, we will try to glimpse the meaning of Plato's philosophy in the light of history, taking into account the ancient setting of 4th century Athens and the 25 centuries of reading Plato that have passed since then.

**CLCIV 456. Egypt after the Pharaohs: Public and Private Life in an Ancient Multicultural Society**  
*CLCIV 101, or HISTORY 200 or 201, or an introductory class in Egyptian archaeology or history; or CLCIV 102, or CLARCH 221 or 222, or HISTART 221 or 222. (3). May not be repeated for credit.*

This course will study a major ancient culture under Greek and Roman rule. We will begin with a historical and geographic overview; proceed with diachronic case studies on themes such as daily life, ethnicity, gender, religion, army, administration, and social mobility; and conclude with its influence on modern popular culture.



**CLCIV 466 / RELIGION 468. Greek Religion**

*(3; 2 in the half-term). May not be repeated for credit.*

**CLCIV 470. Upper Level Topics in Antiquity**

*(2 - 4). May be elected twice for credit.*

This course offers the opportunity to explore aspects of the ancient world in depth such as demographics, population, important figures in antiquity.

**CLCIV 479. Socratic Tradition of Conscientious Objection**

*Consent of instructor required. Junior or Senior standing. (3). May not be repeated for credit.*

In this course we study the Socratic tradition of conscientious objection, looking at the prison writings of prisoners of conscience. We start with Plato and the ancient tradition of speaking truth to power, move into the Roman Empire, studying martyr letters and Boethius' Consolation of Philosophy. We study modern works such as Solzhenitsyn's Gulag Archipelago, Mandela's Conversations With Myself, and writers from the American Civil Rights Movement, King and Angela Davis.

**CLCIV 480. Studying Antiquity**

*Open only to majors in Classical Civilization, Classical Archaeology, Classical Language and Literature, Ancient Greek, Latin, and Modern Greek. (Prerequisites enforced at registration.) (1 - 3). May be repeated for a maximum of 6 credits. May be elected more than once in the same term.*

This course for majors in our department is an in depth discussion of selected topics in antiquity. Students write research papers and further their knowledge of research methods in the various disciplines of Classical Studies.

**CLCIV 495. Senior Honors Research**

*Consent of instructor required. Upperclass standing. (1 - 3). (INDEPENDENT). May be repeated for a maximum of 6 credits.*

This course is intended for Honors concentrators writing a thesis in Classical Civilization.

**CLCIV 499. Supervised Reading**

*Permission of Instructor. (1 - 3). (INDEPENDENT). May be repeated for a maximum of 6 credits.*

Undergraduate supervised reading in Classical Civilization.

## **Climate & Meteorology (CLIMATE)**

Although CLIMATE courses are offered through the College of Engineering, several courses are approved by LSA to earn LSA credits and some may be used to meet distribution requirements. Other Climate and Meteorology courses are listed in the *College of Engineering Bulletin*, and in the *Schedule of Classes* as part of the offerings of the College of Engineering and may be elected by LSA students as a part of non-LSA course work.

**CLIMATE 102 / EARTH 122 /**

**ENVIRON 102. Extreme Weather**

*(3). (NS). (BS). May not be repeated for credit.*

This course provides an introduction to the physics of extreme weather events. The course uses examples of the thunderstorms, jet stream, floods, lake-effect snowstorms, lightning, thunder, hail, hurricanes, and tornados to illustrate the physical laws governing the atmosphere. Participants apply these principles in hands-on storm

forecasting and weather analysis assignments.

**CLIMATE 105 / CHEM 105 / ENSCEN 105 / ENVIRON 105. Our Changing Atmosphere**

(3). (NS). (BS). *May not be repeated for credit.*

The science of the greenhouse effect, stratospheric ozone depletion, polar ozone holes, and urban smog. These phenomena and their possible consequences are discussed, along with the properties and behavior of the atmosphere and its components of the environment.

**CLIMATE 171 / BIOLOGY 110 / EARTH 171 / ENVIRON 110 / RCNSCI 110. Introduction to Global Change: The Science Behind Sustainability**

(4). (NS). (BS). *May not be repeated for credit.*

Students learn about the evolution of the universe, Earth, our changing environment and our planets living organisms. Global Change I, which is part of the GC curriculum, assumes no prior science background. Homework and laboratories use computer-based systems modeling and analysis, and includes a group presentation.

**CLIMATE 172 / EARTH 172 / ENVIRON 111 / GEOG 111. Climate Change and Sustainability: Environmental Challenges of the 21st Century**

(4). (ID). (BS). (QR/2). *May not be repeated for credit.*

This course explores impacts of modern human society on land, ocean, and atmosphere, considering all aspects relevant to a sustainable future. Throughout the semester, students work on a sustainability pledge to apply class material to everyday life.

**CLIMATE 320 / EARTH 320 / SPACE 320. Earth Systems Evolution**

MATH 115, MATH 116; (C or better). (3). (BS). *May not be repeated for credit.*

Introduction to the physics and chemistry of Earth and space. Gravitational energy, radiative energy, Earth's energy budget, and Earth tectonics are discussed along with chemical evolution and biogeochemical cycles. The connections among the carbon cycle, silicate weathering, and the natural greenhouse effect are discussed.

**CLIMATE 321 / EARTH 321 / SPACE 321. Earth Systems Dynamics**

CLIMATE/SPACE 320; *Preceded or accompanied by MATH 215 and MATH 216.* (3). (BS). *May not be repeated for credit.*

This course will describe the major wind systems and ocean currents that are important to climate studies. The primary equations will be developed and simple solutions derived that will explain many of these motions. The relations among the dynamics and other parameters in the climate system will be illustrated by examples from both paleo and present day systems.

**CLIMATE 323 / EARTH 323 / SPACE 323. Earth System Analysis**

(4). *May not be repeated for credit.*

Introduction to the analysis of Earth and Atmospheric Science Systems. Topics include linear systems, harmonic analysis, sampling theory and statistical error analysis. Lectures emphasize underlying mathematical concepts. Labs emphasize application of mathematical methods to analysis of field data in a computer programming environment. Applications include turbulent air motion in the planetary boundary layer, cloud and precipitation microphysical composition, oceanic wave

propagation, stratospheric ozone depletion and satellite remote sensing.

**CLIMATE 350 / EARTH 350 / SPACE 350. Atmospheric Thermodynamics**

*MATH 216or256or286or316 (C>).*

*(Prerequisites enforced at registration.) (3). May not be repeated for credit.*

Fundamentals of thermodynamics are presented, including the First, Second and Third Laws, ideal gases, adiabatic processes, phase changes, vapor pressure, humidity, and atmospheric stability. The Kinetic Theory of Gasses provides a molecular perspective on the various forms of atmospheric water substance and on macroscopic phenomenology in general.

**CLIMATE 380 / EARTH 381 / SPACE 380. Introduction to Atmospheric Radiation**

*MATH 216or256or286or316 (C>).*

*(Prerequisites enforced at registration.) (3). May not be repeated for credit.*

Basic concepts and processes of radiative transfer including radiometric quantities, electromagnetic spectrum, absorption, emission, scattering. The physics laws governing these processes including the Planck Law and the Kirchhoff Law. Radiative properties of atmospheric constituents. Reflection and refraction. Introductory-level descriptions of relevant applications in atmospheric sciences and climate physics.

**CLIMATE 401 / EARTH 401. Geophysical Fluid Dynamics**

*CLIMATE 323, SPACE 323, or EARTH 323 (or GEOSCI 323); MATH 215 and 216 and PHYSICS 240. (3). May not be repeated for credit.*

Dynamics of the oceans and atmosphere. Equations of motion in spherical coordinates, beta-plane approximation,

wave properties in the oceans and atmosphere.

**CLIMATE 410 / EARTH 409. Earth System Modeling**

*CLIMATE 320, CLIMATE 321, SPACE 320, SPACE 321. (4). (BS). May not be repeated for credit.*

Introduction to Earth System Modeling; Discussion of energy balance models, carbon cycle models, and atmospheric chemistry models with multiple time scales; Methods for numerical solution and practice building and analyzing results from models.

**CLIMATE 411 / EARTH 411. Cloud and Precipitation Processes**

*CLIMATE 350, SPACE 350, MATH 216. (3). May not be repeated for credit.*

The special nature of water substance; nucleation of phase changes in the free atmosphere; the structure and content of clouds; the development of physical characteristics of precipitation; and the dynamics of rain systems.

**CLIMATE 414 / EARTH 414. Weather Systems**

*CLIMATE 350, SPACE 350, CLIMATE 401 or CLIMATE 551. (3). May not be repeated for credit.*

Introduction to the basic characteristics, thermodynamics, and dynamics of atmospheric weather systems on Earth and other planets. The students are exposed to observations of weather systems while reviewing non-dimensional analysis, dynamics and thermodynamics. Weather systems on earth are compared to that of other planets and analytical tools are used to gain insights into their basic physics.

**CLIMATE 421 / EARTH 421 /**

**ENVIRON 426. Introduction of Physical Oceanography**

*MATH 115 and 116, and an introductory*

*science course. (3). (BS). May not be repeated for credit. Rackham credit requires additional work.*

This course examines the fundamentals of physical oceanography; the physical properties of the ocean and water masses; circulation of the atmosphere; wind-driven and buoyancy-driven ocean circulation; tides; surface and internal waves; eddies; and mixing.

**CLIMATE 422 / EARTH 423. Boundary Layer Meteorology**

*CLIMATE 350, SPACE 350 or equivalent. (4). May not be repeated for credit.*

This course explores processes in the atmospheric boundary layer, which plays an important role in the exchange of energy, mass and momentum between land and atmosphere. Topics include applications of governing atmospheric equations, atmospheric turbulence, turbulent kinetic energy, the surface energy balance, and the collection and analysis of field flux tower data.

**CLIMATE 440 / EARTH 454.**

**Meteorological Analysis Laboratory**

*CLIMATE 350, SPACE 350, CLIMATE 401. (4). May not be repeated for credit.*

This course provides an introduction into the analysis of both surface-based and remotely-sensed meteorological data. The development and application of operational numerical forecast models will be discussed. Techniques for the prediction of both synoptic and mesoscale meteorological phenomena will also be presented.

**CLIMATE 451 / EARTH 457 / ENSCEN 451. Atmospheric Dynamics I**

*CLIMATE 401 or MATH 450. (4). (BS). May not be repeated for credit.*

Quasi-geotropic energetics; fronts; the mean circulation; planetary and equatorial

waves; overview of the dynamics of the middle atmosphere; wave-mean flow interaction; spectral methods; and tropical meteorology.

**CLIMATE 467 / CHEM 467 / EARTH 465 / ENSCEN 467 / ENVIRON 467.**

**Biogeochemical Cycles**

*MATH 116, CHEM 210, and PHYSICS 240 (or 260). (4). (BS). May not be repeated for credit.*

The biogeochemical cycles of water, carbon, nitrogen, and sulfur; the atmosphere and oceans as reservoirs and reaction media; the fate of natural and man-made sources of carbon, nitrogen, and sulfur compounds; the interactions among the major biogeochemical cycles and resultant global change; greenhouse gases, acid rain and ozone depletion.

**CLIMATE 474 / EARTH 474. Ice Sheets, Glaciers and Climate Change**

*MATH 115 and 116. May not be repeated for credit.*

They dynamics and mass balance of ice sheets and glaciers introduced along with mathematical theories describing how ice sheets and glaciers flow and current methods of observation.

**CLIMATE 475 / EARTH 475 / ENSCEN 475. Earth System Interactions**

*Senior standing in science or engineering. (4). (BS). May not be repeated for credit.*

Students will work on open-ended research problems with mathematical models from Earth System Science. The models may include, for example, surface characteristics, hydrology, solar-land-ocean-atmosphere exchanges, and space-based observations. Numerical experiments will promote further understanding and interpretation of earth system interactions,

team building, and scientific communication.

## **Complex Systems (CMPLXSYS)**

### **CMPLXSYS 250 / ENVIRON 250 / PUBPOL 250. Social Systems, Energy, and Public Policy**

*(3). (BS). (QR/1). May not be repeated for credit.*

This course introduces global energy problems from the perspectives of how energy technologies shape and are shaped by choices people make as individuals, as members of groups, and as members of society at large. We will examine the present and historical cultural, economic, and political contexts out of which today's energy choices and public policies emerged and how these choices and policies are constrained by fundamental scientific principles.

### **CMPLXSYS 260 / SOC 260. Tipping Points, Bandwagons and Cascades: From Individual Behavior to Social Dynamics**

*(3). May not be repeated for credit.*

In this class, we examine how interdependent behaviors of individuals can lead to some surprising and unexpected social outcomes. We will explore both theoretical models and empirical applications of social dynamics, including sexual networks and marriage markets, the formation and transformation of neighborhoods, the success or failure of social movements, and the diffusion of innovation.

### **CMPLXSYS 270. Agent-Based Modeling**

*(3). May not be repeated for credit. Only 2 credits earned by students enrolled in or having completed CMPLXSYS 200.*

Many systems can be modeled as being composed of agents interacting with one another and their environment. Very simple rules governing agent behavior can lead to complex and emergent phenomena. In this course students will use NetLogo to examine well-studied agent based models of complex systems in the social and biological sciences, as well as formulate models of their own.

### **CMPLXSYS 389. Topics in Complex Systems**

*Technical prerequisites vary with topic.  
(3). May be elected three times for credit.*

This course covers a broad range of topics relevant to the study of complex systems. Topics include evolutionary systems, network theory, self-organizing criticality, measures of complexity, collective intelligence, approaches to modeling complex adaptive systems and emergence.

### **CMPLXSYS 391 / POLSCI 391. Introduction to Modeling Political Processes**

*One course in Political Science. (4). (SS).  
(BS). (QR/1). May not be repeated for credit.*

An introduction to constructing, manipulating, and evaluating logical and mathematical models of social and political processes. Topics to be considered may include rational choice, game theory, learning processes and exchange processes.

### **CMPLXSYS 399. Independent Study- Directed Readings**

*Consent of instructor required. (1 - 3; 2 in the half-term). May be repeated for a*

*maximum of 6 credits. May be elected more than once in the same term.*

Directed readings or research in consultation with a member of the faculty of the Center for the Study of Complex Systems.

**CMPLXSYS 425. Evolution in Silico**  
*MATH 115; Comfort with Probability/Statistics; and Proficiency with Programming (e.g., CMPLXSYS 270 or MATH 463/BIOPHYS 463 or CMPLXSYS 391 or CMPLXSYS 530, etc.). (3). May not be repeated for credit.*

While every population of living organisms is evolving, not everything that evolves is alive. Nature's success at finding innovative solutions to complex problems has inspired many computational implementations of the evolutionary process. Some of the various implementations we will learn about with hands-on exercises include approaches for solving optimization problems, building controllers and/or bodies for robots, and using computational instances of Darwinian evolution to study fundamental questions in biology.

**CMPLXSYS 435 / EEB 435. Ecological Networks**  
*Quantitative skills and a general knowledge of biology recommended. (3). May not be repeated for credit.*

Networks have revolutionized the way we understand, represent and analyze complex systems. In particular, Ecology has greatly benefited from network theory to analyze the (inherently complex) structure and dynamics of ecological systems. This course introduces fundamental concepts and recent ecological theory on the structure and dynamics of networks composed by species connected via antagonistic (e.g. who eats whom) and/or

mutualistic (e.g. plant-pollinator) interactions. These concepts and theories will be introduced via lectures and regular reading of primary literature, and actively learned via individual and group analysis of empirical data, mathematical models and computational tools. We will also elucidate how to use ecological networks to inform real-world problems such as the current environmental crisis.

**CMPLXSYS 489. Advanced Topics in Complex Systems**  
*Advanced standing. Technical prerequisites vary with topic. (3). May be elected three times for credit. Rackham credit requires additional work.*

This course covers a broad range of advanced topics relevant to the study of complex systems. Topics include evolutionary systems, self-organizing criticality, measures of complexity, collective intelligence, approaches to modeling complex adaptive systems and emergence.

**CMPLXSYS 511. Theory of Complex Systems**  
*(3). (BS). May not be repeated for credit.*

This course is a math-based introduction to the theory and analysis of complex systems. Methods covered will include nonlinear dynamics, both discrete and continuous, chaos theory, stochastic processes, game theory, criticality and fractals, and numerical methods. Examples studies will include population dynamics, evolutionary theory, genetic algorithms, epidemiology, simple models of markets, opinion formation models, and cellular automata.

**CMPLXSYS 541 / PHYSICS 413. Introduction to Nonlinear Dynamics and the Physics of Complexity**  
*PHYSICS 401 or Graduate Standing.*

*(Prerequisites enforced at registration.) An intermediate mechanics course (such as PHYSICS 401) and/or a course in introductory differential equations. (3). (BS). May not be repeated for credit. F.*

An introduction to nonlinear science with an elementary treatment from the point of view of the physics of chaos and fractal growth.

## **Cognitive Science (COGSCI)**

### **COGSCI 200. Introduction to Cognitive Science**

*PSYCH 112, or one of LING 111, LING 209, or LING 210. (4). (ID). (BS). May not be repeated for credit.*

The goal of this course is to provide an integrated overview of some of the major approaches to understanding the mind and brain - approaches that together constitute contemporary cognitive science. The problems associated with understanding how and why our minds work the way they do are some of the deepest and most complex facing science, and no single discipline can lay claim to privileged status when it comes to making progress. Indeed, much of the recent excitement in the field has come from approaches that draw on the ideas and methods of multiple disciplines. In this course we'll get a taste of some of that excitement.

### **COGSCI 209 / LING 209 / PSYCH 242. Language and Human Mind**

*Not available to students who have completed LING 103 (courseID 020035), Topic: Language and Mind, (Topic #6). (Prerequisites enforced at registration.) (4;*

*3 in the half-term). (ID). May not be repeated for credit.*

This course introduces students to the fascinating "cognitive revolution" in contemporary language study, illuminating the Chomskyan shift away from speech behavior or "languages" as the objects of inquiry to the experimental and theoretical study of the biological/cognitive and mechanisms underlying our unique human capacity for language.

### **COGSCI 301. Special Topics for Cognitive Science**

*Consent of department required. (3). May be elected twice for credit.*

Topics vary by section in relation to the interests and specialization of the instructor.

### **COGSCI 401. Special Topics for Cognitive Science**

*Consent of department required. (3). May be elected twice for credit. May be elected more than once in the same term.*

Topics vary by section in relation to the interests and specialization of the instructor.

### **COGSCI 497. Directed Research in Cognitive Science**

*Consent of department required. (3). (INDEPENDENT). May not be repeated for credit.*

Allows students to work closely with a faculty member to study a topic of interest beyond the classroom setting. Students work closely with faculty to design their research project.

### **COGSCI 498. Independent Study for Cognitive Science**

*Consent of department required. (3). (INDEPENDENT). May not be repeated for credit.*

Allows students to work closely with a faculty member to study a topic of interest beyond the classroom setting. Students work closely with faculty to design their independent study project. Final paper must be submitted.

**COGSCI 499. Senior Honors Research for Cognitive Science**

*Consent of department required.*

*Acceptance into the Cognitive Science Honors Program. (3). (INDEPENDENT). May be elected twice for credit.*

The Cognitive Science Honors Program provides majors with the in-depth research experience of writing an honors thesis under the close supervision of a faculty member.

## **Communication and Media (COMM)**

**COMM 101. The Mass Media**

*Freshman, sophomore or junior standing. (Prerequisites enforced at registration.) (4). (SS). May not be repeated for credit.*

This course provides an introduction to the history and impact of mass media on American culture through advertising, news, radio, television programming, the Internet, and popular music. It reviews ideological, technological, and regulatory developments that produced our existing media system; and analytical tools and techniques that enhance media literacy. Topics include: media's role in shaping attitudes towards race, gender, sexuality and class; relationship between media and society; and language and skills for

critically evaluating media's assumptions and techniques.

**COMM 102. Media Processes and Effects**

*Freshman, sophomore or junior standing. (Prerequisites enforced at registration.) (4). (SS). May not be repeated for credit.*

Americans are immersed in the media like fish in water. The average adult spends two-thirds of his or her waking time consuming media, often more than one type at a time. Many people believe the media have little effect, but research shows they are wrong. This course describes the effects of media on thoughts, feelings, attitudes, and behaviors, and reasons why the media affect us. It includes review and evaluation of media research articles and participation in media research studies.

**COMM 159. First-year Seminar in Media Issues**

*First-year students only. (Prerequisites enforced at registration.) (3). (SS). May not be repeated for credit. Credits do not count toward the Communication Studies major requirements.*

Investigates issues and topics relevant to study of media and communication. Topics presented may include introduction and overview of media and culture, media and identity, media effects, and new, emerging media.

**COMM 221. Quantitative Skills for Communication Studies**

*COMM 102 strongly recommended. (4). (SS). (BS). (QR/1). May not be repeated for credit. No credit for students who have completed COMM 121.*

This course explores basic principles of scientific research. Students explore different ways scientific studies are designed, quantitative data collection methods, and data analysis related to mass communication. We explore a variety of



techniques and assess assumptions researchers make in these techniques. Students learn to recognize what can and cannot be concluded in our examinations. These skills will also help when encountering scientific information in real world settings.

**COMM 222. Media Analysis: Concepts and Methods**

*COMM 101 strongly recommended. (4). (SS). May not be repeated for credit. No credit granted to students who have completed COMM 122.*

This course introduces critical/cultural analysis of media texts, audiences, and production. Through immersion in the practical and theoretical aspects of this approach to studying media, it gives students the opportunity to survey and practice methods used in academia as well as across a wide range of industries.

**COMM 251. Understanding Media Industries**

*(4). (SS). May not be repeated for credit.*

Understanding Media Industries examines the influence of media industry organization and practices on society while offering a comprehensive overview of how the industries work, why they work as they do, and the broader theoretical and practical implications of media industry operation.

**COMM 261. Views on the News: What Shapes our Media Content**

*COMM 102 (completed with a minimum grade of C or better). (Prerequisites enforced at registration.) (4). (SS). May not be repeated for credit.*

This course examines how various aspects of society shape the news. It is designed to offer a framework for thoughtful understanding of processes involved in the production, dissemination, and reception of mediated news content.

**COMM 271. Communication Revolutions**

*COMM 101 (completed with a minimum grade of C or better). (Prerequisites enforced at registration.) (4). (HU). May not be repeated for credit.*

This course explores the central role of technology in our culture, and the tension between technological devices and human users and developers; the link between communication, politics and power; the role of communications processes and technologies in marking the changing boundaries separating the public and private realms of life; the deep ties between trade, labor, transport, and communication technologies; the role of governmental and corporate institutions in influencing the uses of mediated communication in our society.

**COMM 281. Media Psychology**

*COMM 102 (completed with a minimum grade of C or better). (Prerequisites enforced at registration.) (4). (SS). May not be repeated for credit.*

We discuss media effects research and theory with an emphasis on the social psychological processes that facilitate or inhibit media effects on individuals' attitudes, beliefs, emotions, and behaviors. We examine topics such as violence, advertising, stereotypes, news and politics, and fan culture, keeping in mind the role individual differences play in selective exposure to and reception of media messages. Outcomes include both positive and negative effects. Throughout, we will focus on the complexities of developing and executing media effects research.

**COMM 290 / ALA 290. Public Speaking in the Digital Age**

*(3). May not be repeated for credit. No credit granted to those who have completed or are enrolled in SM 101 - Public & Small Group Communication.*

This skills- and practice-based course, rooted in rhetorical theory, is designed to increase students' knowledge, understanding, and ability to use the fundamentals of oral communication for work and civic engagement. Students participate in lectures, discussions and activities, culminating in multiple presentations. Students leave this course as more confident, persuasive, and compelling speakers.

**COMM 291 / ALA 291. Public Speaking: World of Work**

*(3). May not be repeated for credit.*

This skills- and practice-based course is designed to increase your ability to use the fundamentals of oral communication in the world of work. You will participate in lectures, discussions and activities, which will build to a number of presentations, ranging from elevator speeches to sales pitches to business presentations to interviews.

**COMM 292 / ALA 292. Argumentation and Debate**

*(3). May not be repeated for credit.*

This course teaches students the fundamentals and art of argumentation. Students learn how to identify, critique and build arguments. Students will accrue public speaking skills, and learn how to convince various audiences. The capstone of this course is a series of team debates, demonstrating students' facility with argument and presentation.

**COMM 305. Survey of Media Topics**

*COMM 101 and COMM 102 strongly recommended. (3 - 4). May be repeated for a maximum of 8 credits. May be elected more than once in the same term.*

Investigates the theoretical, analytical and historical aspects of media. Topics

presented may include introduction and overview of media industries, media and culture, media and identity, media effects and new, emerging media. Topics vary by section.

**COMM 306. Survey of Media Topics in the Humanities**

*COMM 101, a previous humanities course, or sophomore standing. (1 - 4). (HU). May be repeated for a maximum of 8 credits.*

*May be elected more than once in the same term.*

Topics in the Humanities that investigates the theoretical, analytical and cultural aspects of media; content and number of credits varies by term and instructor.

**COMM 307. Survey of Media Topics in the Social Sciences**

*COMM 102, another SS course, or sophomore standing. (1 - 4). (SS). May be repeated for a maximum of 8 credits. May be elected more than once in the same term.*

Topics in the Social Sciences that investigates the theoretical, analytical and historical aspects of media; content and number of credits varies by term and instructor.

**COMM 310. Representation of Black Life and Culture in Global Perspective**

*(4). (HU). May not be repeated for credit.*

This course examines how people of African descent are represented outside of the United States. Taking Brazil, South Africa, and England as our locations, we probe the relationship between race, social change, and migration

**COMM 312. Television in the Digital Age**

*(4). May not be repeated for credit.*

What is television? More and more of us turn to entertainment content online, through subscription channels, and via

digital recorders. Fewer of us are likely to watch content solely on a dedicated box in the living room. How must our understanding of television as a phenomenon grow and change? Have we seen "the end of television," or does it live on in a new form? Drawing on key concepts in the field of television studies (including flow, liveness, domesticity, convergence, complex TV, and audience reception), this class critically appraises the medium of television in our contemporary digital context. We investigate transformations in television production, genres, and audiences in response to new technologies and economies. By the end of the class we will decide whether "television" is still a meaningful term and, if so, how its meanings must expand to account for our changing televisual practices.

**COMM 313. Behind the Digital Screen**  
(4). *May not be repeated for credit.*

This course provides a look inside the technologies and infrastructures that make digital media function. Students investigate and manipulate code, formats, platforms, and networks in order to consider the relationship between these structures and the audio, visual, and interactive media representations that are possible.

**COMM 317. Designing Persuasive Communication**

*COMM 261 or COMM 281 strongly recommended. (3). May not be repeated for credit. No credit granted to those who have completed COMM 462 or MKT 411.*

This course investigates the changes in business, technology, and design that are reshaping the words and images, the form and content of persuasive mass communication. It investigates emerging strategies for reaching global and regional audiences, discusses the impact of new technologies and media convergence, and

examines the social and ethical issues that underlie persuasive strategies.

**COMM 318 / PSYCH 318. Media and Violence**

*COMM 281 strongly recommended. (4). May not be repeated for credit. No credit granted to students who have completed COMM/PSYCH 481, Media & Violence (Crse ID #019987).*

This course examines the psychological causes of aggressive violent behavior and the theoretical and empirical connections between violence in society and portrayals of violence in the mass media. It surveys the research on the physiological, psychological, and environmental factors implicated in the development of habitual aggressive and violent behavior and examines the theories that explain how exposure to violence in the mass media adds to the effects of these other factors causing aggressive and violent behavior.

**COMM 321. Undergraduate Internship**

*Consent of instructor required. Junior standing, concentration in Communication Studies, and permission of instructor. Internship credit is not retroactive and must be prearranged. (1 - 3). (EXPERIENTIAL). May be repeated for a maximum of 6 credits. May not be used to satisfy Communication Studies electives in a Communication Studies major. Offered mandatory credit/no credit.*

Provides limited credit for appropriate practical work experience. Student evaluation is based on satisfactory completion of the internship and written recommendation of the internship sponsor.

**COMM 322. Faculty Directed Undergraduate Research Practicum**

*Consent of instructor required. (1 - 3). May be repeated for a maximum of 6 credits. Maximum of 3 credits from COMM 322 and/or COMM 441/442 may be used*

*toward the Communication Studies concentration requirements. A maximum of three credits from COMM 322, 441, or 442 may be counted toward the concentration requirements.*

This research practicum offers an opportunity to apply academic knowledge in mass communication or mass media within the context of a research setting. It provides experience and education in research techniques by having students conduct research with a faculty member on the faculty research projects. In the process, students learn the skills needed to conduct research, various research techniques, and the overall experience of analyzing outcomes. This course is intended as an intermediate step in the research educational process prior to students' own independently designed research in COMM 442 or honors research under COMM 491/492.

**COMM 325. Media and Globalization**  
*COMM 101 with a minimum grade of C or better. (Prerequisites enforced at registration.) COMM 251 strongly recommended. (4). May not be repeated for credit.*

This course offers students a framework for exploring the media's role in processes of globalization and how the globalization of media shapes the socio-cultural, political, economic, ethical and moral dimensions of our lives in this world.

**COMM 326 / AMCULT 326. American Magazines**  
*(4; 3 in the half-term). (HU). May not be repeated for credit. No credit granted to students who have completed AMCULT 250.*

This class examines past and present magazines in the United States, and explores the way in which they provide a

window into American history and the development of communications media. It includes both direct study of magazines themselves and secondary readings.

**COMM 328 / POLSCI 328. Media and Democracy**

*COMM 101 or COMM 102 strongly recommended. (4). May not be repeated for credit.*

Modern representative democracy depends on mass media. This course focuses on the complex roles that both traditional and social media play in increasing (or decreasing) citizens' knowledge of public affairs, and enhancing (or diminishing) political representation.

**COMM 329 / POLSCI 329. Mass Media and Political Behavior**

*(4). (SS). May not be repeated for credit.*

Focuses on the role and importance of mass media in the political process. Topics include: how news is made; political advertising; relations between Congress, the President and the media; and the role of mass media in political campaigns. These topics are examined through a systematic review of research in both mass communication and political science.

**COMM 334 / AMCULT 334 / FTVM 334. Race, Gender, Sexuality and U.S. Culture in Video Games**

*(4; 3 in the half-term). May not be repeated for credit.*

This course examines how video games function as a window into U.S. race relations. We will study the history, theory, and practice of video games in the U.S. with particular attention to racial stereotyping, user demographics, diversity of the industry, and racial conflict in shared world and social games.

**COMM 348. Media and the Body**  
(4). *May not be repeated for credit.*

This course explores the way the human body is portrayed within, and influenced by, commercial and social media. Built on a foundation of original social scientific studies and book chapters, the course covers a wide range of issues divided into five segments: the ideal body, the sexual body, the body of color, the athletic body, and the audience body. Gender is not the focus of the course but appears as a theme throughout the segments.

**COMM 350. The Rise and Demise of Mass Culture**

*COMM 101 with minimum grade of C or better. (Prerequisites enforced at registration.) (4). May not be repeated for credit.*

This course explores the ascent of commercial, mass-mediated culture in the United States. The digital transformation of media and communication invites us to reflect upon the history of mass media and communication synonymous with direct advertising and one-too-many broadcast media. This course gestures toward a sense that "mass culture" is not what it once was and asks what has emerged in its stead?

**COMM 362. Digital Media Foundations**  
(4). *May not be repeated for credit.*

This class is for those interested in practical skills and critical intellectual foundations relevant to the Internet and new media. Using context of Web-based applications, mobile applications, online multimedia, social media, and gaming, this course covers topics fundamental to understanding digital media forms, including an introduction to operation of the Web, Internet, Web development, search engines, digital formats, online media distribution platforms and networks, online

communities, audiences, online advertising and user interfaces.

**COMM 365. Visual Culture and Visual Literacy**

*COMM 101, with a minimum grade of C or better. (Prerequisites enforced at registration.) (4). May not be repeated for credit.*

This course examines contemporary media, imaging technologies, and viewing practices through the lens of visual cultural studies. A wide range of media including television, film, photography, graphic design, advertising, video games, and websites are critically analyzed using approaches that draw from semiotics, psychoanalysis, feminist theory, and cultural studies.

**COMM 371. Media, Culture, and Society**

*COMM 101 with a minimum grade of C or better. (Prerequisites enforced at registration.) (4). May not be repeated for credit.*

This course explores the historical rise of mass media and the impact on modern society and culture. It considers the dynamic impact of radio and television broadcasting on the rise of urban industrial mass society and popular commercial culture through music, print and electronic advertising, consumerism, and emergence of affluent society. The course also studies modern media institutions, politics, and forms and processes of social change and identity formation, such as class, ethnicity, gender, race, and sexuality.

**COMM 375. Sports, Media and Culture**

*COMM 101 with a grade of C or better. (Prerequisites enforced at registration.) (4). May not be repeated for credit.*

This course introduces the critical/cultural study of sports in media. The aim is to provide a framework for understanding

sports and sports media through analysis of their representations and discourses, industrial practices, and audience activities. Particular attention is given to issues of race, gender, sexuality, disability, class, and nation.

**COMM 380. Persuasion, Communication and Campaigns**

*COMM 102 with a minimum grade of C or better. (Prerequisites enforced at registration.) (4). May not be repeated for credit.*

This course covers theories of persuasion, how to evaluate the effects of persuasive communication on individuals and groups, as well as the design and evaluation of persuasive communications. As an ULWR, the course also focuses heavily on developing strong, evidence-based arguments, and communicating those arguments clearly in writing.

**COMM 404. Special Topics in Mass Media and Mass Communication**

*COMM 101 strongly recommended. (3). May be repeated for a maximum of 6 credits. May be elected more than once in the same term.*

Investigates topics dealing with mass media and mass communication, media and culture, communication processes, media industries and new and emerging media. Topics vary by section.

**COMM 405. Seminar in Mass Media and Mass Communication**

*COMM 101 strongly recommended. (3). May be repeated for a maximum of 6 credits. May be elected more than once in the same term.*

Investigates topics dealing with mass media and mass communication, media and culture, communication processes, media industries and new and emerging media. Topics vary by section.

**COMM 408. Special Topics in Media Effects**

*COMM 102 strongly recommended. (3). May be repeated for a maximum of 6 credits. May be elected more than once in the same term.*

Investigates topics relating to research on the effects of mass communication. Topics vary by section.

**COMM 409. Seminar in Media Effects**

*COMM 102 strongly recommended. (3). May be repeated for a maximum of 6 credits. May be elected more than once in the same term.*

Investigates advanced topics relating to research on the effects of mass communication. Topics vary by section.

**COMM 410. The Internet and Political Communication**

*COMM 102 and COMM 329 strongly recommended. (3). May not be repeated for credit.*

This course explores both the positive and negative democratic consequences of online political communication. Particular emphasis is placed on the various ways in which citizens are exposed to and engage news and political information online, the quality of that information, and its effects.

**COMM 412. Social Movements and Media Activism**

*(3). May not be repeated for credit.*

Social movements and activism are critical phenomena for social change and social justice. Protest movements have leveraged media to spread their message, influence popular assumptions, and share their own stories. The objective of this class is to examine the relationship between social movements and the media. In doing so, we analyze theories about social movements along with specific case studies.

**COMM 413 / ENVIRON 413.****Environmental Communication**

(3). *May not be repeated for credit.*

This course serves as an introduction to the theory and practice of environmental and science communication. Topics include media depiction's of environmental issues, the role of the media in influencing public opinion and policy actions, expert environmental communication by scientists and policy-makers, and theories that guide effective strategic environmental communication. We will engage with many of the critical environmental issues of our day, including climate change, fracking, support for renewable energy initiatives, and many more.

**COMM 414. Fashion and Media**

*COMM 101 strongly recommended. (3).*

*May not be repeated for credit.*

This course introduces the critical study of fashion in media and culture. We develop approaches to assessing the significance of fashion and fashion media, drawing on interdisciplinary readings that place questions of identity and power in conversation with matters of technology, marketing, production, and labor.

**COMM 416. Fandom and Digital Culture**

*COMM 101 strongly recommended. (3).*

*May not be repeated for credit.*

This course introduces the study of fandom in the digital era, offering tools to critically assess how and why fans perform their investment in media texts. We discuss different fan practices, evolving audience/producer relationships, the role of technology in fan cultures, and issues of identity, celebrity, activism, and the law.

**COMM 417 / ENVIRON 417. Marketing for Social Change**

(3). *May not be repeated for credit.*

This class presents a systematic approach for using marketing techniques to shift attitudes and behaviors for both individual and social benefits. Students learn multiple skills critical for developing marketing campaigns, including behavior selection, audience segmentation, application of the 4 Ps (product, price, place, and promotion), and messaging strategies. Areas of application include the environment, poverty, and health.

**COMM 421. Media Law and Policy**

*COMM 251 strongly recommended. (3).*

*May not be repeated for credit.*

This course covers the basic principles of the First Amendment and how they apply to media policy, practice, and regulation. Topics include First Amendment theory, hate speech, prior restraints and media censorship, defamation, indecency, obscenity, and advertising regulation.

**COMM 424. Race, Gender and New Media**

*COMM 271 and COMM 315 strongly*

*recommended. (3). May not be repeated for credit.*

This course critically examines how ideology shapes the uses and design of information and communication technologies (ICTs). The readings have been selected to encourage reflection on ICTs in Western culture; particularly the influence and creation of racialized, gendered, sexualized, and class-based uses of new media.

**COMM 425. Internet, Society and the Law**

*COMM 251 or COMM 271 strongly*

*recommended. (3). May not be repeated for credit.*

This course examines the development, regulation and impact of the Internet in

American society. It focuses on the expanding legal implications of new technology and how judicial and political apparatus keep pace with the Internet's ever-expanding influence.

**COMM 428. Gender, Media and the Law**

*Not available to students who have completed COMM 459 (crse ID#19977), Topic: Gender and Law (Topic #11). (Prerequisites enforced at registration.) COMM 251 or COMM 271 strongly recommended. (3). May not be repeated for credit.*

This course examines the legal system's treatment of gender through court cases and various theoretical lenses. The aim is to understand the role American jurisprudence plays in shaping society's views and ideas on gender, as well as society's influence on how the legal system frames these gender issues. The course also considers media and society responses to some of the most important decisions rendered in the gender equality arena, while weighing whether the court system is the most effective structure through which to pursue gender equality.

**COMM 429 / WGS 429. Sexual Identities and the Media**

*(3). May not be repeated for credit.*

This course introduces students to some of the major debates about LGBTQ representation in the United States, including how gender, race, class, and economic factors shape how we understand sexuality and its representation. We look at both mainstream and alternative media to consider the role of LGBTQ producers and audiences in shaping queer images. This course asks students to look and think queerly -irrespective of sexual identification- through a series of creative assignments.

**COMM 431. Supreme Court News Coverage**

*COMM 261 strongly recommended. (3). May not be repeated for credit.*

This seminar evaluates media coverage of the U.S. Supreme Court in the context of long-range factors affecting the ability of news media to function in a democracy, examining the scope and content of print, broadcast, and new-media news reporting on major cases before the court. In addition to gaining a broad overview of media coverage of current and recent cases, each student is expected to select one case from the current or past court term and study its media coverage in detail.

**COMM 432. Foreign News Coverage**

*COMM 261 strongly recommended. (3). May not be repeated for credit.*

This course investigates coverage of foreign news as a reflection of the structure and function of media systems. What factors influence media decisions on event coverage? What criteria do the media use for deciding which to report? How successfully do the media make foreign news relevant to American audiences? What special problems do foreign correspondents face?

**COMM 435. News Media Ethics**

*(3). May not be repeated for credit.*

How do journalists cover the news? Do they report it honestly and truthfully? How valid are claims by critics that news media behaved unethically in their coverage of political candidates? This course looks at issues of bias, distortion, lack of perspective and other journalistic failings. It studies journalists' responsibilities to their profession and to the public, and examines proposed solutions to ethics violations.

**COMM 439. Seminar in Journalistic Performance**

*COMM 261 strongly recommended. (3). May be repeated for a maximum of 6*



*credits. May be elected more than once in the same term.*

Investigates long-range factors affecting the ability of the news media to perform their functions in a democratic society. Topics vary by section.

**COMM 440. Global Iconic Events**

*COMM 101 with a minimum grade of C or better. (Prerequisites enforced at registration.) (3). May not be repeated for credit.*

This course examines the media coverage of news events that have attracted large international audiences. These exceptional events interrupt the flow of time, and provide us with uplifting or traumatic experiences. The case studies include the Royal Wedding, the Beijing Olympic Games, the September 11 attacks, and others.

**COMM 441. Independent Reading**

*Consent of department required. (3 - 4). (INDEPENDENT). May be repeated for a maximum of 8 credits. COMM 441 and 442 may be repeated for a combined total of eight credits. A maximum of 3 credits from COMM 322 and/or COMM 441/442 may be used toward the Communication Studies major requirements. Offered mandatory credit/no credit.*

Intended for individualized instruction in subject areas not covered by scheduled courses. Must be arranged with the faculty member and approved by the department.

**COMM 442. Independent Research**

*Consent of department required. (1 - 4). (INDEPENDENT). May be repeated for a maximum of 8 credits. COMM 441 and 442 may be repeated for a combined total of eight credits. A maximum of 3 credits from COMM 322 and/or COMM 441/442 may be used toward the Communication Studies*

*major requirements. Offered mandatory credit/no credit.*

Intended for individualized instruction in subject areas not covered by scheduled courses. Must be arranged with the faculty member and approved by the department.

**COMM 445. Music and Mediated Identities**

*COMM 101 (completed with a minimum grade of C or better). (Prerequisites enforced at registration.) COMM 350 or 371 strongly recommended. (3). May not be repeated for credit.*

Can the analysis of music help us better understand the modern world, consumerism, technology, and mediated communication? To answer this question, this course draws on social and cultural history, theory, and media studies to examine popular music and identity formation in America from the late nineteenth century to the present.

**COMM 446. Reality and Television**

*Not available to students who have completed COMM 468 (crse ID #022063), Topic: Television and Reality, (Topic #12). (Prerequisites enforced at registration.) COMM 371 strongly recommended. (3). May not be repeated for credit.*

The course explores what is meant by the 'real world', 'real life', and 'real people' and the ways in which they are presented in different genres of TV output. How does television work to produce effects of 'the real'? Can we, do we believe what we see--and why?

**COMM 451. Senior Thesis Seminar**

*Completion of LSA quantitative reasoning requirement with a C grade or better. (Prerequisites enforced at registration.) COMM 221, COMM 222, STATS 250 OR STATS 280 (honors) strongly*

*recommended. (3). May not be repeated for credit.*

This seminar helps Senior Thesis majors design, conduct, and write up a scholarly research project for a senior thesis. Students work with the director of the program and an individually selected faculty adviser. Counts for senior capstone requirement.

**COMM 452. Senior Thesis**

*COMM 451 with a C or better.*

*(Prerequisites enforced at registration.) (3). May not be repeated for credit.*

This seminar helps Communication Studies majors design, conduct, and write up a scholarly research project for a senior thesis. Students work with the director of the program and an individually selected faculty adviser. This is the second course in the two-term sequence of courses (COMM 451 and COMM 452) for the Senior Thesis in Communication Studies. It is dedicated to data collection, analysis, developing the results and discussion sections, and making final revisions to the earlier sections as necessary.

**COMM 454. Global Media Dynamics**

*Declared Communication Studies Seniors only. (Prerequisites enforced at registration.) COMM 251 and COMM 271 strongly recommended. (3). May not be repeated for credit. No more than 3 credits can be elected from COMM 450-490.*

This course explores how the globalization of media has transformed how we apprehend and understand the world and our place in it. We explore links between media and identity through case studies of film, television, digital and mobile media in varied regional, national, and trans-national media systems and contexts.

**COMM 455. Global Visual Cultures**

*Declared Communication Studies seniors ONLY. (Prerequisites enforced at*

*registration.) COMM 371 or COMM 365 strongly recommended. (3). May not be repeated for credit. No more than 3 credits from Comm 450-490.*

This CAPSTONE seminar examines the transnational flows of visual media. We survey the literature of visual culture in multiple disciplines, while considering how images travel across cultural boundaries. The course raises the questions of which visuals do and do not resonate with international audiences, and why certain visual resonate more than others.

**COMM 457. Citizenship after Television**

*Declared Communication Studies seniors ONLY. (Prerequisites enforced at registration.) COMM 251 or COMM 271 strongly recommended. (3). (R&E). May not be repeated for credit. No more than three credits can be elected from COMM 450-490.*

This course explores how television serves as a crucial site for struggles over citizenship and questions of inclusion (and exclusion) in the nation. We trace television's role in shaping post-war American culture by relating TV to broader debates surrounding class, ethnicity, gender, sexuality, and religion.

**COMM 460. History of Technology and Modern Culture**

*Declared Communication Studies seniors ONLY. (Prerequisites enforced at registration.) COMM 271 or COMM 350 strongly recommended. (3). May not be repeated for credit. No more than three credits can be elected from COMM 450-490.*

This interdisciplinary seminar explores the cultural history of technology and communication by tracing the emergence of, and reception to, selected technologies from the 19th century to the present. It pays

critical attention to unique and recurring problems and opportunities associated with communication and technical innovation in the modern world.

**COMM 461. Visuality and the New Media**

*Declared Communication Studies seniors ONLY. (Prerequisites enforced at registration.) COMM 365 strongly recommended. (3). May not be repeated for credit. No more than 3 credits from Comm 450-490.*

This course explores the intersection between digital media and "the visual" from historical, theoretical, and industrial perspectives. We trace changes in how the "user" is imagined from 1960s mainframe computers to today's popular social apps, developing analytical techniques for the visual analysis of new media cultural forms.

**COMM 462. Feeling Political? Affect, Emotion, and Personality in Political Communication**

*Declared Communication Studies seniors only. (Prerequisites enforced at registration.) (3). May not be repeated for credit. No more than 3 credits from Comm 450-490.*

There is a growing body of work in political communication that emphasizes the importance of affect, emotion and personality in politics. Our sensitivity to threat or disgust; our reactions of fear, or anger, or happiness; our tendency to focus more on negative than on positive information - each of these can impact the way we feel about candidates, and our positions on a wide range of domestic and foreign issues. Of course, many of these feelings are in reaction to mass-mediated information; and changing media technologies likely increases the volume of affective or emotional content reaching the public. This course reviews recent, path-

breaking work on these themes, drawn from both media psychology and political communication.

**COMM 463. Communication and Political Representation**

*Declared Communication Studies seniors ONLY. (Prerequisites enforced at registration.) COMM 261 and COMM 329 strongly recommended. (3). May not be repeated for credit. No more than three credits from COMM 450-490.*

It is hard to imagine modern representative democracy without mass media. This capstone seminar looks at the roles that mass media play in citizen-government relations: as a source of information about policies and governments; as a representation of citizens' attitudes and preferences; and as centerpiece of election campaigns. Discussions will focus on where mass media succeed and fail, and on the consequences of media performance for political decision-making and the functioning of representative democracy.

**COMM 464. Social Consequences of Mobile Communication**

*Declared Communication Studies seniors ONLY. (Prerequisites enforced at registration.) COMM 251 and COMM 261 strongly recommended. (3). May not be repeated for credit. No more than three credits can be elected from COMM 450-490.*

This course examines the social consequences of mobile communication and the role that mobile communication technology plays in the reformulation of everyday life. It explores adoption patterns, international perspectives on mobile communication, intersections between mass and interpersonal communication, and theoretical approaches.

**COMM 465. Health Communication and Health Behavior Change**

*Declared Communication Studies seniors ONLY. (Prerequisites enforced at registration.) COMM 281 or 380 strongly recommended. (3). May not be repeated for credit. No more than three credits can be elected from COMM 450-490.*

Examines principles related to health communication, including contemporary theories of health behavior change, approaches to the design and development of health communications, and principles and practices of outcome evaluation. Sample topics include: health promotion, social marketing, risk communication, fear appeals, entertainment-education, and health messages in the popular media.

**COMM 466. Global Digital Politics**

*Declared Communication Studies seniors ONLY. (Prerequisites enforced at registration.) COMM 325 OR COMM 329 strongly recommended. (3). May not be repeated for credit. No more than 3 credits from Comm 450-490.*

This Capstone seminar explores the myriad and interconnected ways in which digital media and internet infrastructure are shaping and constraining participation and organizing in world politics. The course also introduces students of communication studies to international affairs and comparative inquiry, with rich case studies and current events from around the globe.

**COMM 468. Political Misinformation and Misperceptions**

*Declared Communication Studies seniors ONLY. (Prerequisites enforced at registration.) COMM 329 strongly recommended. (3). May not be repeated for credit. No more than 3 credits can be elected from COMM 450-490.*

Inaccurate beliefs about politics are prevalent in America and held about a range of political issues and politicians. Once they

take hold, misperceptions are often difficult to correct and can impact democratic outcomes. This CAPSTONE seminar explores several factors that contribute to the spread of political misinformation and the rise of misperceptions, including the roles of media, social networks, and psychological biases. The course also examines the consequences of inaccurate political beliefs and investigates various communication strategies and media campaigns utilized to correct misperceptions.

**COMM 469. Play and Technology**

*Declared Communication Studies seniors ONLY. (Prerequisites enforced at registration.) (3). May not be repeated for credit. No more than 3 credits from Comm 450-490.*

This capstone seminar investigates competing social scientific and philosophical theories of play, the structure of games, and the consequences of technologically mediated play for both children and adults. It is organized around competing theoretical understandings of play and is illustrated with examples from computer games.

**COMM 470. Telling Our Own Stories: Minority Self-Representation in the Media**

*Declared Communication Studies seniors ONLY. (Prerequisites enforced at registration.) COMM 371 strongly recommended. (3). (R&E). May not be repeated for credit. No more than three credits can be elected from COMM 450-490.*

This course explores media narratives and representations of identity and culture told from a minority point of view, considering questions of race/ethnicity, sexuality and gender. The course examines how these media stories are told, what topics/issues

they address, and what alternative views of American identity and society they provide.

**COMM 472. Celebrity Influences**

*Declared Communication Studies Seniors Only. (Prerequisites enforced at registration.) (3). May not be repeated for credit. No more than 3 credits from COMM 450-490.*

Celebrities are a central aspect of our media culture. This CAPSTONE course studies the effects of the actions and communications of celebrities on individuals and on society. On the individual level, we examine whether and to what extent their example causes imitation and affects health and other behaviors, political attitudes, fashion, purchasing behaviors, and more. At societal level we look at framing and agenda setting effects that celebrity involvement has on societal discussions and even political action. An effects approach can't be complete without a discussion of cause and effect: are celebrities really causing changes, or are they merely catalysts or perhaps just mirroring changes that would occur anyway? Finally, we also wonder what the effects of celebrity are on the celebrity, with a look at the dark side of being a fan (obsession, stalking, violence).

**COMM 477. The Mass Media and Celebrity Culture**

*Declared Communication Studies seniors ONLY. (Prerequisites enforced at registration.) (3). May not be repeated for credit. No more than three credits from COMM 450-490.*

This course examines the explosive rise of celebrity culture since the mid-1970s and its colonization of virtually every media form and genre, from niche cable channels to the news to the proliferation of celebrity journalism and magazines in the early 21st century. It explores the mass media's need

for, and role in the manufacture, maintenance and expansion of celebrity culture in the late 20th and early 21st centuries, and considers the consequences of that culture on the media themselves and American culture. Readings focus on theories of celebrity, the history of celebrity production, and the ideological work done by celebrity culture.

**COMM 482. Children and the Media**

*Declared Communication Studies Seniors ONLY. (Prerequisites enforced at registration.) COMM 281 strongly recommended. (3). May not be repeated for credit. No more than three credits can be elected from COMM 450-490.*

Examines influences of the mass media on children in society. The course is designed to explore in-depth the literature on media effects, emphasizing the interaction of mass media, psychological development, and social behavior. Course readings examine both methodological and theoretical issues, drawing from work in communication, psychology, and policy studies.

**COMM 483. Media and Intergroup Conflict**

*Declared Communication Studies seniors ONLY. (Prerequisites enforced at registration.) COMM 281 strongly recommended. (3). May not be repeated for credit. No more than three credits from COMM 450-490.*

This capstone seminar explores theory and research on mass media and its influence on intergroup relations involving different racial, ethnic, and religious groups. It focuses on basic social psychological explanations of stereotypes, prejudice, and intergroup conflict as well as theories explaining how media can influence intergroup conflict.

**COMM 487. African Americans in Popular Culture**

*Declared Communication Studies Seniors ONLY. (Prerequisites enforced at registration.) COMM 371 strongly recommended. (3). (R&E). May not be repeated for credit. No more than three credits can be elected from COMM 450-490.*

This course draws upon diverse literatures as a blue-print to the construction of Black identity in (mediated) popular culture. We delve into debates of race, representation, and participation by examining how African American life and culture - "Blackness" - is presented in popular communication.

**COMM 490. Capstone Seminars in Media Topics**

*Declared Communication Studies Seniors ONLY. (Prerequisites enforced at registration.) COMM 251, COMM 261, COMM 271 or COMM 281 strongly recommended. (3). May not be repeated for credit. No more than three credits can be elected from COMM 450-490.*

Investigates advanced senior capstone topics relating to mass media and mass communication. Topics vary by section.

**COMM 491. Senior Honors Seminar I**

*Completion of LSA quantitative reasoning requirement with a C grade or better. (Prerequisites enforced at registration.) COMM 221, COMM 222, STATS 250 or STATS 280 (honors) strongly recommended. (3). May not be repeated for credit. No more than 3 credits of COMM 491-492 may be included in a Communication concentration plan.*

This is the first in a two-part honors seminar program and culminates in the composition of a senior honors thesis prospectus. Develops student's senior honors thesis topic, choice of research methods, and selection of faculty thesis

adviser. Class meets senior capstone requirement.

**COMM 492. Senior Honors Thesis**

*Consent of instructor required. COMM 251/491 and permission of instructor. (3). May not be repeated for credit. No more than three credits of COMM 491-492 may be included in a communication studies concentration plan.*

The second in a two-part honors seminar program and culminates in the composition of a senior honors thesis. Students must successfully have completed COMM 451 or COMM 491. Students work directly with their thesis advisers, and are expected to meet regularly with them for direction and assistance.

**COMM 495. Future of Digital Media**

*COMM 251/SAC 324. Declared Communication Studies Seniors ONLY. No credit granted to any student who has already completed or enrolled in COMM 490 "Future of Digital Media" Topic #22. (Prerequisites enforced at registration.) COMM 101. (3). May not be repeated for credit. No more than three credits can be elected from COMM 450-499.*

This capstone explores how digitization and digital technologies have affected all aspects of media industries, with a focus on media as businesses. Students will explore how new technologies for making and distributing media have changed how media companies make money, the media they create, and the opportunities available for creatives.

## **Music Composition (COMP)**

Composition is the creation of musical works. In Western culture, it often involves the notating of music on paper, but can be extended to improvisatory musics such as jazz.

COMP 221, 222, 421, and 422 offer LSA students the opportunity to work with School of Music composers in a classroom setting. You will have the opportunity to compose your own musical works in a broad array of styles. No previous experience is necessary for COMP 221.

Courses in Music Composition are listed in the *Schedule of Classes* under the School of Music, Theatre & Dance. All Music Composition courses count as LSA credit.

**COMP 139. Intro Basic Craft**

*FR.COMP.MAJ. (3; 2 in the half-term). May be repeated for credit.*

**COMP 140. Intro Basic Craft**

*COMP 139. (2 - 3). May be repeated for credit.*

**COMP 221. Intro Elem Comp**

*NON-MUS ONLY. (3; 2 in the half-term). (CE). May be repeated for credit.*

**COMP 222. Composition**

*COMP 221. (3; 2 in the half-term). (CE). May be repeated for credit.*

**COMP 233. Special Topics in Composition**

*(2 - 3). May be repeated for credit.*

Periodic offerings on topics of special interest in Composition.

**COMP 239. Contd Basic Craft**

*Consent of instructor required. SO.COMP.MAJ. (2 - 3). (INDEPENDENT). May be repeated for credit.*

**COMP 240. Contd Basic Craft**

*Consent of instructor required. COMP 239. (2 - 3). (INDEPENDENT). May be repeated for credit.*

**COMP 303 / ENS 303. Open Mic Seminar**

*Consent of instructor required. Students enrolling in Open Mic Seminar should have intermediate to advanced proficiency in some performing art. May be repeated for a maximum of 6 credits.*

**COMP 339. Adv Composition**

*Consent of instructor required. JR.COMP.MAJ. (2 - 4). (INDEPENDENT). May be repeated for credit.*

**COMP 340. Adv Composition**

*Consent of instructor required. COMP 339. (2 - 4). (INDEPENDENT). May be repeated for credit.*

**COMP 415. Intro Electron Mus**

*(2). May be repeated for credit.*

**COMP 416. Sem Electron Mus**

*COMP 415. (Prerequisites enforced at registration.) (2). May be repeated for credit.*

**COMP 421. Creative Comp**

*MUS&NON-MUS. (3; 2 in the half-term). May be repeated for credit.*

**COMP 422. Creative Comp**

*COMP 421. (3; 2 in the half-term). May be repeated for credit.*

**COMP 423. Adv Composition**

*Consent of instructor required. Comp. 421 and 422. (2 - 4). (INDEPENDENT). May be repeated for credit.*

**COMP 424. Adv Composition**

*Consent of instructor required. COMP 423. (2 - 4). (INDEPENDENT). May be repeated for credit.*

**COMP 425. Adv Composition**

*Consent of instructor required. Composition 424. Individual instruction. Open to music students and students outside the School of Music. (2 - 4). (INDEPENDENT). May be repeated for credit.*

**COMP 426. Adv Composition**

*Consent of instructor required. COMP 425.*

(2 - 4). (INDEPENDENT). May be repeated for credit.

**COMP 433. Special Topics in Composition**

(2 - 3). May be repeated for credit. Non-Rackham Graduate credit.

Periodic Offerings on topics of special interest in Composition.

**COMP 439. Adv Composition**

*Consent of instructor required.*

SR.COMP.MAJ. (2 - 4). (INDEPENDENT). May be repeated for credit.

**COMP 440. Adv Composition**

*Consent of instructor required. COMP 439. (2 - 4). (INDEPENDENT). May be repeated for credit.*

**COMP 450. Undergrad Seminar**

*Elect concurrently with THEORY 239, 240, 339, 340, 439, 440, 423, 424, 425, 426. (1). May be repeated for credit. Non-Rackham Graduate credit.*

**COMP 504. Words & Music**

*Permission of instructor. (3). May be repeated for credit.*

**COMP 506. Special Courses**

*Permission of instructor. (1 - 3). May be repeated for credit.*

**COMP 515. Intro Electron Mus**

*(2). May be repeated for credit.*

**COMP 516. Sem Electron Mus**

*COMP 515 (or 415). (Prerequisites enforced at registration.) (2). May be repeated for credit.*

**COMP 526. Adv Stdy Elec Mus**

*COMP 516 (or 416). Consent of instructor required. (Prerequisites enforced at registration.) (2 - 4). May be repeated for credit.*

**COMP 601. Independent Study**

*Consent of instructor required. (2 - 4). (INDEPENDENT). May be repeated for credit.*

## **Comparative Literature (COMPLIT)**

**COMPLIT 100. Global X**

*(3 - 4; 2 - 3 in the half-term). (HU). May be elected twice for credit.*

This course explores elements of contemporary US American popular culture within a global framework. Richly contextualized, "Sports Culture," "Apocalypse," "Fairy Tales," or "Vampires" emerge in their complex historical and transnational dimensions. Through a careful selection of guest lectures, "Global X" serves as an introduction to Comparative Literature.

**COMPLIT 122. Writing World Literatures**

*(4). (FYWR). May not be repeated for credit.*

An intensive writing course designed to increase cultural literacy and to fulfill the first-year writing requirement. It will focus on multiple translations of works, asking students to consider how these translation reflect different cultural times and milieu as well as choices in language. Students will also work intensely with issues of composition, argument, and source material related to the creative texts.

**COMPLIT 140. First-Year Literary Seminar**

*Enrollment restricted to first-year students, including those with sophomore standing. (3). (HU). May be repeated for a maximum of 6 credits.*

A course in the LSA First-Year Seminar Program. Led by a faculty member, COMPLIT 140 is a study of selected topics in literature through classroom discussion and the writing of essays.



**COMPLIT 141. Great Performances**

(4). (FYWR). *May not be repeated for credit.*

What makes a "great" performance? This course considers the relation between tradition and innovation in performing "great" works in music, theatre, dance. Students attend live performances and explore the concept of performance from various historical, critical and creative perspectives; they also develop their skills in writing about performance.

**COMPLIT 200. Translation Across Disciplines**

(3). *May not be repeated for credit.*

This course introduces translation as a movement across languages, media, cultures, discourses, and disciplines. We will explore the following questions: Why and how should we think about translation? What is translation? Who translates? When and where do we encounter translation in our daily lives, in our communities, and in the world at large?

**COMPLIT 222 / GTBOOKS 212. Great Books in World Literatures**

(3). (HU). *May not be repeated for credit.*

This course studies great books of world literatures across temporal, generic, and geographic boundaries. The goals are to appreciate the complexity of the texts themselves and their intimate relationship with the cultures that produced them. The course encourages critical thinking about the concept of "world literature" and its relevance to texts we study.

**COMPLIT 240. Literature Across Borders**

(3; 2 in the half-term). (HU). *May not be repeated for credit. This course may be counted toward the International Studies subplan in Comparative Culture and Identity. F.*

Emphasizing international and interdisciplinary approaches to literary studies, this course introduces students to current topics in comparative literature. Readings come from Western and non-Western cultures and are considered within a variety of contexts.

**COMPLIT 241. Topics in Comparative Literature**

COMPLIT 240. (3; 2 in the half-term). (HU). *May not be repeated for credit. W.*

**COMPLIT 260. Europe and Its Others**

(3). (HU). *May not be repeated for credit.*

This course is designed to introduce students to the pan-European origins of literary study and alternatives to them, and to increase their cultural fluency.

**COMPLIT 300. Global Humanities**

(1 - 4; 1 - 2 in the half-term). (HU). *May be repeated for a maximum of 8 credits. May be elected more than once in the same term.*

Explores topics in world cultures with a global perspective and a humanities point of view: how different human societies respond imaginatively to pressing issues like "Human Rights," "Revolutions," or "Religious Conflict" and manifest their understandings in specific cultural productions and practices across media, including film, literature, and visual cultures.

**COMPLIT 322. Translating World Literatures**

(3). (HU). *May not be repeated for credit.*

This course provides an opportunity for students to use their skills in a foreign language to think about the history, theory, and practice of translating literary texts. To meet the Upper Level Writing Requirement, the course is structured around a series of critical and creative writing assignments

that encourage students to reflect on the process of translation, in their own work and in a selection of translated works. The course also includes a range of readings in translation studies, with an emphasis on the cultural function of translation and the role of the translator in cross-cultural communication. Students will integrate theoretical concepts about translation with the textual practice of translating.

**COMPLIT 340 / GREEKMOD 340.**

**Travels to Greece**

(3). (HU). *May not be repeated for credit.*

The course examines the literature of modern travel to Greece and the issues it raises about antiquity, modernity, ethnography, otherness, exoticism, orientalism, and Western identity. Readings include works by British, French, German, American, and Greek authors. Art, film, and the media are also used to provide different measures of comparison.

**COMPLIT 350. The Text and Its Cultural Context**

(3). (HU). *May be repeated for a maximum of 6 credits.*

A comparative study of literature and some expository writing about diverse cultures, focusing on the interdependence of text and context.

**COMPLIT 364. Comparative Literary Movements and Periods**

(3). (HU). *May be repeated for a maximum of 6 credits. May be elected more than once in the same term.*

This topics course proves an introduction to studies in literary movements and periods across national boundaries. Examples include the traditional literary periods such as Romanticism or Modernism as well as movements such as surrealism, dada, or futurism, to name only a few. In each case, a basic understanding of the issues

concerning literary movement or period would supplement the close examination of literary works.

**COMPLIT 372. Literature and Identity**

(3). (HU). *May be repeated for a maximum of 6 credits. May be elected more than once in the same term.*

This course explores the emergence of literary works in relation to identity, tracing how literary and human kinds relate and how this relation changes. Important issues might include how specific cultural contexts affect the making and reading of literary works, how attempts to preserve ethnic heritage and memories play out through literature, and how migration and globalization influence literary creation and meaning.

**COMPLIT 374. Literature and the Body**

(3 - 4). (HU). *May be repeated for a maximum of 6 credits.*

This course interrogates the corporeal context of literary creation and meaning. It focuses not only on the influence of gender, sex, ability, disability, and race within the world of the text but questions the relation between literary and bodily form. Is the body a text, or is it an origin for texts? Do we write out of the body or is the body itself written? How do the body of the text and the text of the body interact to create meaning?

**COMPLIT 376. Literature and Ideas**

(3 - 4). (HU). (R&E). *May be repeated for a maximum of 8 credits. May be elected more than once in the same term.*

This course offers a general consideration of the ways in which particular ideas have affected the creation and history of literature, whether considered in terms of the history of ideas or as the content of an individual work. Its subject matter is varied, depending on the instructor. It might

address the influence of "freedom" in a selection of literary works. It might track the influence of the French Revolution. It might invent other new and useful keys to literary interpretation.

**COMPLIT 382. Literature and the Other Arts**

(3). (HU). *May be repeated for a maximum of 9 credits. May be elected more than once in the same term.*

This course introduces students to the interdisciplinary study of literature and the arts. It poses general questions about the concerns shared by different media (language, paint, music, etc.) as well as arguments between them. It introduces students to basic ideas about aesthetics broadly conceived and permits an exploration of art issues in an inclusive climate where language, music, and the representational arts may come together.

**COMPLIT 422. Comparing World Literatures and Cultures**

*Junior or upper class standing. (3 - 4; 2 - 3 in the half-term). May be repeated for a maximum of 8 credits. May be elected more than once in the same term.*

An advanced seminar studying literatures and cultures in a globalizing world. What does "literature" mean when considered in a comparative global context? The course is designed to encourage theoretical and interdisciplinary thought about pressing issues in the Humanities.

**COMPLIT 434. Comparative Studies in Poetry**

*Junior standing. (3). May be repeated for a maximum of 6 credits.*

**COMPLIT 438. Comparative Studies in Film**

*Junior standing. (3). May be repeated for a maximum of 6 credits.*

**COMPLIT 490. Comparative Cultural Studies**

*Junior standing. (3). May be repeated for a maximum of 6 credits.*

An advanced intro to comparative studies in culture and cultural theory. Approaches will vary but might include questions of social identity, formations of social discourse, postcolonialism, issues of cultural racism and status of "national" identity.

**COMPLIT 492. Comparative Literary Theory**

*Junior standing. (3). May be repeated for a maximum of 6 credits.*

An advanced intro to comparative studies in literary theory. Topics might include narrative theory, gender theory, ideology, semiology, and postmodernism.

**COMPLIT 495. Senior Seminar in Comparative Literature**

*Comparative Literature majors with senior standing. (3). May not be repeated for credit. F.*

**COMPLIT 496. Honors Thesis**

*Consent of instructor required. COMPLIT 495 and Honors concentration in Comparative Literature. (3). (INDEPENDENT). May not be repeated for credit. Continuing Course. Y grade can be reported at end of the first-term to indicate work in progress. At the end of the second term, the final grade is posted for both term's elections. F, W, Sp, Su.*

**COMPLIT 498. Directed Reading**

*Consent of instructor required. (1 - 4). (INDEPENDENT). May be repeated for a maximum of 9 credits. May be elected more than once in the same term. F, W, Sp/Su, Sp, Su.*

This course is individually developed by a student in consultation with an instructor

who may be any Associate Faculty member of the Program.

## **Comprehensive Studies Program (CSP)**

### **CSP 100. CSP Readings Seminar**

(3). (SS). *May be elected twice for credit. F, W, Su.*

This course is intended for first-year students who are affiliated with Comprehensive Studies. It is designed to offer initial guidance as they transition into a college environment, begin to intellectualize their role in the university community, and embark on their academic careers. Course contents are organized around the interrelated themes of social science scholarship and identity (including, but not limited to, race and ethnicity). Students learn how academics conduct research and contribute to ongoing disciplinary discourse.

### **CSP 101. Comprehensive Studies Program: Our History of Academic Success**

*Consent of department required. (1). May be repeated for a maximum of 2 credits. Offered mandatory credit/no credit.*

This course focuses on the history of the Comprehensive Studies Program, and the development of success strategies used by the program today. We explore topics such as transition from high school to a research university, factors that impact success, self-authorship, diversity, and foster engagement in the CSP Community.

### **CSP 103 / MATH 103. Intermediate Algebra**

*Only open to designated summer half-term Bridge students. (3 in the half-term). May not be repeated for credit.*

Review of elementary algebra; rational and quadratic equations; properties of relations, functions, and their graphs; linear and quadratic functions; inequalities, logarithmic and exponential functions and equations.

### **CSP 104 / MATH 104. Mathematical Thinking**

*Only open to designated Summer half-term Bridge and M Academy students. (3 in the half-term). (QR/2). May not be repeated for credit.*

This course is an introduction to rigorous mathematical reasoning, for students planning on a career in the humanities. The focus is on significant ideas in mathematics but not on notation or computation.

### **CSP 105. Reading and Writing Seminar: Insiders/Outsiders**

*(4; 3 in the half-term). (HU). (R&E). May not be repeated for credit. W.*

This course explores the human condition and what it means to belong to or be excluded from specifically identified groups in the past and present. Using literary examples from contemporary culture and politics as well as print, video and online texts that span the recent century, students are asked to respond in writing to various cultural topics. Reading and writing about both real and fictional characters allows students to explore the ways race, ethnicity and community are created and understood.

## **Czech (CZECH)**

### **CZECH 141. First-Year Czech**

*(4). May not be repeated for credit. May not be repeated by credit.*

### **CZECH 142. First-Year Czech**

*CZECH 141. (Prerequisites enforced at*

registration.) (4). *May not be repeated for credit. May not be repeated for credit.*

Students will continue studying basics of Czech grammar according to their sequence in the Communicative Czech textbook. They practice listening, reading, speaking and writing skills while focusing on practical vocabulary for everyday situations. Students are encouraged to use language skills in one-to-one/small group activities.

**CZECH 242. Second-Year Czech**  
*CZECH 241. (4). (Lang Req). May not be repeated for credit. May not be repeated for credit.*

Further development of grammatical structures includes acquiring the complex use of verbs (participles, reflexive passive forms), of adverbs, conjunctions, and interjections and comprises the study of complex sentences (time, conditional, of concession). Stylistic structures are studied. All grammatical material is presented in authentic cultural context with regular use of contemporary Czech mass media, Czech music, film and literature. Course is based on extensive reading and subsequent discussions. The course further enhances Czech vocabulary (CV, health, body, leisure activities) and idioms and is conducted primarily in Czech.

**CZECH 315 / FTVM 315. The Czech New Wave and Its Legacy**  
*(3). (HU). (R&E). May not be repeated for credit.*

This course covers an extremely important film movement in Eastern Europe, encompassing a broad range of film styles, from cinema verite (Milos Forman) to surrealism and the absurd (Chytilova, Svankmayer). It also critiques authoritarian systems, ethnic discrimination, and sexism. Fourteen films are studied and discussed,

with accompanying readings. Three medium-length papers are required.

**CZECH 480. Supervised Czech Reading**  
*Consent of instructor required. (1 - 4). (INDEPENDENT). May be elected twice for credit.*

## Dance (DANCE)

**DANCE 241 / RCHUMS 260. The Art of Dance: An Introduction to American and European Dance History, Aesthetics, and Criticism**  
*(3). (HU). May not be repeated for credit.*

The student will get an introduction to dance history as a part of the liberal arts as well as a basic familiarity with the major choreographers and dance styles in Western dance of the past two centuries.

## Digital Studies (DIGITAL)

**DIGITAL 202 / AMCULT 202. Digital Culture**  
*(4; 3 in the half-term). (ID). May not be repeated for credit. No credit granted to those who have completed or are enrolled in ENGLISH 280 or SAC 202.*

This course explores how digital technologies and practices have shaped contemporary culture and cultural production, focusing on the relationships of power through the lens of race, class, gender, and sexuality.

**DIGITAL 346 / AMCULT 346 / FTVM 346 / GERMAN 346. Media Matter: From Print to Screen Culture**  
*(3). (HU). May not be repeated for credit.*

This course explores the histories of writing, photography, radio, film, television, and the computer in order to gain a firmer understanding of how technology shapes culture, politics, and personal identity in the German-speaking world and beyond.

**DIGITAL 347 / AMCULT 347. Politics of Code**

(3 - 4). (ID). *May not be repeated for credit.*

This course allows students to think through the concept of "code," focusing on how codes carry politics and how politics determine and define relationships of power.

**DIGITAL 358 / AMCULT 358. Topics in Digital Studies**

(1 - 4). (ID). *May be elected twice for credit. May be elected more than once in the same term.*

This course provides undergraduates the opportunity to explore a specific topic in Digital Studies in depth using an interdisciplinary approach.

**DIGITAL 360 / AMCULT 360. Radical Digital Media**

*Not available to students who have completed AMCULT 358 Topics in Digital Studies when taught with the topic "Radical Digital Media" (topic #1) or AMCULT 405 Topics in American Culture when taught with the topic "Radical Digital Media" (topic #31). (Prerequisites enforced at registration.) (3). (HU). May not be repeated for credit.*

Do digital technologies advance or thwart political action? Are forms of radical refusal still possible in network culture? This course explores the seismic shifts digital media has produced in our conceptions of corporate power, radical art, individual agency, and collective action.

**DIGITAL 370 / AMCULT 370. Digital Bodies: Performance After the Internet**

*Not available to students who have completed AMCULT 405 Topics in American Culture when taught with topic "Digital Bodies: Performance After the Internet" (topic #29). (Prerequisites enforced at registration.) (3). (HU). May not be repeated for credit.*

What happens to a body when it goes online? How have digital technologies recast everyday life as a performance? This course explores how new technologies structure performances of identity and social engagement, whether performances of "self" on social media or creative responses to surveillance.

**DIGITAL 379 / AMCULT 379. Privacy, Politics, and Power**

*Not available to students who have completed AMCULT 301 when taught with the topic "Privacy, Politics and Power" (Topic #72). (Prerequisites enforced at registration.) (3). (HU). May not be repeated for credit.*

This course explores the concept of privacy through history as it applies to politics and power. We begin with privacy's origins, trace them through the contemporary era, and evaluate privacy's use in a digitally-networked world. Key themes we discuss include: the Internet, liberalism, race, citizenship, law, gender, and sexuality.

**DIGITAL 380 / AMCULT 380 / FTVM 380 / LATINOAM 380. Studies in Transnational Media**

*Prior coursework in Film Television, and Media, Communications (TV), or Latino Studies. Knowledge of Spanish is not required. (3). May not be repeated for credit.*

Drawing from writings in cultural theory and criticism in both English and Spanish.

This course will examine national and transnational trends in Spanish and Portuguese language TV, alternative video and cinema since WW II.

**DIGITAL 410 / AMCULT 410 / SI 410.**

**Ethics and Information Technology**

*May not be repeated for credit.*

Applies an emergent philosophy of information to a variety of new technologies that are inherently social in their design, construction, and use. Learning modules include: social media interaction; remembering/forgetting; and game design ethics. By collaborating on building a wiki community, students explore ethical/unethical information behaviors and test information quality metrics.

## **Dutch and Flemish Studies (DUTCH)**

**DUTCH 111. First Special Speaking and Reading Course**

*(4). May not be repeated for credit. Graduate students should elect DUTCH 511. No credit granted to those who have completed or are enrolled in DUTCH 100. F.*

**DUTCH 112. Second Special Speaking and Reading Course**

*DUTCH 111. (4). May not be repeated for credit. Graduate students should elect DUTCH 512. No credit granted to those who have completed or are enrolled in DUTCH 100. W.*

**DUTCH 160. First Year Seminar**

*Enrollment restricted to first-year students, including those with sophomore standing. (3). (HU). May not be repeated for credit. Taught in English. F.*

The course aims to introduce first-year students to the Humanities aspect of Dutch studies: Dutch Culture, Literature, Cinema, and the Arts. The course is taught in English.

**DUTCH 231. Second-Year Dutch**

*DUTCH 112 or 100. (4). May not be repeated for credit. Graduate students should elect DUTCH 531. F.*

**DUTCH 232. Second-Year Dutch**

*DUTCH 231. (4). (Lang Req). May not be repeated for credit. Graduate students should elect DUTCH 532. W.*

**DUTCH 339. Independent Study**

*Consent of instructor required. (2 - 4). (INDEPENDENT). May be repeated for credit. F, W, Sp.*

Independent study for students who need work in a certain area to complete their degree and are unable to acquire it from a regularly scheduled course.

**DUTCH 351 / JUDAIC 351. Anne Frank in Context**

*(3). (HU). (R&E). May not be repeated for credit.*

This course examines the Holocaust in The Netherlands and beyond through the analysis of the Diary of Anne Frank, its film, stage and television adaptations, and related materials. It aims to increase your understanding of anti-Semitism and other forms of hatred and discrimination. Topics include Jewish immigration, Jewish Amsterdam, bystanders, resistance movement, and controversial issues like the fictionalization of Anne Frank and alleged Holocaust exploitation. Taught in English

## **Earth and Environmental Sciences (EARTH)**

**EARTH 100. Coral Reefs**

*(1). (NS). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in EARTH 156 or GEOSCI 156.*

**EARTH 102. Energy from the Earth**

*(1). (NS). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in EARTH 158.*

The nature, mode of occurrence, and the technology of exploration and exploitation of energy resources, and their relevance to the present and future world energy needs. Special attention is given to oil, gas, oil shale, tar sands, coal, uranium, and geothermal resources.

**EARTH 103. Dinosaurs and Other Failures**

*(1). (NS). (BS). May not be repeated for credit. No credit granted to those who completed or are enrolled in EARTH 150.*

Some of the outstanding "failures" in evolutionary history also involve the most interesting success stories. This course looks at the fossil record and the ecological causes of diversification and extinction of the ruling reptiles.

**EARTH 104. Ice Ages, Past and Future**

*(1). (NS). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in EARTH 151 or GEOSCI 151.*

**EARTH 105. Our Active Earth: Plate Tectonics and Geohazards**

*(1). (NS). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in EARTH 205 or 146 or GEOSCI 205 or 146.*

This mini-course provides an overview of the geological history and geological

process that shape our planet. We cover the scientific discoveries (Earth's age, continental drift, seafloor spreading) that form the basis of our understanding of Earth's planetary-scale dynamics, plate tectonics, and its natural hazards.

**EARTH 106. Earth Science in Feature Films Minicourse**

*No prior scientific knowledge is required. (1). (NS). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in EARTH 141.*

This minicourse focuses on some major concepts in Earth Science in a lecture setting while also exploring how these same processes are portrayed in feature films, both animated and not. Topics include ocean circulation, ice ages, Earth's structure, plate tectonics, coral reefs, life in the ocean, and climate change.

**EARTH 107. Volcanoes and Earthquakes**

*(1). (NS). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in EARTH 205 or 146 or 147; or GEOSCI 205 or 146 or 147.*

**EARTH 108. When Earth Attacks: The Science Behind Natural Disasters**

*(1). (NS). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in EARTH 147 or GEOSCI 147.*

This minicourse explores the science behind natural disasters, concentrating on our ability, or inability, to predict them. Lectures address how natural disasters can lead to changes in both science and public policy.

**EARTH 109. Water and Society**

*(1). (NS). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in GEOSCI 206 or EARTH 206 or ENVIRON 206.*



This course will present an overview of problems encountered through the unwise use of water resources and the resultant impact on society through the analysis of case studies. An introduction to the hydrological cycle and principles of surface and groundwater hydrology will be provided.

**EARTH 110. Evolving Oceans**

*(1). (NS). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in GEOSCI 222 or EARTH 222.*

This course explores the impacts of climate change on the world's oceans and the history of past oceanic life, events, and environments as recorded in seafloor sediments. Lectures address the nature and rate of past and modern (anthropogenic) perturbations to the physical, chemical, and biological state of the oceans.

**EARTH 112. The Great Lakes**

*No prior scientific knowledge is required. (1). (NS). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in EARTH 417.*

This minicourse focuses on environmental issues in the Great Lakes. Topics include the formation and geology of the Great Lakes, hydrology and dynamics of water levels, effect of invasive species on food webs and fisheries, and pollution, particularly the role of nutrients in causing toxic algal blooms.

**EARTH 113. Planets and Moons**

*(1). (NS). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in GEOSCI 153 or 204, or EARTH 153 or 204, or AOSS 204 or ASTRO 204.*

**EARTH 114. Global Warming**

*High School math, physics, and chemistry.*

*(1). (NS). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in GEOSCI 151 or EARTH 151.*

Review of the geological evidence for global warming including geochemistry of natural and anthropogenic greenhouse gases, global radiation balance, sediment and ice core records, and ancient hot climates with discussion of possible remediation methods and their economic and political context.

**EARTH 115. The Emerald Planet**

*(1). (NS). (BS). May not be repeated for credit.*

This minicourse explores the major events in the co-evolution of plants and the Earth. Topics include: how plants moved onto land, the rise of the first forests, the invention of flowers and their impact on animals, and how plants bring about and respond to environmental change.

**EARTH 116 / ENVIRON 116.**

**Introductory Geology in the Field**

*(5 in the half-term). (NS). (BS). May not be repeated for credit. Reduced credit: Students who have completed GEOSCI 117 or EARTH 117 or ENVIRON 117 receive 2 credits; GEOSCI 119 or 120 or EARTH 119 or 120 or ENVIRON 119 or 120, 3 credits; GEOSCI 205 AND 206 or EARTH 205 AND 206 or ENVIRON 206, 3 credits; one of GEOSCI 205 or 206 or EARTH 205 or 206 or ENVIRON 206, 4 credits. Su at Camp Davis, Wyoming. May not be taken pass/fail.*

An introduction to geology in the field, this course is the equivalent of EARTH/ENVIRON 118/119 but is taught at Camp Davis, the University's Rocky Mountain Field Station near Jackson, Wyoming. It stresses principles and processes involved in the evolution of the

earth. The course includes rigorous laboratory exercises in which students study minerals, rocks and fossils, and structures in their natural settings. Lectures are given both in camp and in the field, but much time is spent outdoors in the nearby Teton, Hoback, Gros Ventre, and Snake River Ranges. Other trips of special significance include the Wind River Range. Craters of the Moon, and Yellowstone Park.

#### **EARTH 118 / ENVIRON 118.**

##### **Introductory Geology Laboratory**

*Prior or concurrent enrollment in EARTH 119, or 205 and 206, or 284. (1). (NS). (BS). May not be repeated for credit. No credit if completed an introductory course in geology (EARTH/ENVIRON 116, 117, or 120). F, W.*

This one-term laboratory course provides a practical study of minerals, rocks, and fossils and geologic maps.

#### **EARTH 119 / ENVIRON 119.**

##### **Introductory Geology Lectures**

*Concurrent enrollment in ENVIRON or EARTH (GEOSCI) 118 for the lab. (3 - 4). (NS). (BS). May not be repeated for credit. No credit granted to those who have completed GEOSCI 116, 117, or 120, and no credit granted to those who have completed or are enrolled in EARTH 116, 117, or 120 or ENVIRON 116, 117, or 120. No credit granted to those who have completed both EARTH 205 (or GEOSCI 205) AND one of GEOSCI 206 or EARTH 206 or ENVIRON 206; Three credits granted to those who have completed one of GEOSCI 205 or 206, EARTH 205 or 206, or ENVIRON 206. F, W.*

A basic single-term course in introductory geology concentrating on the evolution of the Earth in physical and chemical terms. Reference to the interaction of the external biosphere/atmosphere/hydrosphere with the

earth's interior is an essential component of the course.

#### **EARTH 120 / ENVIRON 120. Geology of National Parks and Monuments**

*(4). (NS). (BS). May not be repeated for credit. No credit if completed EARTH (GEOSCI)/ENVIRON 116, 117, or 119, or both EARTH (GEOSCI) 205 AND EARTH (GEOSCI)/ENVIRON 206. Only 3 credits with EARTH (GEOSCI) 205 or EARTH (GEOSCI)/ENVIRON 206. W.*

This is an introductory course that uses the National Parks to explore the geological history of the Earth, and specifically the tectonic evolution of the North American continent. Topics include plate tectonics, global volcanism, large explosive volcanic eruptions, the age of the Earth, the history of life (fossil record), meteorite impacts, earthquakes, mountain building, the origin of the Great Lakes, and climate change throughout Earth history.

#### **EARTH 122 / CLIMATE 102 / ENVIRON 102. Extreme Weather**

*(3). (NS). (BS). May not be repeated for credit.*

This course provides an introduction to the physics of extreme weather events. The course uses examples of the thunderstorms, jet stream, floods, lake-effect snowstorms, lightning, thunder, hail, hurricanes, and tornados to illustrate the physical laws governing the atmosphere. Participants apply these principles in hands-on storm forecasting and weather analysis assignments.

#### **EARTH 125. Evolution and Extinction**

*(3). (NS). (BS). May not be repeated for credit. Those with credit for GEOSCI 106 or EARTH 106 may only elect EARTH 125 for 2 credits. May not be included in a concentration plan in Geological Sciences.*

**EARTH 131 / ENVIRON 131. Earth and Environmental Chemistry**

*(4). (NS). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in CHEM 130 (Gen Chem).*

This course is an introduction to the fundamental principles in chemistry for beginning students in Earth and Environmental Sciences and related programs, including Program in the Environment. Principles of general chemistry, with content tailored to, and examples drawn from, the Earth and Environmental Sciences.

**EARTH 140. Climate and the Media**

*High school science highly recommended. Enrollment restricted to first-year students, including those with sophomore standing. (3). (NS). (BS). May not be repeated for credit.*

Few subjects garner as much media attention and controversy as stories about global warming. This seminar will introduce students to the basic concepts and observations that form the basis of our understanding of climate change and explore how these concepts are reflected and occasionally distorted by the media.

**EARTH 141. Earth Science in Feature Films First Year Seminar**

*No prior scientific knowledge is required. (3). (NS). (BS). May not be repeated for credit.*

This first year seminar focuses on some major concepts in Earth Science in a lecture setting while also exploring how these same processes are portrayed in feature films, both animated and not. Topics include ocean circulation, ice ages, Earth's structure, plate tectonics, coral reefs, life in the ocean, and climate change.

**EARTH 142. From Stars to Stones**

*High school math and science. Enrollment restricted to first-year students, including those with sophomore standing. (3). (NS). (BS). May not be repeated for credit. Those with credit for GEOSCI 114 or EARTH 114 may only elect EARTH 142 for 2 credits.*

**EARTH 146. Plate Tectonics**

*Enrollment restricted to first-year students, including those with sophomore standing. (3). (NS). (BS). May not be repeated for credit. No credit granted to those who have completed three of GEOSCI 105, 107, and 205 or EARTH 105, 107, and 205 (or any combination thereof). Those with credit for one of GEOSCI 105 and 107 or EARTH 105 and 107 (or any combination thereof) may only elect EARTH 146 for two credits. Those with credit for GEOSCI 205 or EARTH 205, or both GEOSCI 105 and 107 or EARTH 105 and 107 (or any combination thereof), may only elect EARTH 146 for one credit.*

**EARTH 147. Natural Hazards**

*Enrollment restricted to first-year students, including those with sophomore standing. (3). (NS). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in EARTH/ENVIRON 230. Students who have credit for GEOSCI 107 or 108 or EARTH 107 or 108 will only receive 2 credits for EARTH 147. Those who have credit for both GEOSCI 107 and 108 or EARTH 107 and 108 (or any combination thereof) may elect EARTH 147 for only 1 credit.*

This seminar explores natural geological hazards such as floods, tsunamis, earthquakes, explosive volcanic eruptions, landslides, and meteorite impacts. It also examines catastrophic results of climate change, with an emphasis influenced by current events. Students are expected to be active participants in reading, discussions, oral presentations, and written reports.

**EARTH 148. Seminar: Environmental Geology**

*High school math and science. Enrollment restricted to first-year students, including those with sophomore standing. (3). (NS). (BS). May not be repeated for credit. No credit granted to those who have completed GEOSCI 284 or EARTH 284 or are enrolled in EARTH 284. Those with credit for GEOSCI 109 or EARTH 109 may only elect EARTH 148 for 2 credits.*

**EARTH 151. The Ice Ages: Past and Present**

*Enrollment restricted to first-year students, including those with sophomore standing. (3). (NS). (BS). May not be repeated for credit. Those with credit for GEOSCI 104 or EARTH 104 may only elect EARTH 151 for 2 credits.*

This course explores the characteristic of the Earth's climate system and how the various components of that system operate to produce times when extensive ice sheets cover large parts of the Earth's surface. The role of each of the major components of the climate system is discussed in detail. Reconstructions of past climatic conditions are presented and discussed. The long term climate change associated with the most recent ice age is then contrasted with more rapid climate oscillations.

**EARTH 153. Earthlike Planets**

*High school science and math recommended. Only first-year students (including first-year students with sophomore standing) may pre-register for this course. All other students need permission of instructor. (3). (NS). (BS). May not be repeated for credit. Those with credit for GEOSCI 113 or EARTH 113 may only elect EARTH 153 for 2 credits.*

**EARTH 154. Ocean Resources**

*High school science and math recommended. Enrollment restricted to first-year students, including those with*

*sophomore standing. (3). (NS). (BS). May not be repeated for credit.*

**EARTH 156. Coral Reef Dynamics**

*(3). (NS). (BS). May not be repeated for credit.*

The biology and ecology of modern reefs are studied, together with the evolution of the reef community and its composition over geologic time. The course investigates the interaction between the organisms living in association with coral reefs. It also explores the ways in which our species affect the reefs and both directly and indirectly through climate change.

**EARTH 159. Toward a Sustainable Human Future**

*High school science and math recommended. Enrollment restricted to first-year students, including those with sophomore standing. (3). (NS). (BS). May not be repeated for credit.*

Today's human society is faced with a need for adjustments to our changing environment. This first-year seminar uses a systems-based approach to examine the natural science that is needed for short- and long-term decision making in support of a sustainable human future.

**EARTH 160. The Science Behind Environmental Issues**

*(3). (NS). (BS). May not be repeated for credit.*

Environmental issues are discussed and debated in the popular media on a daily basis, but the scientific foundations for environmental decision making are often obscured in political rhetoric. This first-year seminar will explore the science behind current environmental issues at a level accessible to first-year students without a prior background in environmental science.

**EARTH 171 / BIOLOGY 110 /  
CLIMATE 171 / ENVIRON 110 /  
RCNSCI 110. Introduction to Global  
Change: The Science Behind  
Sustainability**

*(4). (NS). (BS). May not be repeated for credit. Satisfies the geography requirement for State of Michigan certification for social studies teachers. F.*

Students learn about the evolution of the universe, Earth, our changing environment and our planets living organisms. Global Change I, which is part of the GC curriculum, assumes no prior science background. Homework and laboratories use computer-based systems modeling and analysis, and includes a group presentation.

**EARTH 172 / CLIMATE 172 /  
ENVIRON 111 / GEOG 111. Climate  
Change and Sustainability:  
Environmental Challenges of the 21st  
Century**

*(4). (ID). (BS). (QR/2). May not be repeated for credit. Satisfies the geography requirement for State of Michigan certification for social studies teachers. W.*

This course explores impacts of modern human society on land, ocean, and atmosphere, considering all aspects relevant to a sustainable future. Throughout the semester, students work on a sustainability pledge to apply class material to everyday life.

**EARTH 201 / GEOG 201. Introduction  
Physical Geography**

*(4; 3 in the half-term). (NS). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in GEOSCI 144 or 202 or EARTH 144 or 202 or 219 (or any combination thereof). Students who have completed EARTH 331 or GEOSCI 331 will receive only 3 credits. F.*

This introduction to physical geography emphasizes the nature and dynamics of the Earth system including the atmosphere, hydrosphere and solid Earth, along with their interactions. Topics include weather systems, climate change, biogeography, soils, plate tectonics, erosion, fresh water resources, landforms, and ice ages, all of which are discussed in the context of Earth Systems Science.

**EARTH 202 / ENVIRON 202.  
Introduction to Earth and  
Environmental Sciences in the Rockies**

*(5). (NS). (BS). May not be repeated for credit. No credit granted to those who have completed GEOSCI 201. No credit granted to those who have completed or are enrolled in EARTH 201 or ENVIRON 209 or GEOG 201. Su at Camp Davis, Wyoming. May not be taken pass/fail.*

This course examines the principles of Earth and Environmental Sciences through field-based studies at the UM Camp Davis Rocky Mountain Field Station in Wyoming.

**EARTH 205. How the Earth Works: The  
Dynamic Planet**

*(2). (NS). (BS). May not be repeated for credit. No credit granted to those who have completed GEOSCI 116, 117, 119, 120, or 146 and no credit granted to those who have completed or are enrolled in EARTH 116, 117, 119, 120, or 146 or ENVIRON 116, 117, 119 or 120. No credit granted to those who have completed both GEOSCI 105 and 107 or EARTH 105 and 107 (or any combination thereof). Those with credit for one of GEOSCI 105 and 107 or EARTH 105 and 107 (or any combination thereof) may only elect EARTH 205 for 1 credit.*

**EARTH 206 / ENVIRON 206. How the  
Earth Works: The Water Cycle and  
Environment**

*(2). (NS). (BS). May not be repeated for credit. No credit granted to those who have*

*completed GEOSCI 116 or 117 or 119 or 120, and no credit granted to those who have completed or are enrolled in EARTH 116 or 117 or 119 or 120 or ENVIRON 116 or 117 or 119 or 120. Those with credit for GEOSCI 109 or EARTH 109 may only elect EARTH 206 or ENVIRON 206 for 1 credit.*

Earth surface processes as they affect water and the global biogeochemical environment. Quantifies rates of water and elemental exchange between major Earth surface reservoirs. Surface rock weathering and geochemical exchange described.

**EARTH 219 / ENVIRON 229.**

**Introduction to Environmental Science**

*(4). (NS). (BS). May not be repeated for credit. No credit granted for those who have completed or are enrolled in EARTH 201/GEOG 201/ENVIRON 209, EARTH/ENVIRON 202, EARTH/ENVIRON 284.*

This course emphasizes the scientific processes and principles behind global environmental issues. Topics include global change, human population, ecosystems, biogeography, biodiversity, soil-water-air pollution, environmental health, energy systems and their environmental consequences, and environmental policy.

**EARTH 222 / ENVIRON 232.**

**Introductory Oceanography**

*(3). (NS). (BS). (QR/2). May not be repeated for credit. No credit granted to those who have completed or are enrolled in AOSS 203.*

The oceans of earth, their circulation, biology, chemistry, geology of the sea floor, and marine resources. Emphasis is on understanding the oceans as a single ecosystem.

**EARTH 223 / ENVIRON 233.**

**Introductory Oceanography, Laboratory**

*(1). (NS). (BS). (QR/2). May not be repeated for credit.*

One three-hour lab each week.

**EARTH 230 / ENVIRON 230. Natural and Environmental Hazards: Uncertainties, Risks, and Forecasts**

*(3). (NS). (BS). May not be repeated for credit.*

Society faces considerable risk of future natural and environmental disasters. There is uncertainty in assessments of risks to, or forecasts of, future disasters. This class will focus on the science of natural and environmental hazards, including the scientific process, causes of these hazards, and forecasting of future risk.

**EARTH 238 / ALA 238 / ENVIRON 238 / HISTORY 238 / MIDEAST 278. Zoom: A History of Everything**

*(4; 3 - 4 in the half-term). (ID). May not be repeated for credit.*

This interdisciplinary course in "Big History" integrates the human story with its terrestrial and cosmic surroundings. It uses the notion of "powers of ten" to shift perspectives in space and time. It proceeds logarithmically, "nesting" each topic (and disciplinary perspective) within its predecessor, from astrophysics to history and back again.

**EARTH 255 / ASTRO 255. Earth and Space Sciences for Elementary School Educators**

*High school mathematics and physics recommended. (3). (NS). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in ASTRO 101 or 115, or EARTH 171(or GEOSCI 171) or AOSS 171 or BIOLOGY 110 or ENSCEN 171 or ENVIRON 110.*

This course covers introductory Earth and Space Sciences for undergraduate students

specializing in Elementary Education. It covers the discovery of the place of the Earth in the universe and its origin; discusses plate tectonics, volcanoes, and earthquakes; and addresses the major components of the climate system (atmosphere, oceans, and cryosphere).

**EARTH 259 / ENVIRON 259. Earth's Future and a Resilient Human Society**

(4). (NS). (BS). *May not be repeated for credit. No credit granted to those who have completed or are enrolled in EARTH 111 or 159.*

Human society needs to prepare for and adapt to a changing environment, growing demands for resources and the impacts of natural processes. Planning this future must reconcile social, economic and cultural expectations, by deploying technological and social solutions as adaptation and mitigation strategies for human communities on regional and global scales.

**EARTH 262 / ENVIRON 262. Plants and People**

(3). (NS). (BS). *May not be repeated for credit.*

This course examines the relationship between plants, people, and the environment; focusing on economically important plants. Plants are important for survival, aesthetic, and environmental purposes and have had significant impacts on human history, society, and environment. Today plants are critical for our future. Topics include foods, fibers, drugs, and ornamentals.

**EARTH 277. Water in the 21st Century**

(3). (NS). (BS). *May not be repeated for credit.*

Water sustainability is the number one challenge of the 21st century. Freshwater scarcity is likely to worsen as global climate change intensifies and population growth

continues. This class provides students with a solid understanding of the global water cycle and brings students' awareness to the most current challenging water issues.

**EARTH 284 / ENVIRON 284.**

**Environmental Geology**

(4). (NS). (BS). *May not be repeated for credit. No credit granted to those who have completed GEOSCI 148, and no credit granted to those who have completed or are enrolled in EARTH 148. Those with credit for GEOSCI 147 or EARTH 147 may elect EARTH 284 or ENVIRON 284 for only 3 credits.*

Deals with interactions between people and Earth. It begins with an introduction to geologic materials and processes and goes on to specific topics such as soil, surface and groundwater, natural hazards (volcanism, landslides, earthquakes, floods, coastal processes), geomedicine, and waste disposal.

**EARTH 296. Topics in the Earth and Environmental Sciences**

(1 - 5). (NS). (BS). *May be elected twice for credit.*

A course on topics in Earth and environmental sciences. Content varies by term and instructor.

**EARTH 299. Independent Study and Research**

*Consent of instructor required. (1 - 6). (INDEPENDENT). May be repeated for a maximum of 12 credits. A maximum of one credit of research or independent study (EARTH 299, 489, 490, 494, 498, 499) can be used for electives for the earth and environmental sciences concentration.*

Undergraduate research in Earth and Environmental Sciences for students with less than junior standing.

**EARTH 305. Earth's Surface and Sediments**

*An introductory geological sciences laboratory course. (4). (NS). (BS). May not be repeated for credit. F.*

Properties of sediments and their origin, transportation, desposition, lithification, and diagenesis followed by ecology and environmental analysis, paleoecology, facies analysis, and an introduction to stratigraphic methods and principles.

**EARTH 309 / ENVIRON 309. GIS Explorations of the Past, Present, and Future**

*General computer experience is required, including word processing, spreadsheets, and presentations. (3). (ID). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in ENVIRON 339: GIS Explorations: Past, Present and Future at the University of Michigan Biological Station (UMBS).*

This course uses geographic information systems (GIS) to help understand and analyze environmental problems as well as spatial questions in the natural sciences, social sciences, and humanities. A hands-on approach is used to demonstrate GIS principles using a wide variety of examples.

**EARTH 313 / EEB 313. Geobiology**

*EARTH (GEOSCI) 119 or BIOLOGY 171 or CHEM 130 or permission of instructor. (4). (BS). May not be repeated for credit.*

This course addresses several core geobiological themes in two very different worlds, the microbial world and the vertebrate world. Themes include the coevolution of the biosphere and geosphere, major evolutionary innovations and events, diversity of life and metabolism, biomechanics, and biogeography.

**EARTH 314. Global and Applied Geophysics**

*MATH 115 or equivalent. (Prerequisites enforced at registration.) Introductory algebra-based physics. (4). (BS). May not be repeated for credit. May not be taken pass/fail.*

This course covers the use of geophysical methods for exploration of the shallow subsurface, as is used in oil and mineral exploration, search for water, and environmental problems. We discuss exploration techniques based on gravity, electromagnetics and elastic wave propagation. Lab exercises include discussion and hands-on experience with data collection techniques (using geophysical equipment on campus), data interpretation, and computer modeling.

**EARTH 315. Earth Materials**

*CHEM 130 or CHEM 210 or CHEM 230. (Prerequisites enforced at registration.) (4). (BS). May not be repeated for credit.*

General survey of properties of inorganic solids including elementary crystallography and crystal chemistry, with emphasis on application to mineralogical and geological problems. Laboratory study of mineral properties and an introduction to optical properties of the more important minerals. Field trip required.

**EARTH 320 / CLIMATE 320 / SPACE 320. Earth Systems Evolution**

*MATH 115, MATH 116; (C or better). (3). (BS). May not be repeated for credit.*

Introduction to the physics and chemistry of Earth and space. Gravitational energy, radiative energy, Earth's energy budget, and Earth tectonics are discussed along with chemical evolution and biogeochemical cycles. The connections among the carbon cycle, silicate weathering, and the natural greenhouse effect are discussed.



**EARTH 321 / CLIMATE 321 / SPACE 321. Earth Systems Dynamics**

*CLIMATE/SPACE 320; Preceded or accompanied by MATH 215 and MATH 216. (3). (BS). May not be repeated for credit.*

This course will describe the major wind systems and ocean currents that are important to climate studies. The primary equations will be developed and simple solutions derived that will explain many of these motions. The relations among the dynamics and other parameters in the climate system will be illustrated by examples from both paleo and present day systems.

**EARTH 323 / CLIMATE 323 / SPACE 323. Earth System Analysis**

*(4). May not be repeated for credit.*

Introduction to the analysis of Earth and Atmospheric Science Systems. Topics include linear systems, harmonic analysis, sampling theory and statistical error analysis. Lectures emphasize underlying mathematical concepts. Labs emphasize application of mathematical methods to analysis of field data in a computer programming environment. Applications include turbulent air motion in the planetary boundary layer, cloud and precipitation microphysical composition, oceanic wave propagation, stratospheric ozone depletion and satellite remote sensing.

**EARTH 325 / ENVIRON 325. Environmental Geochemistry**

*Introductory chemistry. (4). (NS). (BS). May not be repeated for credit.*

This course deals with the geochemistry of our environment. It focuses on the geochemistry of the lithosphere, hydrosphere and atmosphere and the ways in which they affect the biosphere. Applications of these principles to present-

day problems in environmental geochemistry are discussed.

**EARTH 331. Climate and Climate Change**

*A working knowledge of high school algebra and physical sciences. (4). (NS). (BS). May not be repeated for credit. Those with credit for GEOSCI 111 or 144 or 201 or EARTH 111 or 144 or 201 or GEOG 201 or ENVIRON 209 may only elect EARTH 331 for 3 credits.*

This course examines the physical and chemical processes influencing Earth's climate and the methods of quantifying past and present climate change. Emphasis is placed on understanding the mechanisms of climate change from ice ages through the near future. The evidence of human-caused changes in climate is also discussed. Students with interests in global change and the environment are encouraged to enroll. A background in college science is not required.

**EARTH 333 / ENVIRON 333. The Inexhaustible Seas? Marine Resources and Environmental Issues**

*EARTH (GEOSCI) 116, 119, 125, 120, 222, or 284. (4). (NS). (BS). May not be repeated for credit. No credit granted to those who have completed GEOSCI 154, and no credit granted to those who have completed or are enrolled in EARTH 154.*

This course explores the mineral, energy and food resources of the ocean and environmental impacts that arise from the exploitation of these resources. We discuss conflicts in our competing uses of the ocean and its resources. We also examine both the popular and scientific literature surrounding these issues.

**EARTH 344 / ENVIRON 344. Sustainable and Fossil Energy: Options and Consequences**

*Consent of department required. At least*

*one previous course in physical sciences or engineering. (4 in the half-term). (NS). (BS). May not be repeated for credit. Su at Camp Davis, Wyoming. May not be taken pass/fail.*

This course introduces concepts and environmental consequences of sustainable and fossil energy sources. Students conduct hands-on experiments using alternate energy systems at Camp Davis. In addition, the class travels throughout Wyoming and Idaho visiting and investigating facilities important for power generation.

**EARTH 350 / CLIMATE 350 / SPACE 350. Atmospheric Thermodynamics**  
*MATH 216or256or286or316 (C>). (Prerequisites enforced at registration.) (3). May not be repeated for credit.*

Fundamentals of thermodynamics are presented, including the First, Second and Third Laws, ideal gases, adiabatic processes, phase changes, vapor pressure, humidity, and atmospheric stability. The Kinetic Theory of Gasses provides a molecular perspective on the various forms of atmospheric water substance and on macroscopic phenomenology in general.

**EARTH 351. Earth Structure**  
*One introductory geological sciences laboratory course. (4). (NS). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in EARTH 451 or GEOSCI 451. W.*

Geological structures of the lithosphere and introduction to global tectonics. Three hours lecture, one laboratory weekly. Topics include: folding, faulting, stress, strain, rheology, deformation mechanisms, whole-earth structure, plate tectonics.

**EARTH 370 / SPACE 370. Solar-Terrestrial Relations**  
*MATH 216 and PHYSICS 240. (4). May not be repeated for credit.*

Introduction to solar terrestrial relations with an overview of solar radiation and its variability on all time-scales. The effects of this variability on the near-Earth space environment and upper atmosphere are considered, as well as effects on the lower and middle atmosphere with connections to weather and climate. Subjects are approached through extensive data analysis, including weekly computer lab sessions.

**EARTH 380 / ENVIRON 380. Natural Resources, Economics, and the Environment**

*No previous courses in Geology or other sciences are required. (4; 3 - 4 in the half-term). (NS). (BS). (QR/2). May not be repeated for credit.*

This course deals with natural resource-related challenges in a complex society. The course discusses the origin, distribution, and remaining supplies of natural resources, including fertilizers, metals and fossil fuels, in terms of the economic, engineering, political, and environmental factors that govern their recovery, processing, and use. Topics covered in the course include nuclear waste disposal, strip mining, continent-scale water transfers, mineral profits and taxation, and estimation of remaining mineral reserves.

**EARTH 381 / CLIMATE 380 / SPACE 380. Introduction to Atmospheric Radiation**  
*MATH 216or256or286or316 (C>). (Prerequisites enforced at registration.) (3). May not be repeated for credit.*

Basic concepts and processes of radiative transfer including radiometric quantities, electromagnetic spectrum, absorption, emission, scattering. The physics laws governing these processes including the Planck Law and the Kirchhoff Law. Radiative properties of atmospheric

constituents. Reflection and refraction. Introductory-level descriptions of relevant applications in atmospheric sciences and climate physics.

**EARTH 396. Topics in the Earth and Environmental Sciences**

(1 - 5). (NS). (BS). May be elected twice for credit.

A course on topics in Earth and environmental sciences. Content varies by term and instructor.

**EARTH 401 / CLIMATE 401. Geophysical Fluid Dynamics**

CLIMATE 323, SPACE 323, or EARTH 323 (or GEOSCI 323); MATH 215 and 216 and PHYSICS 240. (3). May not be repeated for credit.

Dynamics of the oceans and atmosphere. Equations of motion in spherical coordinates, beta-plane approximation, wave properties in the oceans and atmosphere.

**EARTH 408 / ENVIRON 403.**

**Introduction to GIS in the Earth Sciences**

An introductory geology or environmental sciences course (EARTH 116, 119, 120, 201, 202, 219 or 284) and one math course or a statistics course (MATH 115, 116, 120, 121, 156, 175, 176, 185, 186, 295, 296, STATS 150, 180, 250, 280). (Prerequisites enforced at registration.) Although previous GIS experience is not required, students are expected to be familiar with desktop and mobile computing, and to be comfortable with at least one quantitative software program (Matlab, Excel, Mathematica, or R, as examples). (3). (BS). May not be repeated for credit.

This course provides an understanding of Geographic Information Systems and their application in the earth sciences. Through lectures and lab exercises students are

exposed to GIS theory, applications and software.

**EARTH 409 / CLIMATE 410. Earth System Modeling**

CLIMATE 320, CLIMATE 321, SPACE 320, SPACE 321. (4). (BS). May not be repeated for credit.

Introduction to Earth System Modeling; Discussion of energy balance models, carbon cycle models, and atmospheric chemistry models with multiple time scales; Methods for numerical solution and practice building and analyzing results from models.

**EARTH 411 / CLIMATE 411. Cloud and Precipitation Processes**

CLIMATE 350, SPACE 350, MATH 216. (3). May not be repeated for credit.

The special nature of water substance; nucleation of phase changes in the free atmosphere; the structure and content of clouds; the development of physical characteristics of precipitation; and the dynamics of rain systems.

**EARTH 412. Geochemistry of the Solid Earth**

EARTH (GEOSCI) 315. (Prerequisites enforced at registration.) (4). (BS). May not be repeated for credit. Rackham credit requires additional work.

Principles of partial melting, crystallization, magma eruption, and responses of deep-seated rocks to changes in pressure and temperature. The unifying theme is the role of magmatism, volcanism, and metamorphism in the formulation and evolution of oceanic and continental crust within a plate tectonic context. Microscopic study of rock suites with the polarizing microscope in the lab.

**EARTH 413. Geomicrobiology: How Microorganisms Shape Earth and Environment**

(3). (BS). May not be repeated for credit. Rackham credit requires additional work.

This course examines how and why microorganisms (primarily bacteria and archaea) drive geochemical processes. Emphasis is placed on the integration of cellular physiology/metabolism with cycling and transformation of elements. Topics include biomineralization, mineral dissolution and weathering, and critical evaluation of molecular biogeochemical approaches.

**EARTH 414 / CLIMATE 414. Weather Systems**

*CLIMATE 350, SPACE 350, CLIMATE 401 or CLIMATE 551. (3). May not be repeated for credit.*

Introduction to the basic characteristics, thermodynamics, and dynamics of atmospheric weather systems on Earth and other planets. The students are exposed to observations of weather systems while reviewing non-dimensional analysis, dynamics and thermodynamics. Weather systems on earth are compared to that of other planets and analytical tools are used to gain insights into their basic physics.

**EARTH 417. Geology of the Great Lakes**

*An introductory course in Geology (EARTH 116, 119, 120 or 205/206/118), BIOLOGY 171 or 172, or Oceanography (EARTH 222/223), OR permission of instructor. (2). (BS). May not be repeated for credit.*

Geologic history of the late-glacial and post-glacial Great Lakes of North America, with emphasis on evaluation of evidence. Related topics such as lake circulation, bedrock setting, and physical environment of sedimentation, and paleoclimate records are examined.

**EARTH 418. Paleontology**

*An introductory course in Geology (EARTH 116, 119, 120 or 205/206/118) or*

*BIOLOGY 171 or 172. (3). (BS). May not be repeated for credit. F.*

Introduction to the principles, methods of analysis and major controversies within paleontology; familiarization with the fossil record and its use in problems involving evolutionary biology, paleoecology, and general earth history.

**EARTH 419. Paleontology Laboratory**

*Prior or concurrent enrollment in EARTH (GEOSCI) 418. (1). (BS). May not be repeated for credit. F.*

This laboratory course involves observation, analysis and interpretation of fossil material. Its goal is to give students experience dealing with paleontological problems and to develop a familiarity with the morphology, systematics, ecology, and evolutionary history of important groups of fossil organisms.

**EARTH 421 / CLIMATE 421 /**

**ENVIRON 426. Introduction of Physical Oceanography**

*MATH 115 and 116, and an introductory science course. (3). (BS). May not be repeated for credit. Rackham credit requires additional work.*

This course examines the fundamentals of physical oceanography; the physical properties of the ocean and water masses; circulation of the atmosphere; wind-driven and buoyancy-driven ocean circulation; tides; surface and internal waves; eddies; and mixing.

**EARTH 422. Principles of Geochemistry**

*EARTH (GEOSCI) 305, 310, 315 and CHEM 125/126/130. (3). (BS). May not be repeated for credit. W.*

This course explores how geochemical methods can unravel and provide insight into the origin and chemical evolution of the earth and its parts (core, mantle, crustal

rocks). Topics covered include: stable isotope and trace element analysis; radioactive age dating; hydrothermal solutions, and metamorphic and igneous systems.

**EARTH 423 / CLIMATE 422. Boundary Layer Meteorology**

*CLIMATE 350, SPACE 350 or equivalent. (4). May not be repeated for credit.*

This course explores processes in the atmospheric boundary layer, which plays an important role in the exchange of energy, mass and momentum between land and atmosphere. Topics include applications of governing atmospheric equations, atmospheric turbulence, turbulent kinetic energy, the surface energy balance, and the collection and analysis of field flux tower data.

**EARTH 429. Computational Mineralogy**

*(4). (BS). May not be repeated for credit. Rackham credit requires additional work.*

This course will introduce molecular simulation techniques to simulate the atomic and electronic structure of bulk minerals and mineral surfaces. Fundamental properties such as structure, thermodynamics, electronic and magnetic behavior, reactivity and dynamic processes will be studied. These are important in environmental mineralogy, petrology, and in environmental and technical applications.

**EARTH 431 / ENVIRON 431. Terrestrial Biomes Past, Present and Future**

*BIOLOGY 171, or one of EARTH (GEOSCI) 116, 119, 120, or 205/206; or Graduate standing. (Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit. Rackham credit requires additional work.*

As the major organizing feature of terrestrial ecosystems, biomes are dependent on the organisms, ecosystems,

and climate of the planet. This course surveys important biological innovations, examples of past ecosystems from the fossil record, the relevance of climate to terrestrial environments, and the changing world of today and tomorrow.

**EARTH 432. Plant Paleobiology**

*BIOLOGY 171 or GEOSCI 116, or 119, or 120, or 205/206, or graduate standing. (Prerequisites enforced at registration.) (4). (BS). May not be repeated for credit. Rackham credit requires additional work.*

Plants have played important roles in the terrestrial biosphere for over 500 million years. This course explores the evolution and ecology of plants through this time, including the transition to land, early plant life, origin of major groups and plant structures, and the impact plants have on shaping our planet.

**EARTH 433. Field Studies in Economic Geology**

*Permission of instructor. (1 - 4). (BS). May be repeated for credit.*

**EARTH 435. Field Studies in Mineralogy, Petrology, and Geochemistry**

*Permission of instructor. (1 - 4). (BS). May be repeated for credit.*

**EARTH 436. Field Studies in Stratigraphy, Paleontology, and Sedimentology**

*Permission of instructor. (1 - 4). (BS). May be repeated for credit.*

**EARTH 437. Evolution of Vertebrates**

*EARTH (GEOSCI) 125 or BIOLOGY 162 or 171 or 172. (4). (BS). May not be repeated for credit.*

Lectures and laboratory exercises on the anatomy, ecology, and phylogeny of fishes, amphibians, and reptiles in the fossil record, with emphasis on adaptation and evolution.

**EARTH 440. Geological Field Methods**

*EARTH 305 and 351. (Prerequisites enforced at registration.) (5). (BS). May not be repeated for credit. Satisfies the Earth and Environmental Sciences concentration Field Experience requirement. Su at Camp Davis, Wyoming. May not be taken pass/fail. Rackham credit requires additional work.*

In this broad, in-depth field course, students are trained to recognize distinct lithological units and their 3-D relationships. Mapping projects include deformed and faulted sedimentary, regional metamorphic, and igneous complexes. Digital mapping techniques and modern geophysical tools supplement traditional field observations.

**EARTH 442 / ENVIRON 442. Earth Surface Processes and Soils**

*MATH 115 and CHEM 130. (4). (BS). May not be repeated for credit. F.*

Study of processes resulting in landforms on the Earth's solid surface and the formation of soils on these landforms. Emphasis includes present-day processes as well as the evolution of landforms over geologic time. Several required field trips will examine landforms and processes in southern Michigan.

**EARTH 444. Analytical Paleobiology**

*Completion of an introductory paleontology course such as EARTH 418, or evolutionary biology such as EEB 390. (4). (BS). May not be repeated for credit. Rackham credit requires additional work.*

This course emphasizes theory, quantitative methods, and hypothesis testing as applied to paleobiological questions. Topics include phylogenetic inference, morphometrics, evolutionary rates, biomechanics, and functional morphology. Laboratories provide exposure to introductory programming and relevant software. The

course is offered at a level appropriate for advanced undergraduates or beginning graduate students.

**EARTH 446 / ENVIRON 446.****Paleoclimatology**

*MATH 115 and 116 and EARTH 305, or permission of instructor. (4). (BS). May not be repeated for credit. Rackham credit requires additional work.*

This course examines climate change throughout Earth's history. Topics include the following: description of Earth's climate history, physics of the Earth's climate, methods of reconstructing past climate and climate forcings, and biological causes and consequences of climate change.

**EARTH 449. Marine Geology**

*EARTH (GEOSCI) 222/223 or introductory physical geology (EARTH (GEOSCI) 116, 117, 120 or 205/206/118). (3). (BS). May not be repeated for credit.*

**EARTH 450 / ENVIRON 450. Ecosystem Science in the Rockies**

*Introductory Geology [EARTH 119&118 or 116 or 120, or ENVIRON 119&118 or 116], AND (either General Ecology [ENVIRON 281 or BIOLOGY 281] or Introductory Environmental Science [EARTH 201 or 202 or 219, or ENVIRON 209 or 202 or 229]). (Prerequisites enforced at registration.) At least two courses from the following list: Environmental Geochemistry EARTH 325), Geobiology (EARTH 313), Earth Materials (EARTH 315), Earth's Surface and Sediments (EARTH 305). (5 in the half-term). (NS). (BS). May not be repeated for credit.*

This is a 4-week course taught at Camp Davis, WY using the Rocky Mountains as a field laboratory to gain field-based knowledge and experience while developing an understanding of geological and meteorological processes and the

distribution and function of grasslands, forests, and alpine ecosystems of the region. This course is designed for majors in geological and environmental sciences, natural resources and other students who have a general interest in this subject matter.

**EARTH 451. Introduction to Structure and Tectonics**

*Permission of Instructor. (3). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in GEOSCI 351.*

Interpretation of geological structures in the Earth's crust, and introduction to global plate tectonics. This course is aimed at all who have an interest in the Earth's physical properties beyond the introductory level, which may include graduate students.

**EARTH 454 / CLIMATE 440.**

**Meteorological Analysis Laboratory**  
*CLIMATE 350, SPACE 350, CLIMATE 401. (4). May not be repeated for credit.*

This course provides an introduction into the analysis of both surface-based and remotely-sensed meteorological data. The development and application of operational numerical forecast models will be discussed. Techniques for the prediction of both synoptic and mesoscale meteorological phenomena will also be presented.

**EARTH 455. Determinative Methods in Mineralogical and Inorganic Materials**

*One term of Chemistry and Physics. (4). (BS). May not be repeated for credit. W.*

**EARTH 457 / CLIMATE 451 / ENSCEN 451. Atmospheric Dynamics I**

*CLIMATE 401 or MATH 450. (4). (BS). May not be repeated for credit.*

Quasi-geotropic energetics; fronts; the mean circulation; planetary and equatorial waves; overview of the dynamics of the

middle atmosphere; wave-mean flow interaction; spectral methods; and tropical meteorology.

**EARTH 460 / ENVIRON 460.**

**Paleobiology and Paleoenvironments**

*At least two courses from following list: EARTH 305, EARTH 313, EARTH 418. (5). (BS). May not be repeated for credit. Rackham credit requires additional work.*

This course will help students to understand Earth's biological and environmental evolution over geologic time. Through field-based case studies, students will learn an array of observational and analytical skills drawing from, but not limited to, sedimentology, stratigraphy, paleobotany, paleozoology, paleoclimate, paleoecology.

**EARTH 465 / CHEM 467 / CLIMATE 467 / ENSCEN 467 / ENVIRON 467.**

**Biogeochemical Cycles**

*MATH 116, CHEM 210, and PHYSICS 240 (or 260). (4). (BS). May not be repeated for credit. F, W.*

The biogeochemical cycles of water, carbon, nitrogen, and sulfur; the atmosphere and oceans as reservoirs and reaction media; the fate of natural and man-made sources of carbon, nitrogen, and sulfur compounds; the interactions among the major biogeochemical cycles and resultant global change; greenhouse gases, acid rain and ozone depletion.

**EARTH 467. Stratigraphy and Basin Analysis**

*One of the following: EARTH 116 or ENVIRON 116; or GEOSCI 119 and 118, or ENVIRON 119 and 118; or EARTH 120 or ENVIRON 120 or EARTH 201 or GEOG 201 or ENVIRON 209; or EARTH 205 and 206 (or ENVIRON 206) and 207; or graduate standing. (Prerequisites enforced at registration.) EARTH 305, 310, and 351. (4). (BS). May not be repeated for credit. F.*

This course focuses on continental and marine depositional environments and on sedimentary basin filling processes, including an overview of differences between various tectonic settings. Case studies will be drawn from literature examples and from real data.

**EARTH 468. Data Analysis, Inference, and Estimation**

*MATH 115. (Prerequisites enforced at registration.) Knowledge of, or willingness to learn, a programming language (e.g., Matlab, Mathematica). (3). (BS). (QR/2). May not be repeated for credit.*

This course introduces students to methods for the statistical description of data and their uncertainties, and the inference and estimation of indirect information. Emphasis is placed on conceptual understanding and practical application. Topics include error propagation, cluster analysis, Markov Chain Monte Carlo, least squares regression, robust regression, and model selection.

**EARTH 474 / CLIMATE 474. Ice Sheets, Glaciers and Climate Change**

*MATH 115 and 116. (3). May not be repeated for credit.*

They dynamics and mass balance of ice sheets and glaciers introduced along with mathematical theories describing how ice sheets and glaciers flow and current methods of observation.

**EARTH 475 / CLIMATE 475 / ENSCEN 475. Earth System Interactions**

*Senior standing in science or engineering. (4). (BS). May not be repeated for credit.*

Students will work on open-ended research problems with mathematical models from Earth System Science. The models may include, for example, surface characteristics, hydrology, solar-land-

ocean-atmosphere exchanges, and space-based observations. Numerical experiments will promote further understanding and interpretation of earth system interactions, team building, and scientific communication.

**EARTH 477 / ENVIRON 479.**

**Hydrogeology**

*MATH 116; and High school knowledge of PHYSICS, CHEMISTRY, and EARTH (GEOSCI) or equivalent. (4). (BS). May not be repeated for credit.*

Introduction to physical hydrogeology with particular emphasis on processes and direct applications to geological settings and problem solving. The hydrologic cycle, physical rock framework, and properties of aquifer systems are described and quantified. Groundwater flow and mass transport equations are covered, as well as pump test design and analysis. Natural tracers and groundwater dating are discussed.

**EARTH 478. Geochemistry of Natural Waters**

*College Chemistry. (4). (BS). May not be repeated for credit.*

Chemical compositions of natural waters, emphasizing both chemical and biogeochemical processes operating near Earth's surface; equilibrium vs. kinetic controls on chemical weathering; solute sources and mass balances in watersheds, groundwater, and river/ocean mixing zones. Hands-on field and lab experience provides training in methods of applied geochemistry.

**EARTH 483. Geophysics: Seismology**

*Prior or concurrent election of MATH 215 and PHYSICS 240 (or 260). (4). (BS). May not be repeated for credit.*

**EARTH 489. Geological Sciences Honors**

*Consent of instructor required. (1 - 6). (BS).*



*(INDEPENDENT). May be repeated for a maximum of 6 credits. A maximum of one credit of research or independent study (EARTH 299, 489, 490, 494, 498, 499) can be used for electives for the earth and environmental sciences concentration.*

Geological Sciences Honors research or thesis writing.

**EARTH 490. Geological Sciences Honors**  
*Consent of instructor required. (1 - 6). (BS). (INDEPENDENT). May be repeated for a maximum of 6 credits. Continuing Course. Y grade can be reported at end of the first-term to indicate work in progress. At the end of the second term of EARTH 490, the final grade is posted for both term's elections. F, W, Sp. A maximum of one credit of research or independent study (EARTH 299, 489, 490, 494, 498, 499) can be used for electives for the earth and environmental sciences concentration.*

Geological Sciences Honors research for thesis writing.

**EARTH 494. Experiential Learning in the Earth Sciences**  
*Consent of instructor required. Junior or senior standing; and one of the following: EARTH (GEOSCI) 116, 119 and 118, 120, 201, 205/206/207, 222 and 223, 284 or ENVIRON 116, 119 and 118, 120, 209, 232 and 233, 284 or GEOG 201. (1 - 4). (BS). (EXPERIENTIAL). May be repeated for a maximum of 8 credits. A maximum of one credit of research or independent study (EARTH 299, 489, 490, 494, 498, 499) can be used for electives for the earth and environmental sciences concentration. Offered mandatory credit/no credit. Rackham credit requires additional work.*

Students work with a faculty advisor on an off-campus project or internship relevant to their field of study.

### **EARTH 495. Methods in Research for Natural Sciences**

*Consent of department required. (1). (BS). May not be repeated for credit. Offered mandatory credit/no credit. Rackham credit requires additional work.*

This course covers the approaches to conducting research in the natural sciences, including the tools and methods of research; the processes for performing research; the mechanisms for communicating research results; and the responsible conduct of research. Meets the NSF/NIH requirements for the responsible conduct of research.

**EARTH 496. Special Topics in the Earth and Environmental Sciences**  
*(1 - 5). (BS). May be elected three times for credit. May be elected more than once in the same term. Rackham credit requires additional work.*

A seminar on topics in Geological Sciences. Content varies by term and instructor.

**EARTH 498. Research or Special Work**  
*Consent of instructor required. (1 - 6). (INDEPENDENT). May be repeated for a maximum of 6 credits. A maximum of one credit of research or independent study (EARTH 299, 489, 490, 494, 498, 499) can be used for electives for the earth and environmental sciences concentration.*

Geological Sciences independent study, research, or special work.

**EARTH 499. Research or Special Work**  
*Consent of instructor required. (1 - 6). (INDEPENDENT). May be repeated for a maximum of 6 credits. A maximum of one credit of research or independent study (EARTH 299, 489, 490, 494, 498, 499) can be used for electives for the earth and environmental sciences concentration. F, W, Sp/Su, Sp, Su.*

Geological Sciences independent study, research, or special work.

**EARTH 515. Tectonics of Oceans and Continents**

*EARTH (GEOSCI) 351. (4). (BS). May not be repeated for credit.*

**EARTH 531. Seminar in Geologic Problems**

*Permission of instructor. (1 - 3). (BS). May be elected three times for credit. May be elected more than once in the same term. Offered mandatory credit/no credit. Rackham credit requires additional work.*

Earth and Environmental Sciences grad level seminar. Content varies by term and instructor.

**EARTH 532. Seminar in Climate, Tectonics, and Surface Processes**

*Permission of instructor. (1 - 2). (BS). May be repeated for credit. May be elected more than once in the same term.*

This seminar discusses the coupling and interactions between climate, tectonics, and Earth surface processes. This interdisciplinary seminar integrates concepts and readings from the fields of paleoclimate, neotectonics, tectonic geomorphology, lithospheric geodynamics, and process geomorphology. Emphasis is placed on learning how to critically analyze various methods, data sets, and arguments presented in the literature. Participants are expected to read and actively discuss current scientific papers.

**EARTH 534. Seminar in Geophysics, Tectonics, or Structure**

*Permission of instructor. (1 - 2). (BS). May be repeated for credit. May be elected more than once in the same term.*

**EARTH 535. Seminar in Mineralogy, Petrology, or Geochemistry**

*Permission of instructor. (1 - 2). (BS). May*

*be repeated for credit. May be elected more than once in the same term.*

**EARTH 536. Seminar in Stratigraphy, Paleontology, or Sedimentology**

*Permission of instructor. (1 - 2). (BS). May be repeated for credit. May be elected more than once in the same term.*

**EARTH 581 / CEE 581. Aquatic Chemistry**

*CHEM 130 and senior or graduate standing. (3). (BS). May not be repeated for credit.*

Chemical principles applicable to the analysis of the chemical composition of natural waters and engineered water treatment systems; covers acid-base, precipitation-dissolution, complexation, and oxidation-reduction reactions; emphasis on graphical, analytical, and computer-speciation methods; presented in the context of contemporary environmental issues including water quality, climate change, and pollution prevention and abatement.

## **Environment and Sustainability (EAS)**

**EAS 409 / EEB 487 / ENVIRON 409.**

**Ecology of Fishes**

*BIOLOGY 162 or 171, 172 and 173. (3 - 4). (BS). May not be repeated for credit.*

Covers physiological, behavioral, and numerical responses of fishes to biotic and abiotic factors; the relationship between fish and the physical, chemical, and biological parameters of major habitat types; adaptations of fish for survival under different constraints.

**EAS 415 / EEB 424 / ENVIRON 415. Behavioral Ecology and Conservation**

## **Biology**

*BIOLOGY 162 or 171 and completion or concurrent enrollment in either ENVIRON 415 or EEB 424 or EAS 415. (4). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in EEB 492.*

This course will focus on the ways environments shape the behavior and life histories of animals. Because environments pose constraints, behaviors have "better" and "worse" impacts on an organism's survival and reproduction. This course will consider hypothesis in five areas.

### **EAS 422 / EEB 440 / ENVIRON 422.**

#### **Biology of Fishes**

*BIOLOGY 162 or 171, 172 and 173. (3). (BS). May not be repeated for credit.*

Lectures cover many aspects of the biology of lower vertebrates known as fishes, including evolution, physiology, functional morphology, phylogeny, biogeography, ecology, and reproduction. The systematic position of fish among vertebrates is discussed and exemplary assemblages exam.

### **EAS 423 / EEB 441 / ENVIRON 423. The Biology of Fishes Laboratory**

*BIOLOGY 162 or 171, 172 and 173. (1). (BS). May not be repeated for credit.*

This lab provides an intro to field methods used in fish biology and fisheries, and examines the diversity of the Michigan ichthyofauna and major groups of would fishes.

### **EAS 430 / EEB 489 / ENVIRON 430. Soil Ecology**

*BIOLOGY 162 or 171 and 172 and 173, and General Chemistry. Concurrent enrollment in ENVIRON 436/EEB 436 and ENVIRON 435/EAS 435 highly recommended. (3). (BS). May not be repeated for credit.*

Soils as central components of terrestrial ecosystems. Major emphasis is placed on physical, chemical, and biological properties and their relationships to plant growth and ecosystem processes.

Understanding is developed using a combination of lectures, field- and lab-based exercises, and individual research.

### **EAS 433 / EEB 433 / ENVIRON 433.**

#### **Ornithology**

*BIOLOGY 171, 172 or 174, and 173, or BIOLOGY 192 and 173; or BIOLOGY 195 & 173. (4). (BS). May not be repeated for credit.*

During the lecture, students have the opportunity to learn about many unique features of birds. In the mandatory lab, students have the opportunity to learn about birds by using museum specimens, and by observing birds on field trips.

### **EAS 436 / EEB 436 / ENVIRON 436.**

#### **Woody Plants: Biology and Identification**

*BIOLOGY 171 or equivalent. (4). (BS). May not be repeated for credit. Rackham credit requires additional work.*

Ecology, systematic and identification of trees, shrubs, and vines are studies in weekly field trips to diverse Michigan ecosystems--including upland, wetland, and floodplain forests. Lectures focus on glacial landscape history, biogeography, and ecology of Michigan forests.

### **EAS 451 / EEB 451 / ENVIRON 451.**

#### **Biology of Mammals**

*BIOLOGY 171, (172 or 174) & 173; or BIOLOGY 192 & 173; or BIOLOGY 195 & 173. (4). (BS). May not be repeated for credit.*

Evolution, distribution, ecology, behavior, anatomy, and classification of mammals, with emphasis on North American species.

**EAS 475 / EHS 588 / ENVIRON 475.  
Environmental Law**

*(3). May not be repeated for credit.*

Introduces students to environmental law and the impact of the legal process on decisions that affect the environment. Topics include common law tort actions, toxic tort actions, statutory controls of pollution and other environmentally harmful activities. Additional areas include administrative agency structure and performance, constitutional rights to environmental quality and more.

**EAS 476 / EEB 476 / ENVIRON 476.  
Ecosystem Ecology**

*General Ecology and a 400-level course in Aquatic or Terrestrial Ecology. (3). (BS). May not be repeated for credit.*

Current theories about the control and function of ecosystems, the approaches and techniques being used to test these theories, and the application of theory to the management and restoration of ecosystems.

**EAS 518 / ENVIRON 438. Wildlife Ecology and Management**

*BIOLOGY 171, plus one Introductory Interdisciplinary Environment course such as ENVIRON 110, ENVIRON 111, or ENVIRON 201. (3). (BS). May not be repeated for credit.*

This course focuses on the ecological processes and conservation management tools relevant to the survival of free-ranging mammal, bird, reptile and amphibian populations. Students will utilize a diversity of approaches ranging from field research to computer exercises to address wildlife ecology, management, and conservation issues. Topics that will be discussed include wildlife habitat assessment, population abundance and density estimates, nutritional ecology, wildlife disease management, as

well as endangered species restoration, both in the US and international context.

**EAS 574 / PUBPOL 519 / RCNSCI 419.  
Sustainable Energy Systems**

*Senior standing; college-level course in Math or Economics or physical science. May not be repeated for credit.*

Assessment of the current energy systems that encompasses resource extraction, conversion processes and end-uses. Sustainability is examined by studying global and regional environmental impacts, economics, energy efficiency, consumption patterns and energy policy.

**EAS 583 / ECON 472. Intermediate Natural Resource Economics**

*EAS 570 or PI. May not be repeated for credit.*

An intermediate level review of Natural Resource Economics. Topics include basic optimization techniques, resource scarcity, cost-benefit analysis, depletion or exhaustible resources, harvesting of renewable resources and common property problems.

## **Economics (ECON)**

**ECON 101. Principles of Economics I**

*High school algebra and geometry. (4; 3 in the half-term). (SS). (QR/2). May not be repeated for credit. ECON 101 and 102 are required as prerequisites to an Economics major and to upper-level courses in Economics. F, W, Sp/Su.*

This course concentrates on microeconomics: how markets function, what markets do well, where markets do not work well, the distribution of income and

wealth, the public sector, international trade, and environmental economics.

**ECON 102. Principles of Economics II**

*ECON 101. (4; 3 in the half-term). (SS). (QR/2). May not be repeated for credit. ECON 101 and 102 are required as prerequisites to an Economics major and to upper-level courses in Economics. ECON 102 should not be taken without having taken ECON 101. F, W, Sp, Su.*

The fundamental concepts and theories of macroeconomics are developed and used to analyze problems of current interest. The major concerns of this course are the determinants of GDP, unemployment, inflation, international trade, and economic growth.

**ECON 108. Introductory Microeconomics Workshop**

*First-year standing and concurrent enrollment in ECON 101. (1). (SS). May be elected twice for credit. May be elected more than once in the same term. Offered mandatory credit/no credit.*

This course is a 1-credit workshop that enriches the experience of introductory economics students. Students may choose among a variety of workshop topics.

**ECON 140. First-Year Seminar in Economics**

*(3). (ID). May not be repeated for credit.*

This First Year Seminar focuses on specific interdisciplinary topics in Economics of current interest. Topics vary each term.

**ECON 195. Seminar in Introductory Economics**

*(3). (SS). May not be repeated for credit.*

This undergraduate seminar focuses on specific topics of current interest in economics. Instructors and topics vary from semester to semester. The course

emphasizes reading, writing, and discussion of economic issues and methods of analysis.

**ECON 208. Intermediate Microeconomics Workshop**

*ECON 101 (concurrent or previous). (1). May be elected twice for credit. May be elected more than once in the same term. Offered mandatory credit/no credit.*

This is a 1-credit workshop that enriches the experience of students interested in economics. Students may choose among a variety of topics.

**ECON 230. Honors Core in Economics**

*Consent of department required. (4). (SS). May be elected twice for credit. May be elected more than once in the same term.*

As part of the Honors Core Curriculum, this course introduces Honors students to the fields, questions and meta-questions, and methodologies of the Social Sciences; in this case, Economics. The course uses both contemporary technology and time-honored methodologies to examine theoretical concepts, problems, and case studies; the course uses a variety of formats and strategies.

**ECON 240. Honors Core Writing in Economics**

*Consent of department required. (4). (SS). May be elected twice for credit. May be elected more than once in the same term.*

As part of the Honors Core Curriculum, this course introduces Honors students to the fields, questions and meta-questions, and methodologies of the Social Sciences; in this case, Economics. The course uses both contemporary technology and time-honored methodologies to examine theoretical concepts, problems, and case studies; the course uses a variety of formats and strategies.

**ECON 251. Introduction to Statistics and Econometrics II**

*With a minimum grade of C, MATH 115, 116, 121, 156, 185, 186, 215, 255, 256, 285, 295, or 296; AND with a minimum grade of C-, either ECON 249, STATS 250, STATS 280, ECON 451, IOE 265, STATS 412, or STATS 426. (Prerequisites enforced at registration.) (4). (BS). (QR/1). May not be repeated for credit. No credit granted to those who have completed or are enrolled in ECON 452 or ECON 454. Students may take only one of the following courses for credit towards graduation: ECON 251, ECON 452, and ECON 454.*

This course is designed to equip students to read empirical literature in economics and other social sciences. Topics include tabular and regression analysis and emphasize multiple regression.

**ECON 259. Excel in Economics and Business Analytics**

*ECON 101 and ECON 102 with a C or better. (Prerequisites enforced at registration.) (3). May not be repeated for credit.*

This course seeks to develop career-ready proficiency with Microsoft Excel by applying knowledge of Principles of Microeconomics to the real-world decision problems in economics, finance and management. Upon completion of the course, students are expected to have developed practical skills with Excel features most often used in the workplace to solve problems in consulting, banking, education, and insurance industries. Examples of topics covered include estimating a demand curve, pricing products by using subjectively determined demand, calculating customer value, evaluating investments by using net present value, and sensitivity analysis.

**ECON 290. Topics in Economics**

*(3). May be repeated for a maximum of 6 credits.*

This course is designed to offer undergraduate students (especially those at the sophomore level) the opportunity to study specific topics of current interest in Economics. Instructors and topics will vary from semester to semester.

**ECON 310. Money and Banking**

*ECON 102 (completed with a minimum grade of C or better). (Prerequisites enforced at registration.) (3). (SS). May not be repeated for credit.*

This course considers the role of money, banking and finance in the economy. At the macroeconomic level, students study how monetary policy influences interest rates, prices and overall economic activity.

**ECON 320. Survey of Labor Economics**

*ECON 101 (completed with a minimum grade of C or better). (Prerequisites enforced at registration.) ECON 102 (unless ECON 101 completed with B or higher). (3). (SS). May not be repeated for credit.*

A one semester introduction to Labor Economics. Topics include labor supply, labor demand, labor market equilibrium, compensating wage differentials, human capital, and labor market discrimination.

**ECON 323. Economics and Gender**

*ECON 101 (completed with a minimum grade of C or better). (Prerequisites enforced at registration.) ECON 102 (unless ECON 101 completed with B or higher). (3). (SS). May not be repeated for credit.*

Examines many aspects of the economic status of women, including their role in the labor market, their relative wages status, the incidence of poverty in female-headed

households, and the importance of historical and demographic trends as determinants of the economic status of women.

**ECON 325. Economics of Education**

*ECON 101 completed with a minimum grade of C or better. (Prerequisites enforced at registration.) ECON 102 (unless ECON 101 completed with a B or higher) and STATS 250. (3). (SS). May not be repeated for credit. No credit in ECON 395: TopicID #12, The Economics of Education (taken prior to Fall 2014).*

This course surveys the economic analysis of education. We study economic theories of educational investment and production, and current policy debates, including standards-based educational reform, teacher incentive pay, and school choice. Students will learn both the theoretical and empirical methods that economists use to study educational practices and reforms.

**ECON 330. American Industries**

*ECON 101 (completed with a minimum grade of C or better). (Prerequisites enforced at registration.) ECON 102 (unless ECON 101 completed with B or higher). (4). (SS). May not be repeated for credit.*

Big business in the United States today. Considerable attention is given to specific industries, including milk, beer, prescription medicines, gasoline, electricity, air transport, and automobiles. Emphasis is placed on establishing the linkages between market structure, business behavior, public policy, and economic performance.

**ECON 340. International Economics**

*ECON 101 (completed with a minimum grade of C or better). (Prerequisites enforced at registration.) ECON 102 (unless ECON 101 completed with B or higher). (3). (SS). May not be repeated for credit.*

A general course with an introduction to the fundamentals of theory, but with major emphasis upon important contemporary policy issues in the field of international economics.

**ECON 360. The Developing Economies**

*ECON 101 (completed with a minimum grade of C or better). (Prerequisites enforced at registration.) ECON 102 (unless ECON 101 completed with B or higher). (3). (SS). May not be repeated for credit.*

Examination of the structure and problems of the low-income nations, analysis of the economic issues of development policy, discussion of the economic relationships between the poor and the rich nations of the world. Designed for students who wish a relatively nontechnical introduction to the problems of economic development.

**ECON 370 / ENVIRON 375.**

**Environmental and Resource Economics**

*ECON 101. (Prerequisites enforced at registration.) (3). (SS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in ECON 471 or 472, or NRE 571 or 583.*

A one-semester introduction to Environmental and Natural Resource Economics. Topics include externalities, unpriced goods, cost-benefit analysis, resource scarcity, exhaustible resource depletion, renewable resource harvesting and common property.

**ECON 395. Topics in Microeconomics and Microeconomic Policy**

*ECON 101 (completed with a minimum grade of C or better). (Prerequisites enforced at registration.) ECON 102 (unless ECON 101 completed with B or higher). (1 - 4). May be repeated for a maximum of 6 credits. May be elected more than once in the same term.*

This course focuses on specific topics of current interest in microeconomics and microeconomic policy. Instructors and topics vary from semester to semester. The course emphasizes applications of microeconomic approaches from a variety of fields to the analysis of real-world microeconomic issues.

**ECON 396. Topics in Macroeconomics and Macroeconomic Policy**

*ECON 102 (completed with a minimum grade of C or better). (Prerequisites enforced at registration.) (1 - 4). May be repeated for a maximum of 6 credits. May be elected more than once in the same term.*

This course focuses on specific topics of current interest in macroeconomics and macroeconomic policy.

**ECON 401. Intermediate Microeconomic Theory**

*MATH 115, 116, 121, 156, 176, 185, 186, 215, 285, 295, or 296; with a grade of C or better. (Prerequisites enforced at registration.) ECON 101 and 102. (4). (BS). (QR/1). May not be repeated for credit. F, W, Sp. Rackham credit requires additional work.*

The subject of this course are households' and firms' economic choices, and the way in which these choices interact in markets. We also discuss ways in which the performance of markets can be evaluated normatively. The course emphasizes theory over data. Empirical methods are taught in other courses. The theories developed in this course form the basis of much empirical work. We use mathematical tools such as graphs, equations, and calculus.

**ECON 402. Intermediate Macroeconomic Theory**

*MATH 115, 116, 121, 156, 176, 185, 186, 215, 285, 295, or 296, (completed with a minimum grade of C or better).*

*(Prerequisites enforced at registration.) It is strongly recommended that students take ECON 401 before 402. (4). (BS). (QR/1). May not be repeated for credit. F, W, Su. Rackham credit requires additional work.*

This course in macroeconomics deals with theory and evidence on broad economic aggregates such as national income, employment, the price level, and the balance of trade. Rigorous analysis is used to understand the forces that determine these economic variables, and how they are affected by public policies. Consideration is given both to the determinants of long-run growth and inflation and to short-run fluctuations in employment and output. It is strongly recommended that students take ECON 401 before ECON 402.

**ECON 409. Game Theory**

*ECON 401 (completed with a minimum grade of C- or better); OR Graduate Standing. (Prerequisites enforced at registration.) MATH 215. (4). (BS). May not be repeated for credit.*

The same principles that govern the strategic interaction of players in parlor games like Chess or Poker turn out to be widely applicable to a whole range of problems in economics, biology, and political science. This course introduces the subject of game theory, exploring the beginnings of the subject using simple illustrative examples, such as bargaining, auctions, duopolistic competition, and wars of attrition.

**ECON 411. Monetary and Financial Theory**

*ECON 402 with a grade of at least C-; or Graduate standing. (Prerequisites enforced at registration.) STATS 250, or ECON 451, or ECON 453, or ECON 251, or ECON 452, or ECON 454. (3). May not be repeated for credit. Rackham credit requires additional work.*



An advanced undergraduate course in finance from a macroeconomic perspective. The course will emphasize market equilibrium, government interventions, the connection between rational expectations in finance with rational expectations in other areas of macroeconomics, and life-cycle saving and portfolio choice, more than a typical microeconomically-oriented finance class, and will emphasize asset pricing less.

**ECON 412. Topics in Macroeconomics**  
*ECON 402 with a grade of at least C-; or Graduate standing. (Prerequisites enforced at registration.) (3 - 4). May be elected twice for credit. May be elected more than once in the same term. Rackham credit requires additional work.*

Course examines specialized topics in macroeconomics presented at an advanced undergraduate level. Topics vary with the interests of the faculty.

**ECON 414. Growth Theory**  
*ECON 401 and 402 with a grade of at least C-; or Graduate standing. (Prerequisites enforced at registration.) (4). May not be repeated for credit.*

The standard of living in a country is determined by its capacity to produce goods and services. Why are some nations richer than others? Why is there economic growth? Will it continue forever? What is the role of social infrastructure in shaping the economic success of a nation? This array of questions will be addressed using the neoclassical and the new growth theory, as well as cutting-edge theories of talent allocation and economics of corruption.

**ECON 418. Business Cycles**  
*ECON 402 with a grade of at least C-; or Graduate standing. (Prerequisites enforced at registration.) (3). May not be repeated for credit. Rackham credit requires additional work.*

**ECON 420. Topics in Labor Economics**  
*ECON 401 with a C- or better. (Prerequisites enforced at registration.) (3 - 4). May be elected twice for credit. May be elected more than once in the same term. Rackham credit requires additional work.*

This course examines specialized topics in labor economics, presented at an advanced undergraduate level. The particular topics vary with the interests of the faculty.

**ECON 421. Labor Economics I**  
*ECON 401 with a grade of at least C-; or Graduate standing. (Prerequisites enforced at registration.) (3). May not be repeated for credit. Rackham credit requires additional work.*

**ECON 422. Personnel Economics**  
*ECON 401 with a grade of at least C-; or Graduate standing. (Prerequisites enforced at registration.) (3). May not be repeated for credit. Rackham credit requires additional work.*

This course applies economic thinking to the personnel decisions faced by modern employers. Topics that will be covered include: -features of the labor contract, and the incentives that these contracts provide to firms as well as to workers; -the need for firms to learn about workers (and the incentives this sometimes provides to include workers to "reveal" what they know about themselves); -the interplay between productivity and pay over a worker's career; -decisions by workers and by firms to initiate and to terminate the employment relationship.

**ECON 429. Migration Economics and Policy**  
*ECON 401 (completed with a minimum grade of C- or better); OR Graduate standing. (Prerequisites enforced at registration.) STATS 250 or ECON 451. (3 - 4). May not be repeated for credit. Rackham credit requires additional work.*

This course focuses on key topics in the economics of immigration. It also considers illegal immigration to the U.S.

**ECON 431. Industrial Organization and Performance**

*ECON 401 with a grade of at least C-; or Graduate standing. (Prerequisites enforced at registration.) (3). May not be repeated for credit. Rackham credit requires additional work.*

**ECON 432. Government Regulation of Industry**

*ECON 401 with a grade of at least C-; or Graduate standing. (Prerequisites enforced at registration.) (3 - 4). May not be repeated for credit. W. Rackham credit requires additional work.*

Analysis of government policies aimed at maintaining desirable economic performance, especially antitrust regulation and public enterprise.

**ECON 435. Financial Economics**

*ECON 401 (completed with a minimum grade of C- or better); or Graduate standing. (Prerequisites enforced at registration.) STATS 250 or ECON 451. (4). May not be repeated for credit. Rackham credit requires additional work.*

The financial economics course teaches students a wide variety of financial instruments from the global marketplace. In taking this course, students develop an understanding of the determinants of the structure of interest rates, the numerous money and capital market instruments and rates, and the determinants of equity and bond values. Financial derivatives, specifically futures and options, are introduced.

**ECON 437. Energy Economics and Policy**

*ECON 401 (completed with a minimum*

*grade of C- or better); OR graduate standing. (Prerequisites enforced at registration.) (3). May not be repeated for credit. Rackham credit requires additional work.*

This course is about energy markets. It is designed to help students make connections between economic concepts and real world regulatory policy questions and issues. The emphasis is on the insights that economic theory and empirical evidence can provide when thinking about the following questions: How do energy markets work? When should the government regulate energy markets? What can the structure of energy markets tell us about how to design and implement effective economic policy?

**ECON 438. Economics of Health Services**

*ECON 401 with a grade of at least C- or graduate standing. (Prerequisites enforced at registration.) (3). May not be repeated for credit.*

This course gives students experience analyzing health management and health policy issues using economic tools. The basic framework of economics is used to analyze the behavior of consumers, insurers, physicians, and hospitals. The tools of economics are applied to both managerial issues such as pricing decisions and policy issues such as the medically uninsured. By the end of the course, students should be able to assess the potential impact of hypothetical changes in the health care system or costs and access as well as.

**ECON 441. International Trade Theory**

*ECON 401 with a grade of at least C-; or Graduate standing. (Prerequisites enforced at registration.) (3). May not be repeated for credit. Rackham credit requires additional work.*

**ECON 442. International Finance**

*ECON 402 with a grade of at least C-; or*

*Graduate standing. (Prerequisites enforced at registration.) (4). May not be repeated for credit. Rackham credit requires additional work.*

This course develops macroeconomic analysis and issues for an open economy. Topics include: the foreign exchange market and the balance of payments; the income-absorption and monetary-asset market approaches to national income determination and the balance of payments; macro stabilization policies and central bank intervention under fixed and floating exchange rates; Eurocurrency markets; monetary integration, and reform of the international monetary system.

**ECON 444. The European Economy**  
*ECON 401 with a grade of at least C-; or graduate standing. (Prerequisites enforced at registration.) (4). May not be repeated for credit. Rackham credit requires additional work.*

The structure, function, and performance of the European economy since World War II. Emphasis is placed on description and analysis of European economic integration. Topics include the origins and institutions of the European Union, creation of the customs union, unification of the internal market, implementation of common policies for agriculture and competition, monetary union, and progress toward social Europe. Students should be prepared to participate frequently in class discussions.

**ECON 445. The Economy of the People's Republic of China**  
*ECON 401 (completed with a minimum grade of C- or better); OR Graduate standing. (Prerequisites enforced at registration.) (3). May not be repeated for credit. Rackham credit requires additional work.*

Analysis of economic organization, structure, system of planning, economic performance, and problems in China after 1949. The first third of the course is devoted to review of development before 1949.

**ECON 451. Intermediate Introduction to Statistics and Econometrics I**

*With a minimum grade of C-, MATH 116, 156, 186, 215, 255, 256 or 285. (Prerequisites enforced at registration.) (4). (BS). (QR/1). May not be repeated for credit. No credit granted to those who have completed or are enrolled in ECON 405 or ECON 453. Students may take only two of the following courses for credit towards graduation: STATS 250 or ECON 249, ECON 451, and ECON 453. May not be included in an Economics minor.*

The purpose of this course is to provide students with an understanding of the principles of statistical inference. Topics include probability, experimental and theoretical derivation of sampling distributions, hypothesis testing, estimation, and simple regression. (Students are advised to elect the sequel, ECON 452).

**ECON 452. Intermediate Introduction to Statistics and Econometrics II**

*With a minimum grade of C-, ECON 451 or ECON 453, or STATS 426. (Prerequisites enforced at registration.) (4). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in ECON 406 or ECON 454, or ECON 251. Students may take only one of the following courses for credit towards graduation: ECON 251, ECON 452, and ECON 454. One (but only one) of ECON 452 and 454 may be counted toward an Economics minor. Rackham credit requires additional work.*

This continuation of ECON 451 is intended to prepare students to conduct empirical research in economics. The classical linear model is developed with special emphasis on the basic assumptions of the model, economic situations in which the assumptions are violated, and alternative estimation procedures that are appropriate in these cases. Computer exercises are used to introduce students to special problems encountered in the analysis of economic data.

**ECON 453. Advanced Introduction to Statistics and Econometrics I**

*MATH 215, 255, or 285 and MATH 217 with a minimum grade of C-; or graduate standing. (Prerequisites enforced at registration.) (3 - 4). (BS). May not be repeated for credit. Students may take only two of the following courses for credit towards graduation: ECON 249, STATS 250, ECON 451, and ECON 453. May not be included in an Economics minor. Rackham credit requires additional work.*

This course covers topics in probability theory and in mathematical statistics at an introductory level, but taught more rigorously than in Economics 451. The course takes a repeated sampling perspective. The main focus of the course is on the foundations of estimation and inference.

**ECON 454. Advanced Introduction to Statistics and Econometrics II**

*ECON 453 with a minimum grade of C-; or graduate standing. (Prerequisites enforced at registration.) (3 - 4). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in IOE 265, or STATS 280, 400, or 412. Students may take only two of the following courses for credit towards graduation: ECON 251, ECON 452, and ECON 454. One (but only one) of ECON 452 and 454*

*may be counted toward an Economics minor. Rackham credit requires additional work.*

This class provides a rigorous, mathematical-based introduction to econometric analysis. The class focuses on econometric theory and applied econometrics employing foundations from probability and mathematical statistics.

**ECON 457. Financial Econometrics**

*ECON 401 and ECON 454, with a minimum grade of C in each; or graduate standing. (Prerequisites enforced at registration.) Students may request permission of instructor if they are taking ECON 454 concurrently or if they took ECON 452 instead of ECON 454. (3). (BS). May not be repeated for credit. Rackham credit requires additional work.*

This course introduces students to basic time methods for analyzing economic and financial data. Students are expected to apply the tools to real data after learning the theory. The open source software "R" is used for all empirical exercises.

**ECON 461. The Economics of Development I**

*ECON 401 with a grade of at least C-; or Graduate standing. (Prerequisites enforced at registration.) (4; 3 in the half-term). May not be repeated for credit. Rackham credit requires additional work.*

Survey of the historical and economic determinants of stagnation and growth in the underdeveloped countries. Emphasis is given to the role of economic analysis and techniques in the planning process.

**ECON 466. Economics of Population**

*ECON 401 completed with a minimum grade of C- or better; or graduate standing. (Prerequisites enforced at registration.) (3). May not be repeated for credit. Rackham credit requires additional work.*

**ECON 472 / EAS 583. Intermediate Natural Resource Economics**

*ECON 401 (completed with a minimum grade of C- or better), OR NRE 570; OR graduate standing. (Prerequisites enforced at registration.) EAS 570 or PI. (3). May not be repeated for credit.*

An intermediate level review of Natural Resource Economics. Topics include basic optimization techniques, resource scarcity, cost-benefit analysis, depletion or exhaustible resources, harvesting of renewable resources and common property problems.

**ECON 481. Government Expenditures**

*ECON 401 with a grade of at least C-; or Graduate standing. (Prerequisites enforced at registration.) (3). May not be repeated for credit. Rackham credit requires additional work.*

Normative theory of public expenditure, expenditure decision-making processes, historical trends and determinants of government expenditures, benefit-cost analysis and other techniques of program evaluation, and intergovernmental fiscal relations.

**ECON 485. Law and Economics**

*ECON 401 with a grade of at least C-; or Graduate standing. (Prerequisites enforced at registration.) (3). May not be repeated for credit. Rackham credit requires additional work.*

**ECON 490. Topics in Microeconomics**

*ECON 401 (completed with a minimum grade of C- or better); OR Graduate standing. (Prerequisites enforced at registration.) STATS 250, or ECON 249, or STATS 426, or ECON 451. Students are not permitted to elect the same topic multiple times. (3 - 4). May be elected four times for credit. May be elected more than once in the same term.*

Course examines specialized topics in microeconomics presented at an advanced undergraduate level. Topics vary with the interests of the faculty.

**ECON 491. The History of the American Economy**

*ECON 401 (completed with a minimum grade of C- or better); OR Graduate standing. (Prerequisites enforced at registration.) (3). May not be repeated for credit. Rackham credit requires additional work.*

Covers American economic history from colonial times to the present, emphasizing the causes and consequences of economic growth, business cycles, and issues of economic equity.

**ECON 492. Capitalisms**

*ECON 401 with a C- or better. (Prerequisites enforced at registration.) (4). May not be repeated for credit. Rackham credit requires additional work.*

What exactly is capitalism? Does it express itself similarly in all countries? In all time periods? This course will explore the many varieties of capitalism, including: merchant capitalism, religious capitalism, industrial capitalism, financial capitalism, imperial capitalism, state capitalism, welfare capitalism, crony capitalism, and global capitalism. Readings are drawn from such classics as Adam Smith's *Wealth of Nations*. They are drawn also from the scholarly and popular works of contemporary economists, historians, and political scientists.

**ECON 495. Seminar in Economics**

*ECON 401 and 402, each with a grade of C- or better. (Prerequisites enforced at registration.) ECON 452 or ECON 454. (3). May be repeated for a maximum of 6 credits.*

Seminar sections cover specialized topics that span the subfields in economics. The topics are presented and discussed at an advanced level. Specific topics vary with the faculty member.

**ECON 497. Economics Honors Seminar**  
*(1). May be elected twice for credit. Offered mandatory credit/no credit.*

This year-long seminar is required for economics majors who have been admitted into the honors program. The seminar is intended to build a scholarly community in which honors students meet regularly as a group and provide each other support during the thesis-writing process. The seminar will also provide students with opportunities to build presentation and interview skills, learn about research and career opportunities across a range of fields in economics from guest faculty, and learn about the application process to graduate programs in economics.

**ECON 498. Honors Independent Research**

*Consent of instructor required. Open only to students admitted to Honors concentration in economics. Permission of instructor. (1 - 4). (INDEPENDENT). May be repeated for a maximum of 8 credits. Continuing Course. Y grade can be reported at end of the first-term to indicate work in progress. At the end of the second term of ECON 498, the final grade is posted for both term's elections.*

**ECON 499. Independent Research**

*Consent of instructor required. Written permission of staff member supervising research, and permission of the Economics concentration advisor. (1 - 4). (INDEPENDENT). May be repeated for a maximum of 8 credits. No more than four credits may be used in an Economics concentration program. Rackham credit requires additional work.*

## Education D – Curriculum and Instruction (EDCURINS)

**EDCURINS 382 / ENVIRON 382.**

**Introduction to Environmental Education for Sustainable Development**  
*(4). May not be repeated for credit.*

As a result of this course, students become certified by the School of Education to teach leading environmental education programs. They learn how to educate a citizenry able and willing to work towards environmental and sustainable development goals, as well as how to develop, implement, and evaluate their own education efforts.

**EDCURINS 421 / LATIN 421. Teaching of Latin**

*Junior standing in Latin and permission of instructor. (3; 2 in the half-term). May not be repeated for credit. F, W, Sp.*

**EDCURINS 431 / GERMAN 531. Teaching Methods**

*Senior standing; and candidate for a teaching certificate. (3). May not be repeated for credit. F.*

**EDCURINS 455 / ROMLING 413 / SPANISH 413. Teaching Spanish/Applications of Linguistics**

*Nine credits chosen between SPANISH 279 and 399; or two RCLANG 324 and six credits chosen between SPANISH 279 and 399. (Prerequisites enforced at registration.) One of: SPANISH 298, ROMLING 298, LING 210. (3). May not be repeated for credit. F.*

Principles of phonological, morphological, syntactic, and semantic analyses applied to the teaching of Spanish.

## Education (EDUC)

### **EDUC 333. Video Games and Learning** (3). (SS). *May not be repeated for credit.*

Why are videogames fun? The answer isn't as obvious as you might think. Good games draw you in, teach you how to succeed, and keep you engaged with a "just right" level of challenge. Most importantly, players \*learn\* while playing a well-designed game. Why isn't school like that? This class takes a hard look at videogames, a hard look at education, and considers ways that each can be improved to maximize learning.

### **EDUC 390 / ELI 390 / LING 390 / RCSSCI 390. Community-Engaged Learning in ESL Teaching Contexts** (3). (EXPERIENTIAL). *May be elected three times for credit.*

This course focuses on communicative language teaching and learning in community contexts. It prepares participants to teach ESL in local communities and provides them with hands-on teaching practice experiences in local service organizations. Participants explore the overall theme of "Language and Community" as they learn ESL teaching methods & techniques.

### **EDUC 461 / MENAS 461. Web Based Mentorship: Earth Odysseys** (3). *May be repeated for a maximum of 6 credits.*

Students serve as mentors to a worldwide network of middle school and high school participants in cultural issues forum linked to vicarious travel. As the forum participants respond to reports from various global settings, mentors seek to deepen, challenge and honor student thinking, and to help forum participants make

connections to their own lives. Mentors learn about the country being explored, develop curriculum for use by network teachers, and participate in ongoing reflection on the teaching and learning dimensions of their mentoring work.

### **EDUC 462 / MENAS 462. Web Based Mentorship: Learning Through Character Play**

*Consent of instructor required. (3). (EXPERIENTIAL). May be repeated for credit.*

Students serve as teaching mentors for a web-based character-playing simulation involving high school and middle school students on a worldwide network, and they themselves also research and portray historical figures. The Place Out of Time simulated trial is different every term, but mentors and students are always presented with a contemporary problem that they must think through in the role of their characters, one that frames an array of social, political, cultural and moral question. Mentors are active participants in a dynamic, writing-intensive enterprise that is aimed at enlivening the study of history through juxtaposing historical perspective and sensibilities. The course employs purposeful "play" to frame a hands-on teaching experience that is supported by extensive in-class and written reflective work.

### **EDUC 463 / MENAS 463. Web Based Mentorship: Arab-Israeli Conflict Simulation**

*(3). May be repeated for a maximum of 6 credits.*

This course is linked to a web-based simulation that engages high school students worldwide in exploring the Arab-Israeli Conflict through portraying current political leaders and representing stakeholder nations. Course participants

facilitate this diplomatic simulation, working closely with the simulation participants to offer a window into the diplomatic process. Course participants learn about the contemporary politics of the region, and work in teams as gatekeepers and facilitators, helping their student mentees to thoughtfully assume character, and to think and write purposefully and persuasively. This course is a hands-on teaching experience that is supported by extensive in-class and written reflective work.

**EDUC 485 / MATH 485. Mathematics for Elementary School Teachers and Supervisors**

*One year of high school algebra or permission of the instructor. (3). May not be repeated for credit. No credit granted to those who have completed or are enrolled in MATH 385.*

The history, development and logical foundations of the real number system and of numeration systems including scales of notation, cardinal numbers and the cardinal concept, the logical structure of arithmetic (field axioms) and their relations to the algorithms of elementary school instruction.

## **Ecology and Evolutionary Biology (EEB)**

**EEB 300. Undergraduate Research**

*Consent of instructor required. Eight credits of biology and 3.0 grade point average in science; permission of faculty member in EEB. (1 - 3). (BS). (INDEPENDENT). May be repeated for a maximum of 9 credits. Continuing Course. Y grade can be reported at end of the first-term to indicate work in progress. At the*

*end of the second term (EEB 300 or 400), the final grade is posted for both term's elections. Three credits of independent research must be completed in one term to satisfy a Biology laboratory requirement. A maximum of three credits of any independent study course may count toward the Biology concentration programs.*

**EEB 301. Active Learning Assistant**

*Consent of instructor required. BIOLOGY 171, 172/174, and 173, or BIOLOGY 192 and 173; or BIOLOGY 195 and 173; as well as experience in the target course subject matter. (2). (EXPERIENTIAL). (INDEPENDENT). May be elected four times for credit. 8 credits max allowed between EEB 301 and MCDB 301. Offered mandatory credit/no credit.*

Many courses are transitioning to active learning formats. Even large enrollment courses are doing more in-class group work. Some classes have significant problem-solving components. Students enrolled in MCDB or EEB 301 will assist the instructors in these classrooms. They will actively facilitate group work and other activities planned by the instructor.

**EEB 302. Teaching Experience for Undergraduates**

*Consent of instructor required. (1 - 3). (EXPERIENTIAL). May not be repeated for credit.*

**EEB 303. Topics in Biology**

*Recommended prerequisites will be established at the class level by the section instructors. (1 - 4). (NS). (BS). May be repeated for a maximum of 6 credits. May be elected more than once in the same term.*

Topics will vary by term and specific descriptions will be provided for each offering.

**EEB 313 / EARTH 313. Geobiology**

*EARTH (GEOSCI) 119 or BIOLOGY 171*



or CHEM 130 or permission of instructor.  
(4). (BS). May not be repeated for credit.

This course addresses several core geobiological themes in two very different worlds, the microbial world and the vertebrate world. Themes include the coevolution of the biosphere and geosphere, major evolutionary innovations and events, diversity of life and metabolism, biomechanics, and biogeography.

**EEB 320 / ENVIRON 311. Rivers, Lakes, and Wetlands: Introduction to Aquatic Ecosystems**

*One course in BIOLOGY or permission of instructor. (4). (NS). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in ENVIRON 331/EEB 321 (Rivers, Lakes and Wetlands). Satisfies a Biology laboratory requirement.*

Field and lecture based introduction to the scientific study of rivers, lakes, and wetlands. Introduces basic physical/chemical/biological concepts and techniques; emphasized ecological literacy and seeks to develop interpretive skills and reasoning. Includes overview of aquatic fauna and flora, and a survey of the ecology of major types of rivers and streams, lakes, wetlands, and ocean estuaries. Interactions between the hydrological cycle, the landscape, and human activities provide the basic theme around which ecosystem presentations are organized. Lab sections develop basic chemical and biological identification skills during the first half of the course; the second half focuses on weekly field trips to representative ecosystems and their ecological evaluation.

**EEB 321 / ENVIRON 331. Rivers, Lakes, and Wetlands: Introduction to Aquatic Ecosystems (UMBS)**

*Consent of department required. One course in BIOLOGY. (5 in the half-term).*

*(NS). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in ENVIRON 311/EEB 320 (Rivers, Lakes and Wetlands).*

Field and lecture based introduction to the scientific study of rivers, lakes, and wetlands. Introduces basic physical/chemical/biological concepts and techniques; emphasized ecological literacy and seeks to develop interpretive skills and reasoning. Includes overview of aquatic fauna and flora, and a survey of the ecology of major types of rivers and streams, lakes, wetlands, and ocean estuaries. Interactions between the hydrological cycle, the landscape, and human activities provide the basic theme around which ecosystem presentations are organized. Lab sections develop basic chemical and biological identification skills during the first half of the course; the second half focuses on weekly field trips to representative ecosystems and their ecological evaluation.

**EEB 330. Biology of Birds**

*Two college-level courses in biology. (5 in the half-term). (BS). May not be repeated for credit. Satisfies a Biology laboratory requirement.*

**EEB 335. Biodiversity Research Seminar**  
*BIOLOGY 171 and 172 (or 174); or BIOLOGY 192 and 173; or BIOLOGY 195 and 173. (Prerequisites enforced at registration.) Recommended grade of at least B in BIOLOGY introductory courses. (2). (BS). May not be repeated for credit. F and W.*

This course aims to introduce undergraduates to current research topics in ecology and evolutionary biology. Students attend weekly EEB seminars presented by either outside invited scientists or by in-house faculty and graduate students. This is followed by a written critical synopsis, and

instructor-led discussion, of the research presented.

**EEB 341. Parasitology**

*BIOLOGY 171, (172 or 174) & 173; or BIOLOGY 192 & 173; or BIOLOGY 195 & 173. (4). (BS). May not be repeated for credit. W. Satisfies a Biology laboratory requirement.*

An introduction to the study of parasitism, with special reference to the evolution of the parasitic habit.

**EEB 348 / ENVIRON 348. Forest Ecosystems**

*Consent of department required. BIOLOGY 171, (172 or 174) & 173; or BIOLOGY 192 & 173; or BIOLOGY 195 & 173. (5 in the half-term). (NS). (BS). May not be repeated for credit. Su at Biological Station.*

Focused on ecology in forest species and components of ecological systems, this course emphasizes hands-on field study in diverse upland and wetland forests. It stresses integrating topography, soil, climate, and vegetation, plus the dynamics of fire and regeneration ecology. This ecocentric approach is applicable in temperate forest ecosystems throughout the world.

**EEB 362 / ANTHRBIO 362 / ENVIRON 362. Primate Evolutionary Ecology**

*An introductory course on primates, ecology, or conservation biology is advised. No quantitative or statistical training is required. (4). (NS). (BS). May not be repeated for credit.*

This course examines primate ecology within an evolutionary framework. We consider how environmental factors, evolutionary history, and ecological processes affect individuals, social groups, populations, and communities. Topics in primate and rainforest conservation biology are also discussed. Emphasis is placed on

critical assessment and interpretation of quantitative and graphical evidence.

**EEB 372 / ENVIRON 372. General Ecology Laboratory**

*BIOLOGY 171, (172 or 174) & 173; or BIOLOGY 195 & 173; AND concurrent or prior enrollment in BIOLOGY 281/ENVIRON 281. (3). (BS). May not be repeated for credit.*

This course combines a mixture of tools needed to become ecologically proficient. This includes applying the fundamental concepts from ecology, the protocol for conceptualizing and conducting experiments, the statistical tests used to test hypotheses, and the tools needed to present work through communication. The lab exercises have a mixture of ecological practices, field experiments, hypothesis testing, statistical analyses, and written/oral communication.

**EEB 380. Oceanography: Marine Ecology**

*BIOLOGY 171, (172 or 174) & 173; or BIOLOGY 192 & 173; or BIOLOGY 195 & 173; and one term of college CHEM or PHYSICS. (3). (BS). May not be repeated for credit.*

Marine ecology is the branch of biological oceanography that applies ecological principles to the study of marine life. Lectures cover the interrelationships of marine organisms and their environment. Organisms and communities from the following habitats are discussed: estuaries, the rocky intertidal zone, coral reefs, the coastal zone, the deep-sea and the open ocean. The course treats the ecology of diverse marine organisms ranging from bacteria to whales.

**EEB 381 / ENVIRON 381. General Ecology**

*BIOLOGY 171, (172 or 174) & 173; or BIOLOGY 195 & 173; AND a laboratory*

*course in CHEM. (5 in the half-term). (BS). May not be repeated for credit.*

Fundamental concepts and principles of ecology of both plants and animals applied to the study of individual organisms, populations, and communities. Field and laboratory work emphasized the collection and analysis of basic data. A formal introduction to the discipline of ecology and suitable as a prerequisite for intermediate and advanced courses in the subject.

**EEB 390. Evolution**

*BIOLOGY 171 or (195 & 173); prior or concurrent enrollment in BIOLOGY 305. (3). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in EEB 391 (Quantitative Evolution) or EEB 392 (Evolution at UMBS).*

This course covers the fundamentals of evolutionary biology with a focus on living organisms. It includes a historical survey of the development of evolutionary theory from ancient philosophers to the present, and critical examination of phylogenetic systematics, natural selection, population genetics, molecular evolution, micro-evolution, and macro-evolution.

**EEB 391. Introduction to Evolution: Quantitative Approach**

*MATH 115, 120, 185, or equivalent. (Prerequisites enforced at registration.) Any introductory course in probability and statistics. (4). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in EEB 390 or EEB 392.*

This course examines evolutionary biology based on a number of key concepts and partial formal theories. It includes the history of life, microevolution, and macroevolution along with the data and methods for obtaining it. The course

extensively uses simple concepts of calculus, probability theory, and computer science.

**EEB 392. Evolution (UMBS)**

*BIOLOGY 171 or (195 & 173); prior or concurrent enrollment in BIOLOGY 305. (5 in the half-term). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in EEB 391 (Quantitative Evolution) or EEB 390 (Evolution). This course is taught at the University of Michigan Biological Field Station (UMBS) in the spring and/or summer terms only.*

This course covers the fundamentals of evolutionary biology with a focus on living organisms. It includes a historical survey of the development of evolutionary theory from ancient philosophers to the present, and critical examination of phylogenetic systematics, natural selection, population genetics, molecular evolution, micro-evolution, and macro-evolution. This course is taught at the University of Michigan Biological Field Station (UMBS) in the spring and/or summer terms only.

**EEB 399 / MCDB 399. Doing Science: An Introduction to Experimental Design in the Life Sciences**

*Prior or concurrent enrollment in MCDB or EEB 300. (1 in the half-term). (BS). May not be repeated for credit.*

This course will introduce students to basics of experimental design in life science research.

**EEB 400. Advanced Research**

*Consent of instructor required. 12 credits of BIOLOGY, 3.0 average in science, and permission of instructor in EEB. (1 - 3). (BS). (INDEPENDENT). May be repeated for a maximum of 9 credits. Continuing Course. Y grade can be reported at end of the first-term to indicate work in progress. At the end of the second term, the final*

*grade is posted for both term's elections. Three credits of independent research must be completed in one term to satisfy a Biology laboratory requirement. A maximum of three credits of any independent study course may count toward the Biology concentration programs.*

**EEB 401. Advanced Topics in Biology**

*Intended for senior majors. The prerequisites will be set by the instructor as appropriate for each section. (1 - 4). (BS). May be repeated for a maximum of 6 credits. May be elected more than once in the same term.*

This course is designed to acquaint students with a specialized area of Biology that is not a usual part of the Biology Department curriculum. Topics vary from term to term and are listed in the Schedule of Classes.

**EEB 404 / MCDB 404. Genetics, Development, and Evolution**

*BIOLOGY 305. (Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit.*

This course introduces students to the field of evolution and development, with an emphasis on genetics as a unifying force. After reviewing fundamental principles in development and evolutionary biology, papers from the primary literature investigating the molecular mechanisms responsible for evolutionary change will be discussed.

**EEB 405. Biological Station Special Topics**

*College courses in biology, chemistry, and ecology. (1 - 5 in the half-term). (BS). May be repeated for a maximum of 20 credits. May be elected more than once in the same term. Rackham credit requires additional work.*

This course will provide advanced undergraduate and graduate students with a

comprehensive and integrated understanding of topics specific to a field station in northern Michigan.

**EEB 408. Modeling for Ecology and Evolutionary Biology**

*MATH 115 or equivalent; and BIOLOGY 171, 172 or 174, & 173; or BIOLOGY 192 & 173; or BIOLOGY 195 & 173. (Or Graduate Student standing.). (Prerequisites enforced at registration.) (4). (BS). May not be repeated for credit.*

An introductory course in the creation and analysis of mathematical models in ecology and evolutionary biology, teaching students the derivation and analysis of simple models formulated using ordinary differential or recursion equations, and demonstrating the application of those skills to example core models in ecology and evolutionary biology.

**EEB 410. EEB Capstone Seminar**

*Senior-level EEB majors only. (Prerequisites enforced at registration.) BIOLOGY 281 and 390. (3). (BS). May not be repeated for credit.*

This course is required of EEB majors and is intended to be taken in the senior year, after exposure to both basic ecological and evolutionary theory. The course provides the opportunity for in-depth discussion of the ecological and evolutionary principles underlying important issues in biology and human affairs.

**EEB 413. Evolutionary Foundations of Medicine**

*BIOLOGY 171, 172 or 174, & 173; or BIOLOGY 192 & 173; or BIOLOGY 195 & 173. (Prerequisites enforced at registration.) EEB 390, BIOLOGY 305. (3). May not be repeated for credit. Rackham credit requires additional work.*

The course does two things. First, it introduces some basic evolutionary

concepts using examples relevant to human health. Second, it shows how medicine can be informed by evolutionary thinking.

**EEB 414. Molecular Approaches in Ecology and Evolutionary Biology**

*BIOLOGY 171, 172 or 174, & 173; OR BIOLOGY 192 & 173; or BIOLOGY 195 & 173; OR Graduate Student Standing. (Prerequisites enforced at registration.) EEB 390 (Evolution) and BIOLOGY 305 (Genetics). (2 in the half-term). (BS). May not be repeated for credit.*

This course provides an overview of molecular approaches for addressing themes in ecology and evolutionary biology through classroom instruction, a class project, and assignments.

**EEB 416 / MCDB 416. Introduction to Bioinformatics**

*BIOLOGY 305 and EEB 390, or graduate standing. (Prerequisites enforced at registration.) (4). (BS). May not be repeated for credit. Rackham credit requires additional work.*

Introduction to Bioinformatics is an advanced elective for upper-level Program in Biology majors and graduate students that wish to gain exposure to the basic principles of bioinformatics as well as guided practice using the typical computational tools of the field.

**EEB 424 / EAS 415 / ENVIRON 415. Behavioral Ecology and Conservation Biology**

*BIOLOGY 162 or 171 and completion or concurrent enrollment in either ENVIRON 415 or EEB 424 or EAS 415. (4). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in EEB 492.*

This course will focus on the ways environments shape the behavior and life histories of animals. Because environments

pose constraints, behaviors have "better" and "worse" impacts on an organism's survival and reproduction. This course will consider hypothesis in five areas.

**EEB 431. Ecology of Animal Parasites**

*Two laboratory courses in BIOLOGY. (5 in the half-term). (BS). May not be repeated for credit. Meets June 26 - August 21, 2010.*

**EEB 433 / EAS 433 / ENVIRON 433.**

**Ornithology**

*BIOLOGY 171, 172 or 174, and 173, or BIOLOGY 192 and 173; or BIOLOGY 195 & 173. (4). (BS). May not be repeated for credit. Satisfies a Biology laboratory requirement.*

During the lecture, students have the opportunity to learn about many unique features of birds. In the mandatory lab, students have the opportunity to learn about birds by using museum specimens, and by observing birds on field trips.

**EEB 435 / CMPLXSYS 435. Ecological Networks**

*Quantitative skills and a general knowledge of biology recommended. (3). May not be repeated for credit.*

Networks have revolutionized the way we understand, represent and analyze complex systems. In particular, Ecology has greatly benefited from network theory to analyze the (inherently complex) structure and dynamics of ecological systems. This course introduces fundamental concepts and recent ecological theory on the structure and dynamics of networks composed by species connected via antagonistic (e.g. who eats whom) and/or mutualistic (e.g. plant-pollinator) interactions. These concepts and theories will be introduced via lectures and regular reading of primary literature, and actively learned via individual and group analysis of empirical data, mathematical models and computational tools. We will also elucidate how to use ecological

networks to inform real-world problems such as the current environmental crisis.

**EEB 436 / EAS 436 / ENVIRON 436.**

**Woody Plants: Biology and Identification**  
*BIOLOGY 171 or equivalent. (4). (BS). May not be repeated for credit. Rackham credit requires additional work.*

Ecology, systematic and identification of trees, shrubs, and vines are studies in weekly field trips to diverse Michigan ecosystems--including upland, wetland, and floodplain forests. Lectures focus on glacial landscape history, biogeography, and ecology of Michigan forests.

**EEB 440 / EAS 422 / ENVIRON 422.**

**Biology of Fishes**

*BIOLOGY 162 or 171, 172 and 173. (3). (BS). May not be repeated for credit. F.*

Lectures cover many aspects of the biology of lower vertebrates known as fishes, including evolution, physiology, functional morphology, phylogeny, biogeography, ecology, and reproduction. The systematic position of fish among vertebrates is discussed and exemplary assemblages exam.

**EEB 441 / EAS 423 / ENVIRON 423. The Biology of Fishes Laboratory**

*BIOLOGY 162 or 171, 172 and 173. (1). (BS). May not be repeated for credit. Satisfies a Biology laboratory requirement.*

This lab provides an intro to field methods used in fish biology and fisheries, and examines the diversity of the Michigan ichthyofauna and major groups of would fishes.

**EEB 442. Biology of Insects**

*BIOLOGY 171, (172 or 174), & 173; or BIOLOGY 192 & 173; or BIOLOGY 195 & 173. (3). (BS). May not be repeated for credit. No credit granted to those who have*

*completed or are currently enrolled in EEB 443 (Biology of Insects at UMBS).*

Emphasis on living animals and evolution. Embryology, development, and molting; elementary physiology, ecology, genetics and behavior, and functional external and internal morphology; and geological history. Classification of adults and immatures.

**EEB 443. Biology of Insects (UMBS)**

*BIOLOGY 171, (172 or 174) & 173; or BIOLOGY 192 & 173; or BIOLOGY 195 & 173. (5 in the half-term). (BS). May not be repeated for credit. No credit granted to those who have completed or are currently enrolled in EEB 442 (Biology of Insects). This course is taught at the University of Michigan Biological Field Station (UMBS) in the spring and/or summer terms only. Rackham credit requires additional work.*

Emphasis on living animals and evolution. Embryology, development, and molting; elementary physiology, ecology, genetics and behavior, and functional external and internal morphology; and geological history. Classification of adults and immatures. This course is taught at the University of Michigan Biological Field Station (UMBS) in the spring and/or summer terms only.

**EEB 446. Microbial Ecology**

*Introductory Microbiology (BIOLOGY 207 or the equivalent) and one 300-level or above biology course [Microbial diversity (EEB 470) and general ecology (EEB 281/381) are recommended.]. (3). (BS). May not be repeated for credit. For the Microbiology concentration, this course counts as a Group 1 Specified Elective.*

This course covers the ecology of microbes by highlighting their interactions with each other and the environment. An emphasis is placed on Bacteria, Archaea, and their

viruses. The course aims at uncovering how concepts developed in plant and animal ecology do and do not translate to the microbial world.

**EEB 447. Microbes in the Wild:**

**Environmental Microbiology Laboratory**  
*BIOLOGY 207. (Prerequisites enforced at registration.) (3). May not be repeated for credit. Rackham credit requires additional work.*

In this advanced microbiology lab course, students develop projects to study environmental microbes in the context of real-world sustainability issues in Northern Michigan. Students apply 16S rRNA gene sequencing, microscopy techniques, culturing techniques, flow cytometry, and coding for reproducible data analysis to study community and metabolic diversity of freshwater microbes.

**EEB 451 / EAS 451 / ENVIRON 451.**

**Biology of Mammals**

*BIOLOGY 171, (172 or 174) & 173; or BIOLOGY 192 & 173; or BIOLOGY 195 & 173. (4). (BS). May not be repeated for credit. F. (Offered in alternate years). Satisfies a Biology laboratory requirement.*

Evolution, distribution, ecology, behavior, anatomy, and classification of mammals, with emphasis on North American species.

**EEB 453. Field Mammalogy**

*Two laboratory courses in BIOLOGY. (5 in the half-term). (BS). May not be repeated for credit. (Offered in even years at the Biological Station). Satisfies a Biology laboratory requirement.*

**EEB 455. Ethnobotany**

*Two college-level courses in BIOLOGY. (5 in the half-term). (BS). May not be repeated for credit. Satisfies a Biology laboratory requirement.*

**EEB 457. Algae in Freshwater Ecosystems**

*Two laboratory courses in Botany. (5 in the half-term). (BS). May not be repeated for credit. (Offered in even years at the Biological Station). Satisfies a Biology laboratory requirement.*

**EEB 459. Systematic Botany**

*BIOLOGY 171, (172 or 174) & 173; or BIOLOGY 195 & 173; OR BIOLOGY 255. (4). (BS). May not be repeated for credit. F. Satisfies a Biology laboratory requirement.*

Principles of systematic botany, including training in the major groups of vascular plants in terms of their morphology, anatomy, cytology, ecology, and reproductive biology, as well as problems in numerical taxonomy, biosystematics, and botanical nomenclature. Laboratory includes plant specimens and visual aids.

**EEB 463. Neotropical Plant Families**

*BIOLOGY 215 or EEB 459. (3). (BS). May not be repeated for credit. Satisfies a Biology laboratory requirement.*

This course will introduce students to generic-level organization of 25 neotropical plant families. Families covered are 1) ecologically widespread and abundant in the neo-tropics or 2) of taxonomic or economic significance. Meetings include lectures on comparative morphology, anatomy, and ecological/economic significance of families and their included genera, and a laboratory during which students examine dried specimens.

**EEB 466 / MATH 466. Mathematical Ecology**

*MATH 217, 417, or 419; MATH 256, 286, or 316; and MATH 450 or 451. (3). May not be repeated for credit. Rackham credit requires additional work.*

This course gives an overview of mathematical approaches to questions in the science of ecology. Topics include: formulation of deterministic and stochastic

population models; dynamics of single-species populations; and dynamics of interacting populations (perdition, competition, and mutualism), structured populations, and epidemiology. Emphasis is placed on model formulation and techniques of analysis.

**EEB 468. Biology of Fungi**

*BIOLOGY 305, EEB 390, or BIOLOGY 281 strongly suggested. (4). (BS). May not be repeated for credit.*

This course provides an introduction to the fungi through lectures, laboratories, and field trips. We explore fungal biodiversity, ecology, genetics, and the importance of fungi in food and human health. Practical experience, such as isolation and identification of mushrooms, yeasts, and molds is included.

**EEB 470. Microbial Diversity**

*BIOLOGY 207; CHEM 210 (or equivalent); and at least one 300-level course in MCDB or EEB. (Prerequisites enforced at registration.) Junior standing or above. (3). (BS). May not be repeated for credit.*

The course describes the biological diversity of prokaryotic microorganisms, members of the Domain Bacteria and Domain Archaea, examining the evolutionary origins of microbial life, the metabolic roles extant prokaryotes carry out in maintaining the biosphere, their physiological adaptations to the environment and to environmental extremes, and modern phylogenetic approaches for their identification and evolutionary analysis.

**EEB 472. Plant-Animal Interactions**

*BIOLOGY 281. (3). (BS). May not be repeated for credit. W.*

**EEB 476 / EAS 476 / ENVIRON 476. Ecosystem Ecology**

*General Ecology and a 400-level course in*

*Aquatic or Terrestrial Ecology. (3). (BS). May not be repeated for credit. W.*

Current theories about the control and function of ecosystems, the approaches and techniques being used to test these theories, and the application of theory to the management and restoration of ecosystems.

**EEB 477. Laboratory in Field Ecology**

*A course in Ecology. (5). (BS). May not be repeated for credit. F. Satisfies a Biology laboratory requirement.*

**EEB 480. Model-based Statistical Inference for Ecology**

*Senior natural science concentrator or Graduate student. (4). (BS). May not be repeated for credit.*

This course is an introduction to the modern theory and practice of scientific data analysis using both standard and innovative approaches. The unifying concepts are those of probability model, information, and inference. Students will learn and use the basic principles of data visualization, model formulation, parameter estimation, interpretation of results, model criticism, and model refinement. The course will make use of lectures, readings, and computer exercises in the R statistical computing environment. Students will obtain hands-on experience analyzing data provided by the instructor and students. Students will learn and use best practices in the curation and analysis of data and in the organization and presentation of results. Although examples will be for the most part drawn from Ecology, students from other disciplines

**EEB 482. Freshwater Ecosystems: Limnology (UMBS)**

*Sophomores and above. (Prerequisites enforced at registration.) One course in each of the following: Ecology, Chemistry, and Physics. (5 in the half-term). (BS). May not be repeated for credit. No credit*



*granted to those who are enrolled in or have completed BIOLOGY 482, EEB 483, or EEB 484.*

This is a lab course that focuses on the physical, chemical, and biological controls of aquatic ecosystems. It addresses major topics such as nutrient enrichment, food/web interactions, and invasive species. The lab component provides instruction on modern field techniques and laboratory analyses used in aquatic research. This course is taught at the University of Michigan Biological Field Station (UMBS) in the spring and/or summer terms only.

**EEB 483. Freshwater Ecosystems: Limnology**

*Sophomores and above. (Prerequisites enforced at registration.) One course in each of the following: Ecology, Chemistry, and Physics. (4). (BS). (QR/1). May not be repeated for credit. No credit granted to those who are enrolled in or have completed BIOLOGY 482, EEB 482, or EEB 484. W.*

This is a lab course that focuses on the physical, chemical, and biological controls of aquatic ecosystems. It addresses major topics such as nutrient enrichment, food/web interactions, and invasive species. The lab component provides instruction on modern field techniques and laboratory analyses used in aquatic research.

**EEB 485. Population and Community Ecology**

*(4). (BS). May not be repeated for credit. Rackham credit requires additional work.*

Principles governing the phenomena of single and interacting populations are examined, from basic tenets to cutting-edge research questions. Population and community-level perspectives are integrated by drawing parallels between approaches and considering how to scale up from the

phenomena of one or a few species to the structure and dynamics of whole communities.

**EEB 486. Biology and Ecology of Fish**

*Two laboratory courses in BIOLOGY. (5 in the half-term). (BS). May not be repeated for credit. (Offered in odd years at the Biological Station). Satisfies a Biology laboratory requirement.*

**EEB 487 / EAS 409 / ENVIRON 409.**

**Ecology of Fishes**

*BIOLOGY 162 or 171, 172 and 173. (3 - 4). (BS). May not be repeated for credit. W. (Lectures: 3 credits; lectures and lab: 4 credits). Satisfies a Biology laboratory requirement only if the student signs up for four credits.*

Covers physiological, behavioral, and numerical responses of fishes to biotic and abiotic factors; the relationship between fish and the physical, chemical, and biological parameters of major habitat types; adaptations of fish for survival under different constraints.

**EEB 489 / EAS 430 / ENVIRON 430. Soil Ecology**

*BIOLOGY 162 or 171 and 172 and 173, and General Chemistry. Concurrent enrollment in ENVIRON 436/EEB 436 and ENVIRON 435/EAS 435 highly recommended. (3). (BS). May not be repeated for credit. F. Satisfies a Biology laboratory requirement.*

Soils as central components of terrestrial ecosystems. Major emphasis is placed on physical, chemical, and biological properties and their relationships to plant growth and ecosystem processes. Understanding is developed using a combination of lectures, field- and lab-based exercises, and individual research.

**EEB 490. Evolution at the Population Level**

*MATH 115. (Prerequisites enforced at registration.) BIOLOGY 305. (3). (BS). May not be repeated for credit. May be used to satisfy an elective requirement in several biology majors and minors.*

This course deals with evolution of life from the population-level perspective, which ignores internal structure of organisms and, instead, considers their external features, emphasizing gene transmission and natural selection.

**EEB 491. Phylogenetic Methods and Theory**

*BIOLOGY 171, 172 or 174, & 173; or BIOLOGY 192 & 173; or BIOLOGY 195 & 173. (4). (BS). May not be repeated for credit.*

This course covers theory and methods used in phylogenetics. Topics will include sequence manipulation and alignment, dataset assembly, phylogenetic reconstruction, tree searching, character reconstruction, and dating analyses. Prior programming experience is helpful but not required; familiarity with computers is assumed.

**EEB 492. Behavioral Ecology**

*BIOLOGY 172, 174, or 192; or BIOLOGY 195 & 173. Or Graduate Student Standing. (Prerequisites enforced at registration.) EEB 390 (Evolution). (3). (BS). May not be repeated for credit. No credit granted to students who have completed or are currently enrolled in EEB 493 (Behavioral Ecology at UMBS), or NRE/ENVIRON 415/EEB 424. (Offered in odd years at the Biological Station).*

This course explores the behavior of animals in their natural environment. Students develop their understanding of evolution and learn how to apply natural selection to understand why animals behave the way they do.

**EEB 493. Behavioral Ecology (UMBS)**

*BIOLOGY 171, (172 or 174), & 173; or BIOLOGY 192 & 173; or BIOLOGY 195 & 173. Or graduate student standing.*

*(Prerequisites enforced at registration.)*

*EEB 390 (Evolution). (5 in the half-term).*

*(BS). May not be repeated for credit. No credit granted to students who have completed or are currently enrolled in EEB 492. This course is taught at the University of Michigan Biological Field Station (UMBS) in the spring and/or summer terms only. Rackham credit requires additional work.*

This course explores the behavior of animals in their natural environment. Students develop their understanding of evolution and learn how to apply natural selection to understand why animals behave the way they do. This course is taught at the University of Michigan Biological Field Station (UMBS) in the spring and/or summer terms only.

**EEB 494 / MCDB 494. Teaching College Science**

*Consent of department required. Science concentrators having completed a range of courses, such as BIOLOGY 171, 172 and 173; BIOLOGY 225, 281, 305 or EEB 390; CHEM 130, 210 or 211; PHYSICS 140 or 160; or EARTH 119. (2). (BS). May not be repeated for credit.*

This course helps students build a foundation of knowledge about effective science teaching. It is both scholarly and practical in nature. Students construct an understanding of fundamental principles and sound pedagogy that they apply to their own teaching.

**EEB 497. Complex Systems in Ecology**

*MATH 115, 120, or 185 and BIOLOGY 171. (Prerequisites enforced at registration.) (3). (BS). May not be*

*repeated for credit. Rackham credit requires additional work.*

This course will discuss various themes in complex systems as they are or might be applied to ecological systems. Topics will include, chaos, coupled oscillators, stochasticity, Turing processes, indirect nonlinearities, critical transitions, networks, and others.

**EEB 498. The Ecology of Agroecosystems**  
*A course in Ecology. (3). (BS). May not be repeated for credit. F.*

**EEB 499 / MCDB 499. Responsible Conduct of Research and Scholarship in Biology**

*Prior or concurrent enrollment in MCDB or EEB 300. (1). (BS). May not be repeated for credit. Offered mandatory credit/no credit.*

The organization of this class is based on the premise that the educational objective of a research university like the University of Michigan is to produce scholars capable of original and independent research and that such research requires responsible conduct and integrity.

**EEB 556. Field Botany of Northern Michigan**

*A course in Systematic Botany (EEB 459). (5 in the half-term). (BS). May not be repeated for credit. Satisfies a Biology laboratory requirement.*

## **Electrical Engineering and Computer Science (EECS)**

**EECS 101. Thriving in a Digital World**  
*(4). (MSA). (BS). May not be repeated for credit. May not be taken by students enrolled in the College of Engineering or who are majoring in Computer Science or Informatics.*

From mobile apps to bitmaps, this course explores computational technologies and how they impact society and our everyday lives. Topics include: social networks, creative computing, algorithms, security, and digital privacy. Traditional computer programming is not a primary focus. Instead, mobile applications will be created using a novel visual programming environment.

**EECS 180. Exam/Transfer Introductory Computer**

*(BS). May not be repeated for credit. Offered mandatory credit/no credit.*

Credit for college-level introductory programming coursework based on a satisfactory score on an approved introductory programming course at another college. Indicates preparedness to proceed to EECS 280.

**EECS 183. Elementary Programming Concepts**

*(4). (MSA). (BS). (QR/1). May not be repeated for credit. Credit is granted for only one course among EECS 183 or ENGR 101. Credit is granted for only one of ENGR 151 and EECS 183. Not intended for Engineering students (who should take ENGR 101), nor for Computer Science majors in LSA who qualify to enter EECS 280. F, W, Sp.*

Fundamental concepts and skills of programming in a high level language. Flow of control: selection, iteration, subprograms. Data structures: strings, arrays, records, lists, tables. Algorithms using selection and iteration (decision making, finding maxima/minima, searching, sorting, simulation, etc.). Good program design, structure, and style are emphasized. Testing and debugging. Not intended for Engineering students (who

should take ENGR 101), nor for CS majors in LSA who qualify for EECS 280.

**EECS 203. Discrete Math**

*MATH 115 or 116 or 119 or 120 or 121 or 156 or 175 or 176 or 185 or 186 or 214 or 215 or 216 or 217 or 255 or 256 or 285 or 286 or 295 or 296 or 417 or 419; (C or better); AND [ $< 2$  EECS 203 (incl. W, I, VI, & AUD)]. (Prerequisites enforced at registration.) (4). (MSA). (BS). (QR/1). May not be repeated for credit. F, W. Students may attempt this class a maximum of two times. Students will have to see an EECS program advisor in order to register a third time. The advisor may issue an override in extenuating circumstances.*

Introduction to the mathematical foundations of computer science. Topics covered include: propositional and predicate logic, set theory, function and relations, growth of functions and asymptotic notation, introduction to algorithms, elementary combinatorics, and graph theory, and discrete probability theory.

**EECS 270. Introduction to Logic Design**

*ENGR 101 or EECS 183 with a grade of at least C. (Prerequisites enforced at registration.) (4). (MSA). (BS). May not be repeated for credit. F, W.*

Boolean algebra, digital design techniques, logic gates, logic and state minimization, standard combinational circuits, latches and flip-flops, sequential circuits, synthesis of synchronous sequential circuits, state machines, FPGAs, memories, arithmetic circuits, and computer-aided design. Laboratory involves CAD-based design implemented on a FPGA including elementary interfacing.

**EECS 280. Programming and Introductory Data Structures**

*ENGR 101 or 151 or EECS 180 or 183. (Must be taken for a grade.). (Prerequisites enforced at registration.) MATH 115. (4).*

*(MSA). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in EECS 283. F, W. Students may attempt this class a maximum of two times. Students will have to see an EECS program advisor in order to register a third time. The advisor may issue an override in extenuating circumstances.*

Algorithm development and effective programming, top-down analysis, structured programming, testing, and program correctness. Program language syntax and static and runtime semantics. Scope, procedure instantiation, recursion, abstract data types, and parameter passing methods. Structured data types, pointers, linked data structures, stacks, queues, arrays, records, and trees.

**EECS 281. Data Structures and Algorithms**

*[(EECS 203 or MATH 465 or MATH 565) and EECS 280; (C or better, NO OP/F). Minimum GPA of 2.5 over the best grade for each enforced prerequisite] and [Fewer than 2 previous elections of EECS 281 (incl. grades of W & I)]. (Prerequisites enforced at registration.) (4). (BS). May not be repeated for credit. F, W. Students may attempt this class a maximum of two times. Students will have to see an EECS program advisor in order to register a third time. The advisor may issue an override in extenuating circumstances.*

Introduction to the algorithm analysis and O-notation; Fundamental data structures including lists, stacks, queues, priority queues, hash tables, binary trees, search trees, balanced, trees, and graphs; searching and sorting algorithms; recursive algorithms; basic graph algorithms; introduction to greedy algorithms and divide and conquer strategy. Several programming assignments.

**EECS 285. Practical Programming in Java**

(2). (BS). May not be repeated for credit.

Introduction to Java programming, including language features, design principles, and programming practices. Topics include: Java syntax and semantics, object-oriented design, exception handling, graphical user interfaces, mobile-application development, asynchronous programming, and unit testing.

**EECS 370. Introduction to Computer Organization**

EECS 203, or MATH 465 or 565, or EECS 270 with a minimum grade of C or better; and EECS 280 or 283 with a minimum grade of C or better. (Prerequisites enforced at registration.) (4). (BS). May not be repeated for credit. F, W.

Basic concepts of computer organization and hardware. Instructions executed by a processor and how to use these instructions in simple assembly-language programs. Stored-program concept. Data-path and control for multiple implementations of a processor. Performance evaluation, pipelining, caches, virtual memory, input/output.

**EECS 373. Introduction to Embedded System Design**

EECS 370 and 270 with a grade of at least C; and junior standing. (Prerequisites enforced at registration.) (4). (BS). May not be repeated for credit. F, W.

Principles of designing application-specific computer systems that interact with the physical world. Covers memory-mapped I/O, interrupts, analog interfacing, microprocessors, reconfigurable hardware, sensors, and actuators. Complex hardware/software system design and implementation. Substantial student-defined team design project.

**EECS 376. Foundations of Computer Science**

EECS 280; and one of EECS 203, or MATH 465 or 565; each with a minimum grade of C or better. (Prerequisites enforced at registration.) (4). (BS). May not be repeated for credit. F, W.

An introduction to theory of computation. Models of computation: finite state machines, Turing machines. Decidable and undecidable problems. Polynomial time computability and paradigms of algorithm design. Computational complexity emphasizing NP-hardness. Coping with intractability. Exploiting intractability: cryptography.

**EECS 381. Object Oriented and Advanced Programming**

EECS 281 and 370 (completed with a minimum grade of C or better). (Prerequisites enforced at registration.) (4). (BS). May not be repeated for credit. W.

Programming techniques in Standard C++ for large-scale, complex, or high-performance software. Encapsulation, automatic memory management, exceptions, generic programming with templates and function objects, Standard Library algorithms and containers. Using single and multiple inheritance and polymorphism for code reuse and extensibility; basic design idioms, patterns, and notation.

**EECS 388. Introduction to Computer Security**

EECS 281, completed with a minimum grade of C or better. (Prerequisites enforced at registration.) EECS 370 (C or better) or equivalent. (4). (BS). May not be repeated for credit.

This course introduces the principles and practices of computer security as applied to software, host systems, and networks. It

covers the foundations of building, using, and managing secure systems. Topics include standard cryptographic functions and protocols, threats and defenses for real-world systems, incident responses, and computer forensics. There will be homework exercises, programming projects, and a final exam.

**EECS 398. Special Topics**

*Permission of instructor. (1 - 4). (BS). May be repeated for credit.*

**EECS 427. Very Large Scale Integrated Design I**

*EECS 270, 312 and 320 (each completed with a minimum grade of C or better); or graduate standing. (Prerequisites enforced at registration.) (4). (BS). May not be repeated for credit. F, W.*

Design techniques for full-custom VLSI circuits. Design rule checking, logic and circuit simulation. CMOS circuit delay and power analysis. High performance and low power VLSI systems. CMOS logic circuit families, adders, multipliers, memory arrays, sequential circuits, and interconnects. Clock and power distribution. Major design project to implement a RISC processor.

**EECS 441. Mobile App Development for Entrepreneurs**

*COMPUTER SCIENCE UG COE/LSA (Senior standing) and (EECS 281 and 370) and at least 4 credit hours of Upper Level Electives from list in Computer Science or Computer Engineering; (C or better). (Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit.*

Best practices in the software engineering of mobile applications and best practices of software entrepreneurs in the design, production and marketing of mobile apps. Students will engage in the hands-on practice of entrepreneurship by actually

inventing, building, and marketing their own mobile apps.

**EECS 442. Computer Vision**

*EECS 281; (C or better) or Graduate Standing. (Prerequisites enforced at registration.) (4). (BS). May not be repeated for credit. F (Alternate years).*

Computational methods for the recovery, representation, and application of visual information. Topics from image formation, binary images, digital geometry, similarity and dissimilarity detection, matching, curve and surface fitting, constraint propagation relaxation labeling, stereo, shading texture, object representation and recognition, dynamic scene analysis, and knowledge based techniques. Hardware, software techniques.

**EECS 443. Senior ThesisL**

*(BS). May not be repeated for credit.*

Students develop and carry out a research plan in collaboration with a sponsoring faculty member. Students present a research proposal to be approved by both the faculty member and the chief program advisor or designate. Students submit and present a thesis to be evaluated by the sponsoring faculty member and second reader.

Eligibility is limited to students who have a concentration GPA of 3.5 or better.L

**EECS 445. Introduction to Machine Learning**

*EECS 281 and (MATH 214 or 217 or 296 or 417 or 419); (C or better; No OP/F). (Prerequisites enforced at registration.) MATH 214 or equivalent; STATS 250 or equivalent. (4). (BS). May not be repeated for credit.*

Theory and implementation of state of the art machine learning algorithms for large-scale real-world applications. Topics include supervised learning (regression, classification, kernel methods, neural

networks, and regularization) and unsupervised learning, (clustering, density estimation, and dimensionality and reduction).

**EECS 467. Autonomous Robotics Design Experience**

*EECS 281 with a minimum grade of C or better. (Prerequisites enforced at registration.) MATH 214 or equivalent. (4). (BS). May not be repeated for credit.*

Software methods and implementation for robot perception, world mapping, and control, using physical robots. Topics include: sensor, sensor processing, control, motion planning, localization and mapping, and forward and inverse kinematics. Multiple team projects, culminating in a major design experience (MDE) project.

**EECS 470. Computer Architecture**

*EECS 270 and 370 with a grade of at least C; or graduate standing. (Prerequisites enforced at registration.) (4). (BS). May not be repeated for credit. F, W.*

Topics include out-of-order processors and speculation, memory hierarchies, branch prediction, virtual memory, cache design, multi-processors, and parallel processing including cache coherence and consistency. Emphasis on power and performance trade-offs. Groups design an advanced (e.g. out-of-order, multi-core, SMT) processor using an HDL.

**EECS 473. Advanced Embedded Systems**

*EECS 373, and one of EECS 281 or 215 (each completed with a minimum grade of C or better; or graduate standing. (Prerequisites enforced at registration.) (4). (BS). May not be repeated for credit.*

Design of hardware and software for modern embedded systems. Real-time operating systems. Device drivers for general operating systems. PCB design including power integrity and

electromagnetic interference. Radio frequency and wireless communication. Low-power design. DC/DC converter design for PCBs. Rapid prototyping of embedded systems. Groups will design a complete embedded system.

**EECS 475. Introduction to Cryptography**

*EECS 203 or MATH 312 or MATH 412; and EECS 183 or ENGR 101 or 104 or EECS 280 or 283; each with a grade of at least C or better; or Graduate standing. (Prerequisites enforced at registration.) EECS 203 or MATH 312/412 and EECS 183/280. (Prerequisites enforced at registration.) (4). (BS). May not be repeated for credit. F. (Alternating Years).*

Covers fundamental concepts, algorithms, and protocols in cryptography. Topics: ancient ciphers, Shannon theory, symmetric encryption, public key encryption, hash functions, digital signatures, key distribution. Highlights AES, RSA, Discrete Log, Elliptic Curves. Emphasizes rigorous mathematical study in terms of algorithmic complexity. Includes necessary background from algorithms, probability, number theory, and algebra.

**EECS 477. Introduction to Algorithms**

*Electrical Engineering and Computer Science Majors EECS 281 & 376; (C or better). (Prerequisites enforced at registration.) (4). (BS). May not be repeated for credit. F.*

Fundamental techniques for designing efficient algorithms and basic mathematical methods for analyzing their performance. Paradigms for algorithm design: divide-and-conquer, greedy methods, graph search techniques, dynamic programming. Design of efficient data structures and analysis of the running time and space requirements of algorithms in the worst and average cases.

**EECS 478. Logic Circuit Synthesis and Optimization**

*EECS 270 and 203 with a grade of at least C; and senior or graduate standing. (Prerequisites enforced at registration.) (4). (BS). May not be repeated for credit. F, W.*

Advanced design of logic circuits. Technology constraints. Theoretical foundations. Computer-aided design algorithms. Two-level and multilevel optimization of combinational circuits. Optimization of finite-state machines. High-level synthesis techniques: modeling, scheduling, and binding. Verification and testing. Emerging technologies. Lab projects on CAD software development.

**EECS 481. Software Engineering**

*EECS 281 with a grade of at least C; or graduate standing. (Prerequisites enforced at registration.) (4). (BS). May not be repeated for credit. F, W.*

Pragmatic aspects of the production of software systems, dealing with structuring principles, design methodologies and informal analysis. Emphasis is given to development of large, complex software systems. A term project usually required.

**EECS 482. Introduction to Operating Systems**

*EECS 370 and 281 with a grade of at least C; or graduate standing. (Prerequisites enforced at registration.) (4). (BS). May not be repeated for credit. F, W.*

Operating system design and implementation: multi-tasking; concurrency and synchronization; inter-process communication; deadlock; scheduling; resource allocation; memory and storage management; input-output; file systems; protection and security. Students write several substantial programs dealing with concurrency and synchronization in a multi-

task environment, with file systems, and with memory management.

**EECS 483. Compiler Construction**

*EECS 281 with a grade of at least C; or graduate standing. (Prerequisites enforced at registration.) (4). (BS). May not be repeated for credit. F.*

Introduction to compiler construction.

Topics covered will include the following: lexical scanning, parsing (top-down and bottom-up), abstract syntax trees, semantic analysis, code generation and optimization. Students will build a working compiler for a high-level programming language.

**EECS 484. Database Management Systems**

*EECS 281 with a grade of at least C; or graduate standing. (Prerequisites enforced at registration.) (4). (BS). May not be repeated for credit. F, W.*

Concepts and methods for the design, creation, query and management of large enterprise databases. Functions and characteristics of the leading database management systems. Query languages such as SQL, forms, embedded SQL, and application development tools. Database design, integrity, normalization, access methods, query optimization, transaction management and currency control and recovery.

**EECS 485. Web Systems**

*Major in EECS OR Informatics; and EECS 281 or EECS 382 (completed with a minimum grade of C or better); OR graduate standing. (Prerequisites enforced at registration.) (4). (BS). May not be repeated for credit. W.*

Concepts surrounding web systems, applications, and internet scale distributed systems. Topics covered include



client/server protocols, security, information retrieval and search engines, scalable data processing, and fault tolerant systems. The course has substantial projects involving development of web applications and web systems.

**EECS 486. Information Retrieval and Web Search**

*(BS). May not be repeated for credit.*

Covers background and recent advances in information retrieval (IR): indexing, processing, querying, classifying data. Basic retrieval models, algorithms, and IR system implementations. Focuses on textual data, but also looks at images/videos, music/audio, and geospatial information. Web search, including Web crawling, link analysis, search engine development, social media, and crowdsourcing.

**EECS 487. Interactive Computer Graphics**

*EECS 281 with a grade of at least C; and senior or graduate standing. (Prerequisites enforced at registration.) EECS 281 or graduate standing in CSE and (C or better). (4). (BS). May not be repeated for credit. F, W.*

Computer graphics hardware, line drawing, rasterization, anti-aliasing, graphical user interface (GUI), affine geometry, projective geometry, geometric transformation, polygons, curves, splines, solid models, lighting and shading, image rendering, ray tracing, radiosity, hidden surface removal, texture mapping, animation, virtual reality, and scientific visualization.

**EECS 489. Computer Networks**

*EECS 482 with a grade of at least C; or graduate standing. (Prerequisites enforced at registration.) (4). (BS). May not be repeated for credit. W.*

Protocols and architecture of computer networks. Topics include client-server

computing, socket programming, naming and addressing, media access protocols, routing and transport protocols, flows and congestion control, and other application-specific protocols. Emphasis is placed on understanding protocol design principles. Programming problems to explore design choices and actual implementation issues assigned.

**EECS 490. Programming Languages**

*EECS 281 with at least a grade of C. (Prerequisites enforced at registration.) (4). (BS). May not be repeated for credit. W.*

Fundamental concepts in programming languages. Course covers different programming languages including functional, imperative, object-oriented, and logic programming languages; different programming language features for naming, control flow, memory management, concurrency, and modularity; as well as methodologies, techniques, and tools for writing correct and maintainable programs.

**EECS 492. Introduction to Artificial Intelligence**

*EECS 281 with a grade of at least C; or graduate standing. (Prerequisites enforced at registration.) (4). (BS). May not be repeated for credit. F, W.*

Introduction to the core concepts of AI, organized around building computational agents. Emphasizes the application of AI techniques. Topics include search, logic, knowledge representation, reasoning, planning, decision making under the uncertainty, and machine learning.

**EECS 493. User Interface Development**

*EECS 281 with a grade of at least C; or graduate standing. (Prerequisites enforced at registration.) (4). (BS). May not be repeated for credit. W.*

Concepts and techniques for designing computer system user interfaces to be easy

to learn and use, with an introduction to their implementation. Task analysis, design of functionality, display and interaction design, and usability evaluation. Interface programming using an object-oriented application framework. Fluency in a standard object-oriented programming language is assumed.

#### **EECS 494. Computer Game Design and Development**

*EECS 281 with a grade of at least C; or graduate standing. (Prerequisites enforced at registration.) (4). (BS). May not be repeated for credit. F.*

Concepts and methods for the design and development of computer games. Topics include: history of games, 2D graphics and animation, sprites, 3D animation, binary space partition trees, software engineering, game design, interactive fiction, use interfaces, artificial intelligence, game SDK's, networking, multi-player games, game development environments, commercialization of software.

#### **EECS 496. Major Design Experience-Professionalism**

*Senior or Above. (Prerequisites enforced at registration.) (2). (BS). May not be repeated for credit. F, W.*

Design principles for multidisciplinary team projects, team strategies, entrepreneurial skills, ethics, social and environmental awareness, and life long learning.

#### **EECS 497. Major Design Projects**

*EECS 281 (completed with a minimum grade of at least a C). (Prerequisites enforced at registration.) (4). (BS). May not be repeated for credit. F, W.*

Topics in software design and development such as customer discovery, contextual inquiry, storyboarding, prototyping, workload estimation, time dynamics, security engineering, chance management,

testing, and risk management. Teams of 3-5 students complete an entire software design and development cycle by creating software that incorporates effective design strategies and project management methodologies.

#### **EECS 498. Special Topics**

*Permission of instructor. (1 - 4). (BS). May be repeated for credit.*

Topics of current interest selected by faculty.

#### **EECS 499. Advanced Directed Study**

*Senior or graduate standing. (Prerequisites enforced at registration.) Senior standing in EECS. (1 - 4). (BS). (INDEPENDENT). May be repeated for credit.*

This course provides an opportunity for undergraduate students to work on substantial research problems in EECS or areas of special interest such as design problems.

#### **EECS 530 / APPPHYS 530.**

##### **Electromagnetic Theory I**

*PHYSICS 438 or EECS 330. (3). (BS). May not be repeated for credit. F.*

#### **EECS 540 / APPPHYS 540. Applied Quantum Mechanics**

*Permission of instructor. (3). (BS). May not be repeated for credit. F.*

#### **EECS 541 / APPPHYS 541. Applied Quantum Mechanics II**

*APPPHYS 540. (3). (BS). May not be repeated for credit.*

#### **EECS 542. Advanced Topics in Computer Vision**

*EECS 442 or EECS 504 or permission of instructor. (3). (BS). May not be repeated for credit. F in odd years.*

The course discusses advanced topics and current research in computer vision. Topics will be selected from various subareas such as physics based vision, geometry, motion and tracking, reconstruction, grouping and

segmentation, recognition, activity and scene understanding, statistical methods and learning, systems and applications.

**EECS 545. Machine Learning**

*EECS 492. (3). (BS). May not be repeated for credit. W, odd years.*

**EECS 567 / MECHENG 567 / MFG 567 / ROB 510. Robotic Kinematics and Dynamics**

*Graduate standing or permission of instructor. (3). (BS). May not be repeated for credit. W.*

Geometry, kinematics, differential kinematics, dynamics, and control of robot manipulators. The mathematical tools required to describe spatial motion of a rigid body will be presented in full. Motion planning including obstacle avoidance is also covered.

**EECS 570. Parallel Computer Architecture**

*EECS 470. (4). (BS). May not be repeated for credit. F.*

Architecture for explicit parallelism. Multithreaded processors, small- and large-scale multiprocessor systems. Shared-memory coherence and consistency. Effect of architecture on communication latency, bandwidth, and overhead. Latency tolerance techniques. Interconnection networks. Case studies. Term projects.

**EECS 574. Computational Complexity**

*EECS 376 or graduate standing. (4). (BS). May not be repeated for credit. F.*

Fundamentals of the theory of computation and complexity theory. Computability, undecidability, and logic. Relations between complexity classes, NP-completeness, P-completeness, and randomized computation. Applications in selected areas such as cryptography, logic programming, theorem proving,

approximation of optimization problems, or parallel computing.

**EECS 575. Advanced Cryptography**

*EECS 203 or equivalent. EECS 574 recommended. (4). (BS). May not be repeated for credit. W.*

A rigorous introduction to the design of cryptosystems and to cryptanalysis. Topics include cryptanalysis of classical cryptosystems; theoretical analysis of one-way functions; DES and differential cryptanalysis; the RSA cryptosystem; ElGamal, elliptic, hyper elliptic and hidden monomial cryptosystems; attacks on signature schemes, identification schemes and authentication codes; secret sharing; and zero knowledge.

**EECS 579. Digital Systems Testing**

*Graduate standing. (4). (BS). May not be repeated for credit. F.*

Overview of fault-tolerant computing. Fault sources and models. Testing process. Combinational circuit testing. D-Algorithm and PODEM. Sequential circuit testing. Checking experiments. RAM and microprocessor testing. Fault simulation. Design for testability. Testability measures. Self-testing circuits and systems.

**EECS 582. Advanced Operating Systems**

*EECS 482/EQ. (4). (BS). May not be repeated for credit. W.*

**EECS 583. Advanced Compilers**

*EECS 281 and 370 (EECS 483 is also recommended). (4). (BS). May not be repeated for credit. F.*

In-depth study of compiler backend design for high-performance architectures. Topics include control-flow and data-flow analysis, optimization, instruction scheduling, register allocation. Advanced topics include memory hierarchy management, instruction-level parallelism, predicated and

speculative execution. The class focus is processor-specific compilation techniques, thus familiarity with both computer architecture and compilers is recommended.

**EECS 584. Advanced Database Systems**

*EECS 484 or permission of instructor. (4). (BS). May not be repeated for credit. F.*

Advanced topics and research issues in database management systems. Distributed databases, advanced query optimization, query processing, transaction processing, data models and architectures. Data management for emerging application areas, including bioinformatics, the internet, OLAP, and data mining. A substantial course project allows in-depth exploration of topics of interest.

**EECS 586. Design and Analysis of Algorithms**

*EECS 281. (4). (BS). May not be repeated for credit. W.*

Design of algorithms for non-numeric problems involving sorting, searching, scheduling, graph theory, and geometry. Design techniques such as approximation, branch-and-bound, divide-and-conquer, dynamic programming, greed, and randomization applied to polynomial and NP-hard problems. Analysis of time and space utilization.

**EECS 587. Parallel Computing**

*EECS 281; graduate standing. (4). (BS). May not be repeated for credit. F.*

The development of programs for parallel computers. Basic concepts such as speedup, load balancing, latency, system taxonomies. Design of algorithms for idealized models. Programming on parallel systems such as shared or distributed memory machines, networks. Grid computing. Performance analysis. Course includes a substantial term project.

**EECS 588. Computer and Network Security**

*EECS 482 or 489; or graduate standing. (4). (BS). May not be repeated for credit. F.*

Survey of advanced topics and research issues in computer and network security. Topics will be drawn from a variety of areas of such as mandatory and discretionary security policies, secure storage, security darnels, trust management, preventing software vulnerabilities, applied cryptography, network security.

**EECS 589. Advanced Computer Networks**

*EECS 489. (4). (BS). May not be repeated for credit. W.*

**EECS 595 / LING 541 / SI 561. Natural Language Processing**

*Senior standing. (3). (BS). May not be repeated for credit. F.*

Linguistics fundamentals of natural language processing (NLP), part of speech tagging, hidden Markov models, syntax and parsing, lexical semantics, compositional semantics, word sense disambiguation, machine translation. Additional topics such as sentiment analysis, text generation, and deep learning for NLP>

**EECS 598. Special Topics**

*Permission of instructor or counselor. (1 - 4). (BS). May be repeated for credit. F, W, Sp/Su, Sp, Su.*

**Environmental Health Sciences (EHS)**

Courses in the School of Public Health are listed in the *Schedule of Classes* under the School of Public Health.

The following courses count as LSA courses for LSA degree credit.

**EHS 588 / EAS 475 / ENVIRON 475.**

**Environmental Law**

*(3). May not be repeated for credit.*

Introduces students to environmental law and the impact of the legal process on decisions that affect the environment. Topics include common law tort actions, toxic tort actions, statutory controls of pollution and other environmentally harmful activities. Additional areas include administrative agency structure and performance, constitutional rights to environmental quality and more.

## **English Language Institute (ELI)**

**ELI 351 / LING 351 / PSYCH 344.**

**Second Language Acquisition**

*LING 111 or 210. (3). (BS). May not be repeated for credit.*

This is an introductory course in Second Language Acquisition (SLA). How adults learn, or fail to learn, a second language is a fascinating question. It involves much of what we know about human cognition, psychology, and language. How best to help learners acquire a second language is an equally important educational issue. In addition to all of the factors which play a role in child language acquisition, SLA also involves effects of variation in second language educational, social and usage environments, ages of acquisition, levels of learner cognitive and brain development, motivation, and language transfer.

**ELI 390 / EDUC 390 / LING 390 / RCSSCI 390. Community-Engaged**

**Learning in ESL Teaching Contexts**

*(3). (EXPERIENTIAL). May be elected three times for credit.*

This course focuses on communicative language teaching and learning in community contexts. It prepares participants to teach ESL in local communities and provides them with hands-on teaching practice experiences in local service organizations. Participants explore the overall theme of "Language and Community" as they learn ESL teaching methods & techniques.

**ELI 391. English as a Second Language Topics**

*(3). May be elected twice for credit. A maximum of four ELI credits may be counted toward a degree.*

Special courses arranged for undergraduates (native or non-native speakers) preparing to teach English as a second language in other countries. Courses will focus especially on cultural and educational aspects of teaching ESL that may be problematic for the international community. Variable format.

**ELI 395 / AMCULT 361 / EDUC 395 / LATINOAM 361 / LING 391 / RCSSCI 395. Principles and Practices of Teaching ESL in Migrant Communities**

*(3). (R&E). (EXPERIENTIAL). May be elected three times for credit.*

In this service-learning course students explore the language, educational, health, and legal issues facing migrant farmworkers in southeast Michigan. As students come to understand the needs of these communities, they learn and practice methods and techniques for teaching ESL to this mixed-proficiency, primarily Spanish-speaking population.

**ELI 396 / AMCULT 362 / EDUC 396 / LATINOAM 362 / LING 396 / RCSSCI 396. Migrant Community Outreach and**

### **ESL Teaching Practicum**

*ELI 395; completed with a minimum grade of C or better. (Prerequisites enforced at registration.) (2 - 3). (EXPERIENTIAL). May be elected three times for credit.*

In this Summer half-term course students practice teaching English to migrant farm workers in southeast Michigan. Students also help provide outreach services to camp residents such as pesticide training, interpreting, and translating. Central to the course is extensive reflection on the teaching experience, both in discussions and written assignments.

**ELI 399. Individual Research and Study**  
*Permission of Instructor. (1 - 4). (INDEPENDENT). May be repeated for a maximum of 4 credits. A maximum of four ELI credits may be counted toward a degree.*

Students will pursue individual research on a wide variety of topics related to second language acquisition, teaching or learning. Research projects would be completed done under the supervision of ELI faculty, who should be consulted as to possible topics or ongoing projects in which students could participate.

## **English Language and Literature (ENGLISH)**

### **ENGLISH 124. Academic Writing and Literature**

*(4). (FYWR). May not be repeated for credit.*

This course studies the intersection between critical thinking and persuasive writing,

and, using literary texts as the point of reference, takes as its goal the development of the student's skill at writing cogent expository and argumentative prose.

### **ENGLISH 125. Writing and Academic Inquiry**

*(4). (FYWR). May not be repeated for credit. F, W, Sp, Su.*

A study of rhetoric, both as a body of principles, and as a practical art, emphasizing the writing of expository and argumentative essays.

### **ENGLISH 126. Community-Engaged Writing**

*(4). (FYWR). May not be repeated for credit.*

In this community-based-learning course, students will develop academic writing skills through community engagement.

### **ENGLISH 140. First-Year Seminar on English Language and Literature**

*Enrollment restricted to first-year students, including those with sophomore standing. (3). (HU). May not be repeated for credit.*

A course in the LSA First-Year Seminar Program taught by a faculty member. Course involves focused study of selected topics in English language and literature through classroom discussion and the writing of essays.

### **ENGLISH 150. The Art of the Story**

*(2 - 3). (HU). May not be repeated for credit.*

Humans are story-telling animals: from our earliest entrance into language as young children, we are enthralled, inspired, and instructed by stories. This course explores the deep cultural and cognitive foundations of our collective fascination with story and their role in the continuing evolution and vitality of various literary genres.

**ENGLISH 201. Readings in U.S. Literatures: "American" and Other Fictions**

*(4; 3 in the half-term). (HU). May not be repeated for credit.*

As we engage U.S. novels, we will develop and improve our reading and writing practices, introduce ourselves to some critical tools and concepts, deepen our understandings of multiple perspectives, and build literacies around and increase our facility with conversations about race, ethnicity, and other socially constructed identities.

**ENGLISH 203. Introduction to Language and Rhetoric**

*(3 - 4; 3 in the half-term). (HU). May be repeated for a maximum of 8 credits.*

In introductory ways, students engage the scope, patterns, influence, and power of linguistic and rhetorical events and structures in a variety of contexts. Goals for the course include increasing critical thinking and deepening an awareness of the situational dynamics of language use.

**ENGLISH 215. Introduction to Women and Literature**

*(3 - 4; 3 in the half-term). (HU). May not be repeated for credit.*

This course surveys literary works written by women in English. Students engage literary works by writing about them in a variety of formats, with the goal of improving their critical and analytical thinking. Class meetings involve discussion and lecture.

**ENGLISH 216. Introduction to Disability Studies**

*(3 - 4; 2 - 3 in the half-term). (HU). May not be repeated for credit.*

An introduction to the field of Disability Studies.

**ENGLISH 221. Literature and Writing Outside the Classroom**

*(2 - 3). (HU). May be elected twice for credit. May be elected more than once in the same term.*

The course will lead students to connect classroom learning to site-based learning outside the classroom.

**ENGLISH 223. Creative Writing**

*(3). (CE). May not be repeated for credit. F, W, Sp.*

**ENGLISH 225. Academic Argumentation**

*Completion of the First-Year Writing Requirement. (4; 3 in the half-term). (HU). May not be repeated for credit. F, W, Sp.*

Instruction in composition with weekly papers and overall review of style and arrangement.

**ENGLISH 226. Directed Writing**

*Consent of instructor required. (1 - 3). (INDEPENDENT). May be repeated for a maximum of 3 credits. F, W, Sp/Su, Sp, Su.*

**ENGLISH 227 / THTREMUS 227. Introductory Playwriting**

*(3; 2 in the half-term). (CE). May not be repeated for credit.*

A creative writing course in the rudiments of playwriting, with special attention to the one-act play. Students are accepted on the basis of a portfolio.

**ENGLISH 229. Professional Writing**

*Completion of the First-Year Writing Requirement. (4). May not be repeated for credit.*

A straightforward approach to the practicalities of writing clear descriptive and explanatory prose whose subject matter is centered on process and sequence.

**ENGLISH 230. Introduction to Short Story and Novel**

(3). (HU). *May not be repeated for credit.*

**ENGLISH 231. Honors Core in English Studies**

*Consent of department required. (4). (HU). May be elected twice for credit. May be elected more than once in the same term.*

As part of the Honors Core Curriculum, this course introduces Honors students to the fields, questions and meta-questions, and methodologies of the Humanities. The topics vary, but all are extra-disciplinary in approach, providing a broad but rigorous investigation of the humanities.

**ENGLISH 232. Introduction to Visual Culture**

(3 - 4; 3 in the half-term). (HU). *May be repeated for a maximum of 6 credits. May be elected more than once in the same term.*

A lecture course for non-concentrators and future concentrators. This course offers a broad introduction to the field of visual culture. Students will learn methods for studying the techniques and themes of literature, film, photography, television, and other visual texts.

**ENGLISH 240. Introduction to Poetry**

(3). (HU). *May not be repeated for credit.*

An introduction to the reading and writing of poetry.

**ENGLISH 241. Honors Core Writing in English Studies**

*Consent of department required. (4). (HU). May be elected twice for credit. May be elected more than once in the same term.*

As part of the Honors Core Curriculum, this course introduces Honors students to academic writing while engaging with the fields, questions and meta-questions, and methodologies of the Humanities. The

topics vary, but all are extra-disciplinary in approach, providing a broad but rigorous investigation of the humanities.

**ENGLISH 242. Interdisciplinary Studies in English**

(1 - 4). (ID). *May be elected twice for credit.*

This 200-level interdisciplinary course will be organized around approaches to the study of English literature and language. Topics may include medicine, economics, history, sports, and others.

**ENGLISH 244. Introduction to Literary Journalism**

(3). (HU). *May not be repeated for credit.*

This course explores the history, theory, and craft of literary journalism, a long-standing literary genre that includes personal essays, profiles, and immersive investigations of the social landscape. Students will examine the origins of literary journalism, analyze well-known and influential examples of the genre, and experiment with using its characteristic devices in writing their own nonfiction narratives.

**ENGLISH 245 / RCHUMS 280 / THTREMUS 211. Introduction to Drama and Theatre**

(3; 2 in the half-term). (HU). *May not be repeated for credit. No credit granted to those who have completed or are enrolled in RCHUMS 281.*

This course aims to introduce students to as many basic aspects of the theatre, practical and theoretical, as time allows. It also presents them with a number of key plays from various periods and examines them from the point of view of their dramatic qualities, their theatrical strengths, their social and political contexts, their performance history, and their relevance today.



**ENGLISH 258 / JUDAIC 258 /  
RELIGION 258. The Bible as Literature**  
(3). (HU). *May not be repeated for credit.*

Literary genres of the Old and New Testaments and the formation of the Canonical Book.

**ENGLISH 260. Introduction to British Literature**  
(3). (HU). *May not be repeated for credit.*

This course offers a broad introduction to British literature. Students engage texts from a wide range of the literary-historical contexts of Britain from various periods.

**ENGLISH 270. Introduction to American Literature**  
(3). (HU). *May not be repeated for credit.*

**ENGLISH 274 / AAS 271. Introduction to Afro-American Literature**  
AAS 111 (CAAS 111). (3; 2 in the half-term). (HU). (R&E). *May not be repeated for credit.*

This course surveys poetry, fictive and autobiographical narratives, prose essays, and drama produced by black writers over the course of their presence in America. The goal is to investigate responses to Afro-American peoples' situation in a society simultaneously both hostile to and keenly dependent upon their presence.

**ENGLISH 280. Introduction to Digital Cultures**  
(3). (HU). *May not be repeated for credit. No credit granted to those who have completed or are enrolled in AMCULT 202: Digital Culture or SAC 202: Introduction to Digital Media Studies.*

A lecture course for non-concentrators and prospective concentrators. This course offers a broad introduction to studies of digital culture. Students engage texts in their historical contexts, with attention to

particular digital technologies and new media.

**ENGLISH 282 / AMCULT 232 / NATIVEAM 232. Native American Literature**  
(4; 3 in the half-term). (HU). (R&E). *May not be repeated for credit.*

This course surveys the history of Native American writing and oratory in the English language from the late eighteenth century to the present. Texts are situated to their historical, cultural, and political contexts, so this course also serves as a basic introduction to American Indian history, policy and law.

**ENGLISH 290. Themes in Language and Literature**  
(3 - 4; 3 in the half-term). (HU). *May be repeated for a maximum of 6 credits.*

This course is designed to introduce students to literature through a thematic approach.

**ENGLISH 292. Topics in Language and Literature**  
(1 - 2; 1 in the half-term). (HU). *May be elected twice for credit. May be elected more than once in the same term.*

This mini-course introduces literary works to non-concentrators. Topics change each term and may address the work of a single author, a single text, or be associated with a local cultural event.

**ENGLISH 298. Introduction to Literary Studies**  
(3). (HU). *May not be repeated for credit. Prerequisite for the English major and English Honors Plan.*

This course introduces students to the chief terms and practices of English Studies.

**ENGLISH 299. Directed Study**  
*Consent of instructor required. (1 - 3).*

*(INDEPENDENT). May be repeated for a maximum of 3 credits. F, W, Sp/Su, Sp, Su.*

**ENGLISH 303. Language and Rhetorical Studies**

*Recommended for students interested in focusing their study of English on language matters. (4; 3 in the half-term). (HU). May be repeated for a maximum of 8 credits. May be elected more than once in the same term.*

Examines the consequences of language use in the world in which we live from the persuasive effects of rhetorical strategies, to the relationship between linguistic practices and literary form, to the political consequences of disputed as well as shared literary and literacy practices across different discourse communities.

**ENGLISH 305. Exploring the English Language**

*Recommended for students preparing to teach English. (4; 3 in the half-term). (HU). May not be repeated for credit.*

The phonemic and grammatical structure of present-day English considered in the light of modern linguistic science, with some attention to problems of usage, word formation, meaning, and changes in meaning.

**ENGLISH 308. History of the English Language**

*(3 - 4; 3 in the half-term). (HU). May not be repeated for credit.*

A historical survey of the sounds and structures of the English language from 900 to the present time with particular emphasis upon the language of Chaucer and Shakespeare.

**ENGLISH 311 / THTREMUS 328. Theater of Politics**

*Consent of department required. (3). (HU). May not be repeated for credit.*

This course explores how political theater affects and is affected by current trends in American politics.

**ENGLISH 312 / AMCULT 354 / ENVIRON 354. Camp Davis: History and Literature of the Rockies**

*Consent of department required. (3 in the half-term). (HU). May not be repeated for credit. Su at Camp Davis, Wyoming. May not be taken pass/fail.*

This course is taught onsite at the University of Michigan's Camp Davis Geology field station south of Jackson Hole, Wyoming. It examines a range of human experiences and expressions of place, centered on the area of Jackson Hole, but extending in conceptual terms across the central and northern Rocky Mountain region and to the American West as a whole.

**ENGLISH 313. Topics in Literary Studies**

*(4; 3 in the half-term). (HU). May be repeated for a maximum of 8 credits. May be elected more than once in the same term.*

This course considers various thematic approaches to literature and will be organized around texts and concepts raised by a particular set of authors, historical period, or genre.

**ENGLISH 314 / WGS 314. Gender and Sexuality Studies in Literature**

*(3 - 4; 2 - 3 in the half-term). May be repeated for a maximum of 6 credits. May be elected more than once in the same term.*

A broad survey of a major literary or cultural theme, focusing on gender and/or sexuality as categories of analysis central to the understanding of human life and society.

**ENGLISH 315 / WGS 315.****Women and Literature**

(3 - 4; 3 in the half-term). (HU). May be repeated for a maximum of 6 credits.

This course considers a wide variety of literature on women and literature often through the relation between the socio-historical existence of women and textual representation of women literary institutions and literary texts.

**ENGLISH 316. Disability Studies**

(3). (HU). May not be repeated for credit.

A lecture course for non-concentrators and concentrators. It introduces students to the range of texts, themes, and conceptual terms that constitute disability studies approaches to poetry, novels, creative non-fiction, dance, theater and the visual arts.

**ENGLISH 317. Literature and Culture**

(3). (HU). May be repeated for a maximum of 6 credits. May be elected more than once in the same term.

Literary readings aimed at recreating the sense of a specific culture, e.g. English Renaissance, Beat Literature, Revolutionary Ireland, Post-Colonial Africa (English-speaking). Actual content and emphasis varies from term to term.

**ENGLISH 318. Genre Studies**

(3). (HU). May be repeated for a maximum of 6 credits.

Readings are bound together by their similarity on the structural, generic, or modal levels, e.g. Science Fiction, Fantasy, Epic and Romance, Psychological Novel, Lyric Poetry, Tragedy. Actual content and emphasis varies from term to term. Consult the schedule of classes for information about each term's offerings.

**ENGLISH 319. Literature and Social Change**

(3). (HU). May be repeated for a maximum of 6 credits. May be elected more than once in the same term.

This course studies the effect of scientific, economic, political, or cultural change upon literature, with particular reference to the nineteenth and twentieth centuries. Some of the topics which may be offered include science and poetry, or politics and the modern novel; or the focus may be on a particular theme, for example, urbanization and the theme of alienation in modern literature.

**ENGLISH 320. Literature and the Environment**

(3 - 4; 2 - 3 in the half-term). (HU). May not be repeated for credit.

This course will look at the development of responses to American nature from the colonial period to the present. From colonial ideas about a new Eden, or a howling wilderness, we will move through Enlightenment concepts of order and/or sublimity, then to Transcendentalist claims about a spiritual nature, and finally look at 20th-century concerns about wilderness loss or management, toxicity, concepts of sustainability, and the dependence of the human on the non-human world.

**ENGLISH 321. Internship**

*Concentration in English. (1).*

*(EXPERIENTIAL). May be repeated for a maximum of 4 credits. May be elected more than once in the same term. Students may count up to 4 credits of ENGLISH 321 toward their elective concentration credits. Offered mandatory credit/no credit.*

The English department believes that English is one of the most versatile concentrations you can choose as an undergraduate at Michigan. We understand, too, that a number of our concentrators receive opportunities to work in various

internship placements, especially over the summer months, putting their skills as writers and speakers to work in placements outside the classroom.

**ENGLISH 322. Community Journalism**

*Consent of instructor required. (3). May be repeated for a maximum of 6 credits.*

This course combines two components: an internship position in community journalism and a writing seminar that supports students as they produce written work related to their internship positions. Students will complete 50-60 hours as interns and participate in a seminar in which they workshop their writing and study journalistic techniques.

**ENGLISH 323. Creative Writing: Fiction**

*ENGLISH 223; submission of portfolio and application required. (3). (CE). May be repeated for a maximum of 6 credits. May be elected more than once in the same term.*

Practice in writing fiction.

**ENGLISH 324. Creative Writing: Poetry**

*ENGLISH 223; submission of portfolio and application required. (3). (CE). May be repeated for a maximum of 6 credits. May be elected more than once in the same term.*

Practice in writing poetry.

**ENGLISH 325. Art of the Essay**

*Completion of the First-Year Writing Requirement. (3). May not be repeated for credit. F, W, Sp, Su.*

A review of the fundamentals of composition with further practice in writing expository prose, materials being drawn in part from the students' special fields of interest.

**ENGLISH 327 / THTREMUS 327.**

**Intermediate Playwriting**

*ENGLISH 227. (3; 2 in the half-term). May not be repeated for credit.*

Practice in writing short plays.

Conceptualizing a full-length play.

**ENGLISH 328. Writing and the Environment**

*(3). (CE). May be elected twice for credit.*

This is an upper level writing course that asks for essays -descriptive, narrative, argumentative, even ones that might be strongly advocating a particular position-that grow out of knowledge or curiosity about the natural world. Examples are drawn from environmental writing, literary and scientific, in the hopes that they may be used as models or inspiration.

**ENGLISH 329 / ENVIRON 329.**

**Environmental Writing and Great Lakes Literature**

*Consent of department required. (5 in the half-term). (HU). May not be repeated for credit.*

This course explores some classic examples of nature writing from the Great Lakes region (fiction, non-fiction, and poetry). It takes advantage of the resources of the Biological Station--habitat, trails and lake to stimulate written responses that are descriptive, narrative, and researched.

**ENGLISH 331 / FTVM 331. Film Genres and Types**

*FTVM 150 or FTVM (SAC) 236. (3). (HU). May be repeated for a maximum of 9 credits. May be elected more than once in the same term.*

Careful analytical studies of representative films from various film genres. The course concentrates on one particular genre every semester it is offered. Past subjects have included non-narrative film, post-1972 gore, farce, and the American musical.

**ENGLISH 332. Visual Culture**

*(3 - 4; 2 - 3 in the half-term). (HU). May be*

*elected twice for credit. May be elected more than once in the same term.*

A lecture or lecture/discussion course for non-concentrators and concentrators. This course introduces students to a range of texts in visual culture studies, which may include film, photography, painting, and other visual arts.

**ENGLISH 335. Autobiography**

*(3 - 4; 2 - 3 in the half-term). (HU). May not be repeated for credit.*

Looking at 12-15 narratives, this course considers a range of questions, including: What is autobiographical truth? How are autobiographies different than and similar to novels and history? What relationships do these narratives posit between the individual's life and that of his or her larger community?

**ENGLISH 340. Studies in Poetry**

*(3). (HU). May not be repeated for credit.*

This course studies and analyzes poetry using various topics and themes. Students write, critique, and formulate responses to poetry.

**ENGLISH 341. Fantasy**

*(3 - 4; 2 - 3 in the half-term). (HU). May not be repeated for credit.*

This course explores the mythic, psychological, and literary theoretical nature, impact, and uses of Fantasy both in general and in outstanding narratives from the beginning of the 19th century to the present drawn from a wide variety of genres such as fairy tale, science fiction, the New Novel, and Postmodernism.

**ENGLISH 344. Writing for Publication/Public Writing**

*(3). May be elected twice for credit.*

The course assists students in using their college and academic writing skills to practice producing publishable writing, giving attention to publishing contexts both print and digital. Course themes will vary by instructor, and range across topics such as journalism, creative nonfiction, organizational blogging, and publicity writing.

**ENGLISH 345. The New Essay**

*Completion of the First Year Writing Requirement. (3). (CE). May not be repeated for credit.*

Building on the traditions of the personal essay, we will use the technology of modern life (smartphones, computers) to create three well-researched, nonfiction, multimodal essays grounded in traditional prose. We will develop and hone each of these assignments through a process of planning, drafting, peer-based workshops, and final revisions.

**ENGLISH 346. Performance Studies**

*(3). (HU). May be repeated for a maximum of 6 credits.*

An introduction to the field of performance studies, its theoretical framings and traditions, exploring questions of performance in everyday life, in art-framed practices, and in textual work.

**ENGLISH 349 / THTREMUS 323.**

**American Theatre and Drama**

*(3). (HU). May not be repeated for credit.*

**ENGLISH 350 / MEMS 350. Literature in English to 1660**

*(4; 3 in the half-term). (HU). May not be repeated for credit. F.*

Part one of a two-term sequence designed to give students a principled sense of the range of literary works in English to 1660.

**ENGLISH 351. Literature in English,  
1660-1830**

*(3 - 4; 3 in the half-term). (HU). May not be repeated for credit. W.*

Part two of a three-term sequence designed to give students a principled sense of the range of literary works written in English to 1830.

**ENGLISH 352. Literature in English,  
1830-Present**

*(3 - 4; 3 in the half-term). (HU). May not be repeated for credit.*

This course provides students a principled sense of the range of literary works written in English from 1830 to the present.

**ENGLISH 355 / ENVIRON 355.  
Southern Natures: The Making and  
Unmaking of Races and Environments in  
the US South**

*(3). (HU). May not be repeated for credit.*

This course provides an environmental and cultural history survey of US southern spaces from the colonial period through the present. We begin in the present, with a unit on the New Orleans levee disaster of 2005 (Katrina) and another unit on contemporary plantation memorials/ tourism / representations. Having familiarized ourselves with contemporary issues and crises, we then jump back to colonial origins and work our way forward again.

**ENGLISH 360. The Rise of the Novel**

*(3). (HU). May not be repeated for credit.*

The development of the novel into a major literary form is related to cultural and intellectual backgrounds. Authors often studied include Defoe, Richardson, Fielding, Sterne, Smollett, Austen, Scott.

**ENGLISH 361. The Victorian Novel**

*(3). (HU). May not be repeated for credit.*

The development of the novel is traced with attention to traditional and innovative forms, and cultural and intellectual backgrounds. Authors often studied include the Brontes, Trollope, Gaskell, Thackeray, Eliot, Hardy.

**ENGLISH 362. The American Novel**

*(3 - 4; 3 in the half-term). (HU). May not be repeated for credit.*

This course concerns the growth of the U.S. novel from the early national period to the present. It investigates both what the U.S. novel shares with other Anglophone novel traditions as well as its unique responses to U.S. historical and social conditions. Authors may include Brockden Brown, Hawthorne, Melville, Stowe, Twain, James, Wharton, Dreiser, Dos Passos, Cather, Hemingway, Faulkner, Hurston, as well as a variety of post WWII and contemporary authors.

**ENGLISH 363. The Modern Novel**

*(3 - 4; 3 in the half-term). May not be repeated for credit.*

This course focuses on the major developments in the modern novel with special attention to the form's relationship to intellectual and cultural trends in the modern world. Special emphasis is on works by authors such as Joyce, Woolf, Lawrence, Ford, Forster, Stein, West, Richardson, H.D.

**ENGLISH 364. The Contemporary Novel**

*(3 - 4; 2 - 3 in the half-term). (HU). May not be repeated for credit.*

This course investigates the novel since World War II. Readings are in such writers as Camus, Sartre, Waugh, Nabokov, Lessing, Bellow, Mailer, Robbe-Grillet, Grass, and Solzhenitsyn.

**ENGLISH 367 / MEMS 367.**

**Shakespeare's Principal Plays**

(3 - 4; 3 in the half-term). (HU). May not be repeated for credit.

An intensive study of 8 to 10 plays designed to increase the student's critical appreciation and understanding of Shakespeare's art and thought.

**ENGLISH 374. African American Literature**

(3). (HU). May be repeated for a maximum of 6 credits.

This course explores formal and thematic developments in African American Literature in relation to broader historical, cultural, political, and legal contexts. Particular sections may focus on topics such as: interracialism; the environment; gender/sexuality; popular culture; protest and activism; the historical trauma of enslavement; crime and justice; film and visual art.

**ENGLISH 375. World Literatures in English**

(3). (HU). May not be repeated for credit.

An introduction to literatures in English with emphasis on writing from outside the US and Great Britain: Africa, Asia, Australia, the Caribbean, and the Pacific. Some attention to issues involved in thinking about English as a world language and a global literature, including questions of colonialism and decolonization.

**ENGLISH 378. Muslim and Arab Literatures**

(3). (HU). May be repeated for a maximum of 6 credits.

This course introduces students to major works and writers of modern and contemporary Muslim and Arab literature from the United States and around the world.

**ENGLISH 379 / AAS 338. Literature in Afro-American Culture**

AAS 201. (3). (HU). May not be repeated for credit.

**ENGLISH 380 / AAS 381 / WGS**

**381. Intersections: Fictions and Feminisms of the African Diaspora**

AAS 111 (CAAS 111). (3). May not be repeated for credit.

Focusing on fiction written by women in the African Diaspora, this course explores how works of fiction can contribute to an understanding of feminisms, and how various feminist perspectives can contribute to an understanding of fictional texts.

**ENGLISH 381 / AMCULT 324 / ASIANPAM 324. Asian American Literature**

(3). (HU). May not be repeated for credit.

This course considers a range of topics in the study of Asian American literature. It raises questions concerning the canon of texts to be studied, the cultural construction of Asian American literature, race and ethnicity in America, and the ways in which these texts challenge and expand our understanding of American literature.

**ENGLISH 382 / AMCULT 328 / NATIVEAM 328. Studies in Native American Literature**

(3). (HU). May not be repeated for credit.

This course considers a range of topics in the study of native American literature. It raises questions concerning the canon of texts studied, the cultural construction of ethnicity in America, and the ways in which these texts challenge and expand our understanding of American literature.

**ENGLISH 383 / JUDAIC 389. Jewish Literature**

(3). (HU). May not be repeated for credit.

This course considers a range of topics in the study of Jewish literature. It raises questions concerning the canon of texts studied, the cultural construction of Jewish literature, race and ethnicity.

**ENGLISH 384 / AAS 384 / AMCULT 376. Caribbean Literature**

AAS 202. (3). (HU). *May be repeated for a maximum of 6 credits.*

The course considers a range of topics in the study of Caribbean literature. It raises questions concerning the canon of texts to be studied, the cultural construction of Caribbean literature, race and ethnicity.

**ENGLISH 385 / AAS 385. African Literature**

AAS 200. (3). (HU). *May be elected twice for credit.*

This course considers a range of topics in the study of African literature. It raises questions concerning the canon of texts studied, the cultural construction of African literature, race and ethnicity.

**ENGLISH 387 / AMCULT 327 / LATINOAM 327. Latina/Latino Literature of the U.S.**

(3). (HU). *May not be repeated for credit. Taught in English.*

This course, taught in English, considers the relationships between Latino/a literary productions and the social conditions and possibilities of its production. A variety of topics are addressed in the study of such Latino/a literatures of the US as Chicano/a, Puerto Rican, and Cuban American.

**ENGLISH 388 / AMCULT 325 / ASIANPAM 325. Pacific Literary and Cultural Studies**

(3). (HU). *May not be repeated for credit.*

This course will introduce students to major authors and texts of Pacific and Pacific Islander American literature. We will attend to issues of representation, form and genre, identify, history, social and political movements, gender, sexuality, class, and race.

**ENGLISH 389 / AAS 346 / HISTORY 362. Literature in African History**

(3). (HU). (R&E). *May not be repeated for credit.*

This course explores the intersection of African history and literature, of imagination and politics. We study how African writers participated in the political and moral arguments of their time. In epic dramas, in novels, in poetry and in autobiographies, African composers conjured up audiences, offered a shared vision of the past and the future, and set them on a forward path together.

**ENGLISH 390. Topics in Literary Criticism and Theory**

(3). *May not be repeated for credit.*

Course in specific topics pertaining to literary criticism and theory. Content and emphasis varies from term to term. Consult the Schedule of Classes for information about specific terms.

**ENGLISH 397. Honors Junior Seminar**  
*Junior or senior standing, and permission of instructor. (3). May be repeated for a maximum of 9 credits.*

This seminar prepares Honors students for writing their senior thesis. It includes research methods, literary critical studies, and writing techniques. Period and topic will vary depending on the instructor's expertise. Requirements may include independent research, intensive readings, oral presentations, annotated bibliographies, and critical writing.



**ENGLISH 398. Junior Seminar in English Studies**

*(4; 3 in the half-term). May be repeated for a maximum of 8 credits. May be elected more than once in the same term.*

The Junior Seminar introduces the discussion of literary texts and issues in literature and or language, along with some explicit considerations of critical approaches to literature and language. The goal is to allow students at the junior level to produce significant writing and research projects.

**ENGLISH 403. Topics in Language and Rhetorical Studies**

*(3). May be elected twice for credit. May be elected more than once in the same term.*

This course examines the consequences of language use, its persuasive effects, linguistic and literacy practices, literary forms, and political manifestations within specific time periods, topics, and/or discourse communities. Topics vary by term and instructor.

**ENGLISH 405. Theories of Writing**

*(3). May not be repeated for credit.*

An introduction to some of the major theories that shape approaches to written composition. Investigation of how such theories shape practices, especially the classroom practices of writing teachers.

**ENGLISH 407. Topics in English Language and Literature**

*(3). May be elected twice for credit. May be elected more than once in the same term.*

This class considers the various critical approaches to literature, either by direct study or by application to a particular writer, period, or genre.

**ENGLISH 408 / LING 408. Varieties of English**

*(3). May not be repeated for credit.*

This course examines topics such as American English, English as a world language, and dialects in English. It also studies the ways speech reflects our personal views about national and regional origins, race, class, ethnicity, religion, age, gender, and sexual orientation.

**ENGLISH 409. Old English**

*(3). May not be repeated for credit.*

This course provides an intensive introduction to Old English, both its grammar and lexicon, in order to allow students to begin to read and translate Old English texts.

**ENGLISH 410. Middle English**

*(3). May not be repeated for credit.*

This course provides an intensive introduction to Middle English in order to allow students to read and translate Middle English texts. The course covers Middle English grammar and lexicon, as well as the dialect variation that characterizes texts from this period.

**ENGLISH 411. Art of the Film**

*(3). May not be repeated for credit.*

**ENGLISH 415 / WGS 414. Studies in Women and Literature**

*(3). May not be repeated for credit.*

An intensive study of women and literature. A particular section might focus on a group of women writers defined by a period, a literary form, or a particular tradition; on representations of women in literature in some period or form, or a specific image of women present in a range of literature; or some combination of these topics.

**ENGLISH 418. The Graphic Narrative**  
(3). *May not be repeated for credit.*  
*Rackham credit requires additional work.*

This is a general term for Comic Books, Graphic Novels, Manga, Bandes Dessinees, Novelas Em Quadrinhos, Sequential Art, and even the Bayeux Tapestry. Students use both primary and secondary readings to explore the modern history and theory of the field, the sociology of the field, and a rich assortment of excellent examples of many literary types within the field.

**ENGLISH 420. Technology and the Humanities**  
(3). *May not be repeated for credit.*

This course combines practical training in computer-based information collection, manipulation, and presentation with original research into the humanistic implications of technology.

**ENGLISH 423. Advanced Fiction Writing**

*Consent of instructor required. Open to seniors and graduate students. (3). May be repeated for a maximum of 6 credits.*

Practice in the analysis and writing of fiction.

**ENGLISH 424. Advanced Poetry Writing**

*Consent of instructor required. (3). May be repeated for credit.*

Practice in the analysis of poetic forms and the writing of poetry.

**ENGLISH 425. Advanced Essay Writing**  
*Open only to seniors who have completed the First-Year Writing Requirement. (3). May not be repeated for credit.*

Practice and guidance in the writing of expository prose, primarily for students at work on long papers, with special attention

in conference to individual writing problems.

**ENGLISH 426. Directed Writing**

*Consent of instructor required. Junior standing. (1 - 4). (INDEPENDENT). May be repeated for a maximum of 6 credits. F, W, Sp/Su, Sp, Su.*

**ENGLISH 427 / THTREMUS 427. Advanced Playwriting**

*Consent of instructor required. ENGLISH 327. (3; 2 in the half-term). May be repeated for a maximum of 6 credits.*

Students write a full-length play. Skills are developed through technique assignments, rewrites, class readings and discussions, viewing of local plays.

**ENGLISH 428. Senior Creative Writing Tutorial**

*Consent of instructor required. ENGLISH 223, 323, and 423/429. (3). May not be repeated for credit.*

A creative writing tutorial for seniors who have taken the 200-, 300-, and 400-level writing workshops, and have been accepted into the Creative Writing Program. In this course, students complete a major manuscript of fiction or poetry. Includes supervised reading and writing assignments and regular tutorial meetings between students and faculty, with the possibility of arranged workshops in fiction and/or poetry. The course is designed to afford students and faculty the greatest flexibility and latitude in devising the most beneficial working arrangements, given the particular needs of students taking the course that term.

**ENGLISH 440. Modern Poetry**

*(3). May not be repeated for credit.*

**ENGLISH 441. Contemporary Poetry**

*(3). May not be repeated for credit.*

**ENGLISH 442. Studies in Poetry**

*(3). May not be repeated for credit.*

A course allowing for in-depth exploration of a specific poetic movement, genre or sub-genre, or historical, theoretical, or critical questions in the field of poetry and poetics.

**ENGLISH 443 / THTREMUS 321.  
History of Theatre I**

*(3). May not be repeated for credit.*

**ENGLISH 444 / THTREMUS 322.  
History of Theatre II**

*(3). May not be repeated for credit.*

**ENGLISH 447. Modern Drama**

*(3). May not be repeated for credit.*

Considered are the great dramatic movements of the last hundred years, selected from the naturalistic theatre of Ibsen and Chekhov, symbolism after Strindberg, expression in Pirandello and O'Neill, the epic theatre of Brecht, and the theatre of the absurd's after Beckett.

**ENGLISH 449. Medieval Drama**

*(3). May not be repeated for credit.*

A study of the English mystery plays and morality plays, with some coverage of related continental dramas (such as commedia del arte).

**ENGLISH 450. Studies in Medieval and Renaissance Literature**

*(3). May be repeated for a maximum of 8 credits. May be elected more than once in the same term.*

A course which ranges widely (by genre or theme) over literature in English to 1660.

**ENGLISH 451. Studies in Literature, 1600-1830**

*(3). May be repeated for credit. May be elected more than once in the same term.*

A course which ranges widely (by genre or theme) over literature in English 1660-1830.

**ENGLISH 460. Studies in the Novel**

*(3). May be repeated for a maximum of 6 credits. May be elected more than once in the same term.*

This course will address specific issues or trends in the history of the novel. Examples include unreliable narration in the novel form, the post-colonial novel, and the gothic novel then and now.

**ENGLISH 464. Studies in Individual Authors**

*(3). May be repeated for credit. May be elected more than once in the same term.*

Course is in the works of a major author.

**ENGLISH 465 / MEMS 465. Chaucer: The Canterbury Tales**

*(3). May not be repeated for credit.*

This course is an intensive study of Chaucer's major works. It includes reading in Middle English and background lectures covering as many tales as possible at the instructor's discretion.

**ENGLISH 467. Topics in Shakespeare**

*Prior course work in Shakespeare is recommended. (3). May not be repeated for credit.*

This course is designed to consider specific issues and approaches to Shakespeare's work for students who have already gained some basic familiarity with his texts.

**ENGLISH 469. Milton**

*(3). May not be repeated for credit.*

**ENGLISH 470. Colonial and Revolutionary American Literature**

*(3). May not be repeated for credit.*

A study of colonial and revolutionary literature and literary history from their origin to the 19th century.

**ENGLISH 471. Nineteenth-Century American Literature**

*(3). May not be repeated for credit.*

A study of representative literary texts and significant cultural movements of the nineteenth century.

**ENGLISH 472. Twentieth-Century American Literature**

*(3). May not be repeated for credit.*

A study of the evolution of American literary modernism.

**ENGLISH 473. Topics in American Literature**

*(3; 2 - 3 in the half-term). May be repeated for a maximum of 6 credits. May be elected more than once in the same term.*

Intensive study of particular periods and essential issues in American literature.

**ENGLISH 490. History of Literary Criticism and Theory**

*(3). May not be repeated for credit.*

A study of representative critics from classical times to the present.

**ENGLISH 492. Special Topics in Language and Literature**

*(1 - 2; 1 in the half-term). May be elected twice for credit. May be elected more than once in the same term.*

The course topic changes each term. It may address the work of a single author, or a single text, or be associated with a local cultural event.

**ENGLISH 495. Honors Colloquium: Drafting the Thesis**

*Consent of instructor required. Admission to the English Honors Program and permission of instructor. (3). May not be repeated for credit. Continuing Course. Y grade can be reported at end of the first-term to indicate work in progress. At the*

*end of the second term, the final grade is posted for both term's elections.*

Students develop the prospectus and first draft of their honors thesis during this course taken during the Fall Term of the Senior year with the final thesis submitted in March.

**ENGLISH 496. Honors Colloquium: Completing the Thesis**

*Consent of instructor required. ENGLISH 492, admission to the English Honors Program, and permission of instructor. (1 - 3). May not be repeated for credit. Continuing Course. Y grade can be reported at end of the first-term to indicate work in progress. At the end of the second term, the final grade is posted for both term's elections. W.*

Students develop the final draft of their honors thesis during this course taken during the Winter term of their senior year.

**ENGLISH 498. Directed Teaching**

*Consent of instructor required. (3; 2 in the half-term). (INDEPENDENT). May be repeated for a maximum of 9 credits.*

**ENGLISH 499. Directed Study**

*Consent of instructor required. Junior standing. (1 - 4). (INDEPENDENT). May be repeated for a maximum of 6 credits. F, W, Sp, Sp/Su, Su.*

## **Engineering (ENGR)**

**ENGR 371 / MATH 371. Numerical Methods for Engineers and Scientists**

*ENGR 101; one of MATH 216, 256, 286, or 316, and one of MATH 214, 217, 417, or 419. (3). (BS). May not be repeated for credit. No credit granted to those who have*

*completed or are enrolled in MATH 471 or 472.*

This is a survey course of the basic numerical methods which are used to solve scientific problems. In addition, concepts such as accuracy, stability and efficiency are discussed. The course provides an introduction to MATLAB, an interactive program for numerical linear algebra as well as practice in computer programming.

## **Ensemble (ENS)**

A wide variety of music performing ensembles are available to LSA students. Principal among these, for instrumentalists, are Ensemble (ENS) 344 (University Campus Orchestra) and ENS 346 (Campus Band), as well as ENS 348 (U M Marching Band), for which an audition is required. Other instrumental ensembles, both orchestras and bands, are designed primarily for University of Michigan School of Music, Theatre & Dance students, but LSA students with a performance background are encouraged to audition for these groups as well. Vocalists may audition for the University Arts Chorale (designated for the LSA population), but may also audition for the University of Michigan School of Music, Theatre & Dance vocal ensembles, including the University Choir (ENS 349), the University Chamber Choir (ENS 350), the Choral Union (ENS 354), and the Men's and Women's Glee Clubs (ENS 353 and 356). In addition, many LSA students have participated in performing ensembles sponsored by the ethnomusicology faculty, such as the Javanese gamelan (ENS 405), for which no prior background is required.

*No music performing ensemble carries LSA credit (except for those cross-listed with LSA: ENS 405, 406, 407).*

### **ENS 303 / COMP 303. Open Mic Seminar**

*Consent of instructor required. Students enrolling in Open Mic Seminar should have intermediate to advanced proficiency in some performing art. May be repeated for a maximum of 6 credits.*

### **ENS 405 / RCHUMS 301. Beginning Indonesian Orchestra**

*(1). May be repeated for credit. Yields no honor points.*

### **ENS 406 / RCHUMS 302. Beginning Indonesian Orchestra**

*ENS 405. (1). May be repeated for credit. Yields no honor points.*

### **ENS 407 / RCHUMS 303. Intermediate Indonesian Orchestra**

*One semester of gamelan. (1 - 2). May be repeated for credit. Yields no honor points.*

## **Environmental Sciences and Engineering (ENSCEN)**

### **ENSCEN 105 / CHEM 105 / CLIMATE 105 / ENVIRON 105. Our Changing Atmosphere**

*(3). (NS). (BS). May not be repeated for credit.*

The science of the greenhouse effect, stratospheric ozone depletion, polar ozone holes, and urban smog. These phenomena and their possible consequences are discussed, along with the properties and behavior of the atmosphere and its components of the environment.

**ENSCEN 451 / CLIMATE 451 / EARTH 457. Atmospheric Dynamics I**

*CLIMATE 401 or MATH 450. (4). (BS).*

*May not be repeated for credit.*

Quasi-geotropic energetics; fronts; the mean circulation; planetary and equatorial waves; overview of the dynamics of the middle atmosphere; wave-mean flow interaction; spectral methods; and tropical meteorology.

**ENSCEN 467 / CHEM 467 / CLIMATE 467 / EARTH 465 / ENVIRON 467.**

**Biogeochemical Cycles**

*MATH 116, CHEM 210, and PHYSICS 240 (or 260). (4). (BS). May not be repeated for credit. F, W.*

The biogeochemical cycles of water, carbon, nitrogen, and sulfur; the atmosphere and oceans as reservoirs and reaction media; the fate of natural and man-made sources of carbon, nitrogen, and sulfur compounds; the interactions among the major biogeochemical cycles and resultant global change; greenhouse gases, acid rain and ozone depletion.

**ENSCEN 475 / CLIMATE 475 / EARTH 475. Earth System Interactions**

*Senior standing in science or engineering. (4). (BS). May not be repeated for credit.*

Students will work on open-ended research problems with mathematical models from Earth System Science. The models may include, for example, surface characteristics, hydrology, solar-land-ocean-atmosphere exchanges, and space-based observations. Numerical experiments will promote further understanding and interpretation of earth system interactions, team building, and scientific communication.

**Program in the Environment (ENVIRON)**

**ENVIRON 101 / BIOLOGY 101. Food, Energy, and Environmental Justice**

*(4). (NS). (BS). May not be repeated for credit. Credit is granted for a combined total of 17 credits elected in introductory biology.*

In recent years it has become apparent that current energy and food sourcing is damaging the environment from global warming to pesticide runoff. This course treats the issues of energy, food, and the environment from a biological and sociopolitical point of view. It emphasizes the historical trajectories that generated current conditions and the scientific options for revamping our energy and food systems to make them more consistent with environmental sustainability.

**ENVIRON 102 / CLIMATE 102 / EARTH 122. Extreme Weather**

*(3). (NS). (BS). May not be repeated for credit.*

This course provides an introduction to the physics of extreme weather events. The course uses examples of the thunderstorms, jet stream, floods, lake-effect snowstorms, lightning, thunder, hail, hurricanes, and tornados to illustrate the physical laws governing the atmosphere. Participants apply these principles in hands-on storm forecasting and weather analysis assignments.

**ENVIRON 105 / CHEM 105 / CLIMATE 105 / ENSCEN 105. Our Changing Atmosphere**

*(3). (NS). (BS). May not be repeated for credit.*

The science of the greenhouse effect, stratospheric ozone depletion, polar ozone holes, and urban smog. These phenomena and their possible consequences are discussed, along with the properties and behavior of the atmosphere and its components of the environment.

**ENVIRON 110 / BIOLOGY 110 / CLIMATE 171 / EARTH 171 / RCNSCI 110. Introduction to Global Change: The Science Behind Sustainability**

*(4). (NS). (BS). May not be repeated for credit. Satisfies the geography requirement for State of Michigan certification for social studies teachers. F.*

Students learn about the evolution of the universe, Earth, our changing environment and our planets living organisms. Global Change I, which is part of the GC curriculum, assumes no prior science background. Homework and laboratories use computer-based systems modeling and analysis, and includes a group presentation.

**ENVIRON 111 / CLIMATE 172 / EARTH 172 / GEOG 111. Climate Change and Sustainability: Environmental Challenges of the 21st Century**

*(4). (ID). (BS). (QR/2). May not be repeated for credit. Satisfies the geography requirement for State of Michigan certification for social studies teachers. W.*

This course explores impacts of modern human society on land, ocean, and atmosphere, considering all aspects relevant to a sustainable future. Throughout the semester, students work on a sustainability pledge to apply class material to everyday life.

**ENVIRON 116 / EARTH 116. Introductory Geology in the Field**

*(5 in the half-term). (NS). (BS). May not be repeated for credit. Reduced credit:*

*Students who have completed GEOSCI 117 or EARTH 117 or ENVIRON 117 receive 2 credits; GEOSCI 119 or 120 or EARTH 119 or 120 or ENVIRON 119 or 120, 3 credits; GEOSCI 205 AND 206 or EARTH 205 AND 206 or ENVIRON 206, 3 credits; one of GEOSCI 205 or 206 or EARTH 205 or 206 or ENVIRON 206, 4 credits. Su at Camp Davis, Wyoming.*

An introduction to geology in the field, this course is the equivalent of EARTH/ENVIRON 118/119 but is taught at Camp Davis, the University's Rocky Mountain Field Station near Jackson, Wyoming. It stresses principles and processes involved in the evolution of the earth. The course includes rigorous laboratory exercises in which students study minerals, rocks and fossils, and structures in their natural settings. Lectures are given both in camp and in the field, but much time is spent outdoors in the nearby Teton, Hoback, Gros Ventre, and Snake River Ranges. Other trips of special significance include the Wind River Range. Craters of the Moon, and Yellowstone Park.

**ENVIRON 118 / EARTH 118. Introductory Geology Laboratory**

*Prior or concurrent enrollment in EARTH 119, or 205 and 206, or 284. (1). (NS). (BS). May not be repeated for credit. No credit if completed an introductory course in geology (EARTH/ENVIRON 116, 117, or 120). F, W.*

This one-term laboratory course provides a practical study of minerals, rocks, and fossils and geologic maps.

**ENVIRON 119 / EARTH 119. Introductory Geology Lectures**

*Concurrent enrollment in ENVIRON or EARTH (GEOSCI) 118 for the lab. (3 - 4). (NS). (BS). May not be repeated for credit. No credit granted to those who have completed GEOSCI 116, 117, or 120, and*

*no credit granted to those who have completed or are enrolled in EARTH 116, 117, or 120 or ENVIRON 116, 117, or 120. No credit granted to those who have completed both EARTH 205 (or GEOSCI 205) AND one of GEOSCI 206 or EARTH 206 or ENVIRON 206; Three credits granted to those who have completed one of GEOSCI 205 or 206, EARTH 205 or 206, or ENVIRON 206. F, W.*

A basic single-term course in introductory geology concentrating on the evolution of the Earth in physical and chemical terms. Reference to the interaction of the external biosphere/atmosphere/hydrosphere with the earth's interior is an essential component of the course.

**ENVIRON 120 / EARTH 120. Geology of National Parks and Monuments**

*(4). (NS). (BS). May not be repeated for credit. No credit if completed EARTH (GEOSCI)/ENVIRON 116, 117, or 119, or both EARTH (GEOSCI) 205 AND EARTH (GEOSCI)/ENVIRON 206. Only 3 credits with EARTH (GEOSCI) 205 or EARTH (GEOSCI)/ENVIRON 206.*

This is an introductory course that uses the National Parks to explore the geological history of the Earth, and specifically the tectonic evolution of the North American continent. Topics include plate tectonics, global volcanism, large explosive volcanic eruptions, the age of the Earth, the history of life (fossil record), meteorite impacts, earthquakes, mountain building, the origin of the Great Lakes, and climate change throughout Earth history.

**ENVIRON 131 / EARTH 131. Earth and Environmental Chemistry**

*(4). (NS). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in CHEM 130 (Gen Chem).*

This course is an introduction to the fundamental principles in chemistry for beginning students in Earth and Environmental Sciences and related programs, including Program in the Environment. Principles of general chemistry, with content tailored to, and examples drawn from, the Earth and Environmental Sciences.

**ENVIRON 139. First-Year Seminar in the Environment**

*Enrollment restricted to first-year students, including those with sophomore standing. (3). (ID). May not be repeated for credit.*

Seminar on environmental topics for first-year students.

**ENVIRON 152. Topics in Environmental Social Science**

*(1 - 4). (SS). May be repeated for a maximum of 9 credits.*

This introductory level special topics course seeks to examine environmental problems and issues from a social science perspective. Specific social science topics will vary by term.

**ENVIRON 153. Topics in Environmental Natural Science**

*(1 - 4). (NS). (BS). May be repeated for a maximum of 9 credits.*

This introductory special topics course seeks to examine environmental problems and issues from a natural science perspective. Specific natural science topics will vary by term.

**ENVIRON 154. Topics in Culture and Environment**

*(1 - 4). (HU). May be repeated for a maximum of 9 credits.*

This introductory special topics course seeks to examine environmental problems



and issues from a humanities perspective. Specific topics will vary by term.

**ENVIRON 155. Interdisciplinary Environmental Topics**

*(1 - 4). (ID). May be repeated for a maximum of 9 credits.*

This introductory special topics course seeks to examine environmental problems and issues from an interdisciplinary perspective. Specific topics will vary by term.

**ENVIRON 167 / ANTHRBIO 167. Evolution, Environment, and Global Health**

*(4). (NS). (BS). May not be repeated for credit.*

Earth is on the brink of the Sixth extinction - likely more devastating than the asteroid impact that took out the dinosaurs.

Scientific evidence shows that humans are the cause. Evolutionary anthropology can uniquely contribute to understanding how we got here and what we need to do.

**ENVIRON 201 / RCNSCI 202. Ecological Issues**

*(4). (NS). (BS). May not be repeated for credit.*

How have you interacted with your environment today? The environment impacts your life in more ways than you might think! This course involves lectures and discussions on ecological principles and concepts underlying the management and use of natural resources. The class emphasizes the importance of interdisciplinary approaches to matters concerning the allocation of natural resources and the quality of our environment. We will track production and use of products we use every day to issues regarding biodiversity, endangered species, climate change, tropical deforestation, agriculture, air and water pollution, energy

production and use, waste disposal, and the role of politics and economics in environmental issues.

**ENVIRON 202 / EARTH 202.**

**Introduction to Earth and Environmental Sciences in the Rockies**

*(5). (NS). (BS). May not be repeated for credit. No credit granted to those who have completed GEOSCI 201. No credit granted to those who have completed or are enrolled in EARTH 201 or ENVIRON 209 or GEOG 201.*

This course examines the principles of Earth and Environmental Sciences through field-based studies at the UM Camp Davis Rocky Mountain Field Station in Wyoming.

**ENVIRON 204. Under Pressure: Water Systems, Society, and the Environment**

*(3). (ID). May not be repeated for credit.*

Water plays an essential role in sustaining human and ecosystem health; it also has tremendous recreational, agricultural, commercial, and industrial value. How do we as a society balance these competing needs? The purpose of this course is to explore topics related to freshwater use, access, and availability within North America.

**ENVIRON 206 / EARTH 206. How the Earth Works: The Water Cycle and Environment**

*(2). (NS). (BS). May not be repeated for credit. No credit granted to those who have completed GEOSCI 116 or 117 or 119 or 120, and no credit granted to those who have completed or are enrolled in EARTH 116 or 117 or 119 or 120 or ENVIRON 116 or 117 or 119 or 120. Those with credit for GEOSCI 109 or EARTH 109 may only elect EARTH 206 or ENVIRON 206 for 1 credit.*

Earth surface processes as they affect water and the global biogeochemical environment. Quantifies rates of water and

elemental exchange between major Earth surface reservoirs. Surface rock weathering and geochemical exchange described.

**ENVIRON 207. Sustainability and Society**

(3). (SS). *May not be repeated for credit.*

This course provides students with a broad, interdisciplinary understanding of sustainability in society and establishing a platform from which to further research, study, and put it into practice. Students learn to connect sustainability to real-world challenges, evaluate its claims, develop knowledge to participate in sustainability debates, and identify novel pathways towards a more sustainable society.

**ENVIRON 208 / ORGSTUDY 208. Business and the Natural Environment**

(3). (SS). *May not be repeated for credit.*

This course is an introduction to business and the natural environment. We will start with an overview of the triple bottom line framework, in which corporations take into account social and environmental performance in addition to financial performance. Then we will focus on contemporary business activities that address the natural environment. We will discuss the role of the natural environment on business management and strategy, operations, supply chain, product innovation, and marketing.

**ENVIRON 211 / RCSSCI 211. Social Sciences and Environmental Problems**

(4). (SS). *May not be repeated for credit.*

This course introduces a variety of social sciences and how they can contribute to understanding and addressing environmental problems. The first half of the course surveys the social sciences using environmental case studies. The second half applies concepts and tools from the social

sciences to address a specific environmental problem.

**ENVIRON 216 / SOC 206. Animals and Society**

(3). (SS). *May not be repeated for credit.*

This course sociologically examines the relationships that exist between humans and other non-human animals. It explores the legal, ethical, cultural, political, ecological, and social issues that underlie the concerns for and against animal rights and protections.

**ENVIRON 219 / MIDEAST 209. Food and Drink in the Middle East**

(4). (SS). *May not be repeated for credit.*

This course will explore the social history of Middle Eastern (and North African) food and drink, examining records from ancient Mesopotamia and Egypt, medieval cookbooks and wine poetry from Baghdad, imperial art and account books of the Ottoman palace, to modern cookbook-memoirs. We will also have a direct experience of culinary practices in the Middle East and the diaspora. Food and social practices of eating and drinking provide a uniquely intimate version of the history of this region through lived experience that also shows the universal humanity of these cultures.

**ENVIRON 222. Introduction to Environmental Justice**

(3). (SS). (R&E). *May not be repeated for credit.*

This course explores people of color environmental concerns and specifically focuses on the connection between communities of color and low-income groups and the location of hazardous waste sites. This course also explores Native American environmental issues and the connection between the transboundary

shipping of hazardous waste from developed countries to developing ones.

**ENVIRON 223 / HISTORY 223.**

**Trashed! A History of Garbage in the Modern World**

*(4; 3 in the half-term). (ID). May not be repeated for credit.*

This course traces the history of garbage since the middle of the 19th century and explores how the stuff humans discard and the methods employed for dealing with that stuff have shaped our world. This course connects global, local and public history and makes these connections tangible.

**ENVIRON 224 / HISTORY 224 /**

**PUBPOL 224. Global Nuclear Proliferation**

*(4; 3 in the half-term). (SS). May not be repeated for credit.*

This course presents a global perspective on the history and politics of nuclear weapons. It examines the science and technology of these weapons; the politics of their growth, spread, and control; environmental and health consequences of their development; and the cultural responses and social movements they have engendered.

**ENVIRON 229 / EARTH 219.**

**Introduction to Environmental Science**

*(4). (NS). (BS). May not be repeated for credit. No credit granted for those who have completed or are enrolled in EARTH 201/GEOG 201/ENVIRON 209, EARTH/ENVIRON 202, EARTH/ENVIRON 284.*

This course emphasizes the scientific processes and principles behind global environmental issues. Topics include global change, human population, ecosystems, biogeography, biodiversity, soil-water-air pollution, environmental health, energy systems and their environmental consequences, and environmental policy.

**ENVIRON 230 / EARTH 230. Natural and Environmental Hazards:**

**Uncertainties, Risks, and Forecasts**

*(3). (NS). (BS). May not be repeated for credit.*

Society faces considerable risk of future natural and environmental disasters. There is uncertainty in assessments of risks to, or forecasts of, future disasters. This class will focus on the science of natural and environmental hazards, including the scientific process, causes of these hazards, and forecasting of future risk.

**ENVIRON 232 / EARTH 222.**

**Introductory Oceanography**

*(3). (NS). (BS). (QR/2). May not be repeated for credit. No credit granted to those who have completed or are enrolled in AOSS 203.*

The oceans of earth, their circulation, biology, chemistry, geology of the sea floor, and marine resources. Emphasis is on understanding the oceans as a single ecosystem.

**ENVIRON 233 / EARTH 223.**

**Introductory Oceanography, Laboratory**

*(1). (NS). (BS). (QR/2). May not be repeated for credit.*

One three-hour lab each week.

**ENVIRON 235. Economics of Natural Resources and Environment**

*(3). (SS). May not be repeated for credit.*

Applications of environmental and natural resources economics are frequent in the media. Motivating discussions on scarcity of resources - such as water and energy - and pollution control and policy through recent news coverage, this course aims to develop your understanding of environmental issues using core economic tools and concepts.

**ENVIRON 236 / HISTORY 236.****Environment and History in Preindustrial Europe**

(3). (ID). *May not be repeated for credit.*

The course surveys human interactions with European environments in ancient, medieval, and early modern times (500 BCE-1750 CE). It presents the ecological dimensions to selected episodes in the economic history of ancient Greece, imperial Rome, medieval Europe, and the Europe of early nation states. It shows that before the "anthropocene" and the Industrial Revolution of the 1800s European people established dynamic relations with their ecosystems that profoundly modified both humans and ecologies.

**ENVIRON 237 / HISTORY 237. Global Environmental History**

(4; 3 in the half-term). (ID). *May not be repeated for credit.*

This course is an introduction to environmental history, which combines traditional historical methods with findings from ecology to explore how humans have transformed nature and how nature has shaped human history. It focuses on how human-nature interactions can illuminate key problems in global history (e.g. inter-scalar feedbacks, human agency).

**ENVIRON 238 / ALA 238 / EARTH 238 / HISTORY 238 / MIDEAST 278. Zoom: A History of Everything**

(4; 3 - 4 in the half-term). (ID). *May not be repeated for credit.*

This interdisciplinary course in "Big History" integrates the human story with its terrestrial and cosmic surroundings. It uses the notion of "powers of ten" to shift perspectives in space and time. It proceeds logarithmically, "nesting" each topic (and disciplinary perspective) within its

predecessor, from astrophysics to history and back again.

**ENVIRON 240 / PHIL 240.****Environmental Ethics: Philosophical Underpinnings**

(3; 2 in the half-term). (HU). *May not be repeated for credit.*

This course introduces students to environmental ethics, which concerns the value and moral status of the environment and its nonhuman elements. Topics may include theories about which parts of nature have intrinsic value, duties to future generations, the significance of wilderness, sustainability, and environmental policy and economics.

**ENVIRON 242. Topics in Environmental Social Science**

(1 - 4). (SS). *May be repeated for a maximum of 12 credits.*

This special topics course seeks to examine environmental problems and issues from a social science perspective. Specific social science topics will vary by term.

**ENVIRON 243. Topics in Environmental Natural Science**

(1 - 4). (NS). (BS). *May be repeated for a maximum of 12 credits.*

This special topics course seeks to examine environmental problems and issues from a natural science perspective. Specific natural science topics will vary by term.

**ENVIRON 244. Topics in Culture and Environment**

(1 - 4). (HU). *May be repeated for a maximum of 12 credits.*

This special topics course seeks to examine environmental problems and issues from a humanities perspective. Specific topics will vary by term.

**ENVIRON 245. Interdisciplinary Environmental Topics**

*(1 - 4). (ID). May be repeated for a maximum of 12 credits.*

This special topics course seeks to examine environmental problems and issues from an interdisciplinary perspective. Specific topics will vary by term.

**ENVIRON 250 / CMPLXSYS 250 / PUBPOL 250. Social Systems, Energy, and Public Policy**

*(3). (BS). (QR/1). May not be repeated for credit.*

This course introduces global energy problems from the perspectives of how energy technologies shape and are shaped by choices people make as individuals, as members of groups, and as members of society at large. We will examine the present and historical cultural, economic, and political contexts out of which today's energy choices and public policies emerged and how these choices and policies are constrained by fundamental scientific principles.

**ENVIRON 255 / BIOLOGY 255. Plant Diversity**

*(4). (NS). (BS). May not be repeated for credit.*

This course examines plant diversity by groups, ranging from algae and nonvascular plants through primitive vascular plants and culminating in flowering plants. Using an evolutionary perspective, it treats plants as organisms and emphasizes the innovations and structural adaptations of the various plant groups as well as life history strategies. Weekly field trips allow exploration of local natural areas.

**ENVIRON 256 / ANTHRCUL 256. Culture, Adaptation, and Environment**

*(3). (SS). May not be repeated for credit.*

This course explores anthropological approaches to human relationships with their environments and resources. Examines diverse conceptions of culture and nature, and time and space, and the impacts that contemporary global forces are having on indigenous societies and their ecosystems. Particular interest to relative strengths and weaknesses of materialistic and cultural analyses of human-environment relationship, and models that attempt to combine them.

**ENVIRON 258 / ASIAN 258. Food and Drink of Asia**

*(4). (HU). May not be repeated for credit.*

This course uses food and drink as a window into the culture and history of East Asia, South Asia, and Southeast Asia.

**ENVIRON 259 / EARTH 259. Earth's Future and a Resilient Human Society**

*(4). (NS). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in EARTH 111 or 159.*

Human society needs to prepare for and adapt to a changing environment, growing demands for resources and the impacts of natural processes. Planning this future must reconcile social, economic and cultural expectations, by deploying technological and social solutions as adaptation and mitigation strategies for human communities on regional and global scales.

**ENVIRON 262 / EARTH 262. Plants and People**

*(3). (NS). (BS). May not be repeated for credit.*

This course examines the relationship between plants, people, and the environment; focusing on economically important plants. Plants are important for survival, aesthetic, and environmental

purposes and have had significant impacts on human history, society, and environment. Today plants are critical for our future. Topics include foods, fibers, drugs, and ornamentals.

**ENVIRON 270 / RCIDIV 270.**

**Globalization and its Discontents: Struggles for Food, Water, and Energy**  
(4). (ID). *May not be repeated for credit.*

We will examine sustainable development and globalization through the struggles with food and water scarcity and energy justice. Using lectures, films, discussions, and assignments, this course aims to foster critical thinking about how societies are organized, and to evaluate what we can contribute to the pursuit of a sustainable and just biosphere.

**ENVIRON 277 / CLCIV 277 / HISTORY 277. Environmental History of the Ancient Mediterranean**

(3). (HU). *May not be repeated for credit.*

This course concerns the ecology and environmental history of the Mediterranean during the Greek and Roman Periods. Students will be introduced to the discipline of environmental history through case studies drawn from various regions within the broader Mediterranean basin. Attention will also be given to perceptions of the natural world in ancient literature.

**ENVIRON 281 / BIOLOGY 281. General Ecology**

*BIOLOGY 171, (172 or 174), & 173; or BIOLOGY 192 & 173; or BIOLOGY 195 & 173; AND a laboratory course in CHEM.*  
(3). (NS). (BS). *May not be repeated for credit. No credit granted to those who have completed or are enrolled in EEB 381 or ENVIRON 381.*

The course introduces the basic concepts and principles of ecology as applied to the

study of individuals, populations, and communities of both plants and animals.

**ENVIRON 284 / EARTH 284.**

**Environmental Geology**

(4). (NS). (BS). *May not be repeated for credit. No credit granted to those who have completed GEOSCI 148, and no credit granted to those who have completed or are enrolled in EARTH 148. Those with credit for GEOSCI 147 or EARTH 147 may elect EARTH 284 or ENVIRON 284 for only 3 credits.*

Deals with interactions between people and Earth. It begins with an introduction to geologic materials and processes and goes on to specific topics such as soil, surface and groundwater, natural hazards (volcanism, landslides, earthquakes, floods, coastal processes), geomedicine, and waste disposal.

**ENVIRON 290. Food: The Ecology, Economics, and Ethics of Growing and Eating**

(3). (ID). *May not be repeated for credit.*

Food systems have environmental, economic, ethical, and political dimensions. They intersect with health, ecological resilience, security, justice, and democracy. The course examines patterns of food production and consumption via histories, case studies and personal accounts, across cultures and across time. Special attention is paid to the possibilities for sustainability and equity.

**ENVIRON 300. Special Problems and Research**

*Consent of instructor required. (1 - 4). (INDEPENDENT). May be repeated for a maximum of 8 credits.*

Independent study covering different resource issues. Maximum of eight hours to be counted toward degree requirements.

**ENVIRON 302. Topics in Environmental Social Science**

(1 - 4). (SS). *May be repeated for a maximum of 12 credits.*

This special topics course seeks to examine environmental problems and issues from a social science perspective. Specific topics will vary by term.

**ENVIRON 303. Topics in Environmental Natural Science**

(1 - 4). (NS). (BS). *May be repeated for a maximum of 12 credits.*

This special topics course seeks to examine environmental problems and issues from a natural science perspective. Specific topics will vary by term.

**ENVIRON 304. Topics in Culture and Environment**

(1 - 4). (HU). *May be repeated for a maximum of 12 credits.*

This special topics course seeks to examine environmental problems and issues from a humanities perspective. Specific topics will vary by term.

**ENVIRON 305. Interdisciplinary Environmental Topics**

(1 - 4). (ID). *May be repeated for a maximum of 12 credits.*

This special topics course seeks to examine environmental problems and issues from an interdisciplinary perspective. Specific topics will vary by term.

**ENVIRON 306. Global Water**

(3). (SS). *May not be repeated for credit.*

This course examines a critical environmental issue of the 21st century: freshwater scarcity, an issue that intersects with other environmental, economic and political issues such as food, biodiversity, trade, international security, and global

justice. Questions are raised concerning international cooperation, local-global interactions, collective action, sustainability, development, trade, North-South relations, equity, and diplomatic practice.

**ENVIRON 307 / POLSCI 309.**

**Theoretical Perspectives on Environmental Change**

*POLSCI 101. (3 - 4). (SS). May be elected twice for credit.*

This course draws upon concepts from Western political theory to examine the political and ethical issues posed by environmental change.

**ENVIRON 308. Sustainability and Health**

(3). (SS). *May not be repeated for credit.*

This course explores how the environment influences health and well-being. In order to tackle this complex topic the physical, psychological, and social dimensions of health are considered. The course then explores how issues like climate change, materialism, and sprawl might impact health and the potential benefits associated with sustainable lifestyles.

**ENVIRON 309 / EARTH 309. GIS Explorations of the Past, Present, and Future**

*General computer experience is required, including word processing, spreadsheets, and presentations. (3). (ID). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in ENVIRON 339: GIS Explorations: Past, Present and Future at the University of Michigan Biological Station (UMBS).*

This course uses geographic information systems (GIS) to help understand and analyze environmental problems as well as spatial questions in the natural sciences, social sciences, and humanities. A hands-on

approach is used to demonstrate GIS principles using a wide variety of examples.

**ENVIRON 310. Toxicology: The Study of Environmental Chemicals and Disease**

*BIOLOGY 162 or 172. (3). (NS). (BS). May not be repeated for credit.*

Explores the relationship between environmental chemical exposures and adverse health consequences, examining factors that determine and influence toxicity and exploring the role of chemical exposure in the etiology of specific diseases.

**ENVIRON 311 / EEB 320. Rivers, Lakes, and Wetlands: Introduction to Aquatic Ecosystems**

*One course in BIOLOGY or permission of instructor. (4). (NS). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in ENVIRON 331/EEB 321 (Rivers, Lakes and Wetlands).*

Field and lecture based introduction to the scientific study of rivers, lakes, and wetlands. Introduces basic physical/chemical/biological concepts and techniques; emphasized ecological literacy and seeks to develop interpretive skills and reasoning. Includes overview of aquatic fauna and flora, and a survey of the ecology of major types of rivers and streams, lakes, wetlands, and ocean estuaries. Interactions between the hydrological cycle, the landscape, and human activities provide the basic theme around which ecosystem presentations are organized. Lab sections develop basic chemical and biological identification skills during the first half of the course; the second half focuses on weekly field trips to representative ecosystems and their ecological evaluation.

**ENVIRON 312 / POLSCI 380 / PUBPOL 312. Environmental Politics and Policy**

*(3). May not be repeated for credit.*

This course is an advanced offering on environmental politics and the environmental policy-making process. The course will consider both processes of policy formation and implementation, placing particular emphasis on the development of alternatives to conventional regulatory practices at federal, state, and local levels of government.

**ENVIRON 314. Food Literacy for All**

*No credit is granted to those who have completed ENVIRON 305 "Food Literacy for All" (Topic #5). (Prerequisites enforced at registration.) (2). (ID). May not be repeated for credit.*

This course offers a unique opportunity for student to gain an interdisciplinary overview of crises and opportunities in today's food system through a weekly lecture series bringing high-profile speakers to campus from diverse sectors: academia, grassroots movements, public health, farming, and more. This course is designed as an academic-community partnership.

**ENVIRON 317. Conservation of Biological Diversity**

*(3). (NS). (BS). May not be repeated for credit.*

Overview of historic and present-day causes of species extinction, and of biological principles central to species conservation and sustainable management of ecosystems. Topics covered include episodes of extinction and diversification over earth history; geographic distribution strategies; and sustainable use of ecosystems. Weekly recitation sections discuss material from lectures, assigned readings and films, and perform computer and gaming simulations.

**ENVIRON 320. Environmental Journalism: Reporting About Science, Policy, and Public Health**

*Completion of First-Year Writing*



*Requirement. (3). (ID). May not be repeated for credit.*

This course give students the basic research and writing skills to cover emerging issues related to the environment and public health. Students learn to produce journalistic writing, which differs markedly from academic writing. The emphasis is on communicating to a wide audience. Students also become more savvy news consumers

**ENVIRON 321. Climate Change and Adaptation**

*(3). (SS). May not be repeated for credit.*

Climate change is the greatest environmental and development challenge facing the world. Course will introduce students to the following: human dimensions of global climate change; key concepts and examples related to impacts, mitigation, vulnerability, resilience, and adaptation; and how government, civil society, and market actors can jointly solve climate problems related to migration, public health, and urbanization.

**ENVIRON 324 / POLSCI 323.**

**Introduction to Water Law and Policy**

*Previous course in Environment, Political Science, or Public Policy. (3). (SS). May not be repeated for credit.*

This course will survey the history, politics and cultural contexts that inform United States water law and policies of prior appropriation, riparian, federal reserve, and groundwater rights. In addition, the course will examine the role of population growth, energy and climate change in formulating current and future water policy.

**ENVIRON 325 / EARTH 325.**

**Environmental Geochemistry**

*Introductory chemistry. (4). (NS). (BS). May not be repeated for credit.*

This course deals with the geochemistry of our environment. It focuses on the geochemistry of the lithosphere, hydrosphere and atmosphere and the ways in which they affect the biosphere. Applications of these principles to present-day problems in environmental geochemistry are discussed.

**ENVIRON 329 / ENGLISH 329.**

**Environmental Writing and Great Lakes Literature**

*Consent of department required. (5 in the half-term). (HU). May not be repeated for credit.*

This course explores some classic examples of nature writing from the Great Lakes region (fiction, non-fiction, and poetry). It takes advantage of the resources of the Biological Station--habitat, trails and lake to stimulate written responses that are descriptive, narrative, and researched.

**ENVIRON 331 / EEB 321. Rivers, Lakes, and Wetlands: Introduction to Aquatic Ecosystems (UMBS)**

*Consent of department required. One course in BIOLOGY. (5 in the half-term). (NS). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in ENVIRON 311/EEB 320 (Rivers, Lakes and Wetlands).*

Field and lecture based introduction to the scientific study of rivers, lakes, and wetlands. Introduces basic physical/chemical/biological concepts and techniques; emphasized ecological literacy and seeks to develop interpretive skills and reasoning. Includes overview of aquatic fauna and flora, and a survey of the ecology of major types of rivers and streams, lakes, wetlands, and ocean estuaries. Interactions between the hydrological cycle, the landscape, and human activities provide the basic theme around which ecosystem

presentations are organized. Lab sections develop basic chemical and biological identification skills during the first half of the course; the second half focuses on weekly field trips to representative ecosystems and their ecological evaluation.

**ENVIRON 333 / EARTH 333. The Inexhaustible Seas? Marine Resources and Environmental Issues**

*EARTH (GEOSCI) 116, 119, 125, 120, 222, or 284. (4). (NS). (BS). May not be repeated for credit. No credit granted to those who have completed GEOSCI 154, and no credit granted to those who have completed or are enrolled in EARTH 154.*

This course explores the mineral, energy and food resources of the ocean and environmental impacts that arise from the exploitation of these resources. We discuss conflicts in our competing uses of the ocean and its resources. We also examine both the popular and scientific literature surrounding these issues.

**ENVIRON 335 / AAS 322. Introduction to Environment Politics: Race, Class, and Gender**

*(4; 3 in the half-term). (SS). (R&E). May not be repeated for credit.*

This course analyzes the development of political action from the 1860s to the present. It will analyze the role of race, gender, and class in defining environmental issues and environmental action.

**ENVIRON 337 / RCHUMS 337. Children Under Fire: Narratives of Sustainability**

*(3). (HU). May not be repeated for credit.*

This seminar examines how children in crisis are portrayed in picture books, YA fiction, fairy tales, and film. How are they represented as killers or consumers, soldiers or refugees? Do empire, frontier and classic war stories still influence narratives today?

How do gender, family resilience, and terrorism figure in stories?

**ENVIRON 339. GIS Explorations of the Past, Present, and Future (UMBS)**

*Consent of department required. (5 in the half-term). (ID). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in ENVIRON/Earth 309 (GIS Explorations: Past, Present and Future).*

In this course, you will learn the basic concepts and functions of GIS - data capture, editing, processing, and display. You will use it both for analysis - to discover trends and outliers in your data - as well as for presenting data visually in mapping format in ways that deliver actionable insights for decision-making.

**ENVIRON 344 / EARTH 344. Sustainable and Fossil Energy: Options and Consequences**

*Consent of department required. At least one previous course in physical sciences or engineering. (4 in the half-term). (NS). (BS). May not be repeated for credit.*

This course introduces concepts and environmental consequences of sustainable and fossil energy sources. Students conduct hands-on experiments using alternate energy systems at Camp Davis. In addition, the class travels throughout Wyoming and Idaho visiting and investigating facilities important for power generation.

**ENVIRON 345 / POLSCI 331 / SOC 380. Environmental Public Opinion Analysis**

*One of the following: AP STATS 180, STATS 250, STATS 280, or SOC 210. (3). (SS). May not be repeated for credit.*

This course examines trends in environmental public opinion, influences on people's concerns about the environment, the depth and strength of concerns, and how environmental concerns affect personal

behaviors and the political process. It also introduces students to useful statistical concepts and procedures for analyzing and interpreting public opinion data.

**ENVIRON 348 / EEB 348. Forest Ecosystems**

*Consent of department required. BIOLOGY 171, (172 or 174) & 173; or BIOLOGY 192 & 173; or BIOLOGY 195 & 173. (5 in the half-term). (NS). (BS). May not be repeated for credit. Su at Biological Station.*

Focused on ecology in forest species and components of ecological systems, this course emphasizes hands-on field study in diverse upland and wetland forests. It stresses integrating topography, soil, climate, and vegetation, plus the dynamics of fire and regeneration ecology. This ecocentric approach is applicable in temperate forest ecosystems throughout the world.

**ENVIRON 350 / RCSSCI 350. The Built Environment: Introduction to Landscape Change**

*(3). (ID). May not be repeated for credit.*

This course is an introduction to the role of humans in shaping the built environment. It explores physical design and cultural meaning at various scales and contexts in the landscape. We explore the power of physical design and planning to enrich the human spirit, provide functional needs, interpret cultural history, and sustain natural systems.

**ENVIRON 351 / ASIAN 351 / INTLSTD 351. Chinese Food in Crisis: Health, Ecology, and Identity in an Age of Globalization**

*ASIAN 258, ASIAN 366, or coursework in Chinese Studies or Sustainability. (3). (ID). May not be repeated for credit.*

This course looks at the role that culinary globalization has played in reshaping the

Chinese diet, along with its implications for health, the environment, and political identity.

**ENVIRON 354 / AMCULT 354 / ENGLISH 312. Camp Davis: History and Literature of the Rockies**

*Consent of department required. (3 in the half-term). (HU). May not be repeated for credit. Su at Camp Davis, Wyoming. May not be taken pass/fail.*

This course is taught onsite at the University of Michigan's Camp Davis Geology field station south of Jackson Hole, Wyoming. It examines a range of human experiences and expressions of place, centered on the area of Jackson Hole, but extending in conceptual terms across the central and northern Rocky Mountain region and to the American West as a whole.

**ENVIRON 355 / ENGLISH 355. Southern Natures: The Making and Unmaking of Races and Environments in the US South**

*(3). (HU). May not be repeated for credit.*

This course provides an environmental and cultural history survey of US southern spaces from the colonial period through the present. We begin in the present, with a unit on the New Orleans levee disaster of 2005 (Katrina) and another unit on contemporary plantation memorials/ tourism / representations. Having familiarized ourselves with contemporary issues and crises, we then jump back to colonial origins and work our way forward again.

**ENVIRON 360 / PSYCH 360. Behavior and Environment**

*(3). (SS). May not be repeated for credit.*

Course deals with two central themes: First, environmental problems are people problems, requiring an understanding of how people think, what they care about, and

the conditions under which they behave most reasonably. Second, human behavior makes the most sense when studied in the context of the environment, both present and evolutionary. This course builds a model of human nature, based upon research in the field of environmental psychology.

**ENVIRON 361 / PSYCH 362. The Psychology of Environmental Stewardship**

*(3). (SS). May not be repeated for credit.*

This course deals with how to reframe and promote a future with a restrained and austere existence. To meet this challenge, behavior-change tools and strategies are developed. Emphasis is on informational and motivational means of changing behavior in a durable manner.

**ENVIRON 362 / ANTHRBIO 362 / EEB 362. Primate Evolutionary Ecology**

*An introductory course on primates, ecology, or conservation biology is advised. No quantitative or statistical training is required. (4). (NS). (BS). May not be repeated for credit.*

This course examines primate ecology within an evolutionary framework. We consider how environmental factors, evolutionary history, and ecological processes affect individuals, social groups, populations, and communities. Topics in primate and rainforest conservation biology are also discussed. Emphasis is placed on critical assessment and interpretation of quantitative and graphical evidence.

**ENVIRON 365. International Environmental Policy**

*(3). May not be repeated for credit.*

This course explores institutions, actors, and outcomes in international environmental policy making.

**ENVIRON 367. Global Enterprise and Sustainable Development**

*Senior Standing. (3). May not be repeated for credit.*

This course examines how businesses can influence, and are influenced, by issues related to sustainable development. The course identifies external forces and strategy based reasons that motivate corporations to contribute to environmental and social goals. Through guest lectures and case studies, students learn about current best practice and future possibilities.

**ENVIRON 370 / ARCH 423 / URP 423. Introduction to Urban and Environmental Planning**

*(3 - 5). May not be repeated for credit.*

**ENVIRON 372 / EEB 372. General Ecology Laboratory**

*BIOLOGY 171, (172 or 174) & 173; or BIOLOGY 195 & 173; AND concurrent or prior enrollment in BIOLOGY 281/ENVIRON 281. (3). (BS). May not be repeated for credit.*

This course combines a mixture of tools needed to become ecologically proficient. This includes applying the fundamental concepts from ecology, the protocol for conceptualizing and conducting experiments, the statistical tests used to test hypotheses, and the tools needed to present work through communication. The lab exercises have a mixture of ecological practices, field experiments, hypothesis testing, statistical analyses, and written/oral communication.

**ENVIRON 375 / ECON 370.**

**Environmental and Resource Economics**

*ECON 101. (Prerequisites enforced at registration.) (3). (SS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in ECON 471 or 472, or NRE 571 or 583.*

A one-semester introduction to Environmental and Natural Resource Economics. Topics include externalities, unpriced goods, cost-benefit analysis, resource scarcity, exhaustible resource depletion, renewable resource harvesting and common property.

**ENVIRON 376 / PHIL 376.**

**Environmental Ethics-Living Well with Nature**

(3). (HU). May not be repeated for credit.

This course explores what we do and why we do what we do to the world around us. Without ignoring the theoretical, this course will focus on ethics as it bears on practical, everyday things: using energy, eating food, building houses, flying to far-away destinations, hiking in wild places, watching birds ....Our effects are far reaching: climate change, industrial agriculture and CAFOs, pollution and ecological restoration, biodiversity and species extinctions, wilderness, genetic engineering of plants and animals. We will ask "what is a good way to live in nature?"

**ENVIRON 377. Literature and the Environment**

(3). (HU). May not be repeated for credit.

This course explores human interactions with the natural world or in contrast with a constructed world through literature, including fiction, essays, and poetry.

**ENVIRON 380 / EARTH 380. Natural Resources, Economics, and the Environment**

No previous courses in Geology or other sciences are required. (4; 3 - 4 in the half-term). (NS). (BS). (QR/2). May not be repeated for credit.

This course deals with natural resource-related challenges in a complex society. The course discusses the origin, distribution, and

remaining supplies of natural resources, including fertilizers, metals and fossil fuels, in terms of the economic, engineering, political, and environmental factors that govern their recovery, processing, and use. Topics covered in the course include nuclear waste disposal, strip mining, continent-scale water transfers, mineral profits and taxation, and estimation of remaining mineral reserves.

**ENVIRON 381 / EEB 381. General Ecology**

BIOLOGY 171, (172 or 174) & 173; or BIOLOGY 195 & 173; AND a laboratory course in CHEM. (5 in the half-term). (BS). May not be repeated for credit.

Fundamental concepts and principles of ecology of both plants and animals applied to the study of individual organisms, populations, and communities. Field and laboratory work emphasized the collection and analysis of basic data. A formal introduction to the discipline of ecology and suitable as a prerequisite for intermediate and advanced courses in the subject.

**ENVIRON 382 / EDCURINS 382.**

**Introduction to Environmental Education for Sustainable Development**

(4). May not be repeated for credit.

As a result of this course, students become certified by the School of Education to teach leading environmental education programs. They learn how to educate a citizenry able and willing to work towards environmental and sustainable development goals, as well as how to develop, implement, and evaluate their own education efforts.

**ENVIRON 385 / HISTORY 385. The Environmental History of China**

(4; 3 in the half-term). (SS). May not be repeated for credit.

This course will introduce students to the environmental history of China through a chronological survey of Chinese history and through a series of case studies.

**ENVIRON 390 / RCIDIV 390.**

**Environmental Activism: Citizenship in a Republic**

*It is best to have at least one environmental course prior to this class. (3). (ID). May not be repeated for credit.*

This course defines environmental activism as a social movement designed to affect positive and sustainable environmental change. We will articulate an overarching set of values to which people can respond, as well as a shared set of symbols, heroes, slogans, and other cultural referents.

**ENVIRON 391 / RCIDIV 391.**

**Sustainability and the Campus**

*An introductory course in Environment, Earth, or related field (e.g., ENVIRON 110, 111, 201, 270). (4). (ID). May not be repeated for credit.*

This course will cover the concepts and practices of environmental sustainability as they pertain to the campus of this university. Students will design and conduct projects about managing this campus more sustainably than is currently practiced.

**ENVIRON 395. Public Lands & Natural Resource Law and Policy**

*Completed one introductory environment course (such as ENVIRON 101, 110, 111, or 201). (3). (SS). May not be repeated for credit.*

This course examines the different philosophical perspectives on public lands and natural resources as well as the historic and ongoing acquisition, disposition, and management of the public domain. It explores the policy regimes and ensuing debates over the primary resources:

minerals, timber, range, wildlife, recreation and preservation.

**ENVIRON 398. Environment Internship Program**

*Consent of instructor required. (1 - 4). (EXPERIENTIAL). May be repeated for a maximum of 9 credits. Offered mandatory credit/no credit.*

Undergrads, with the guidance of a faculty advisor, participate in an internship relevant to their field of study.

**ENVIRON 399. Junior Honors Seminar**

*Consent of instructor required. (3). May not be repeated for credit.*

This course is intended to start Honors students on their thesis projects. Students will develop a topic of interest into a research proposal. This requires identifying the topic, assessing the pertinent literature, finding a faculty sponsor, and preparing a research design. Course readings and discussions will focus on research methodology.

**ENVIRON 400. Special Problems and Research**

*Consent of department required. (1 - 4). (INDEPENDENT). May be repeated for a maximum of 8 credits.*

Independent study covering different resource issues. Maximum of eight hours to be counted toward degree requirements.

**ENVIRON 403 / EARTH 408.**

**Introduction to GIS in the Earth Sciences**

*An introductory geology or environmental sciences course (EARTH 116, 119, 120, 201, 202, 219 or 284) and one math course or a statistics course (MATH 115, 116, 120, 121, 156, 175, 176, 185, 186, 295, 296, STATS 150, 180, 250, 280). (Prerequisites enforced at registration.) Although previous GIS experience is not required, students are expected to be familiar with desktop and*

*mobile computing, and to be comfortable with at least one quantitative software program (Matlab, Excel, Mathematica, or R, as examples). (3). (BS). May not be repeated for credit.*

This course provides an understanding of Geographic Information Systems and their application in the earth sciences. Through lectures and lab exercises students are exposed to GIS theory, applications and software.

**ENVIRON 405. Urban Sprawl: Policy and Politics**

*ENVIRON 350 or 370. (3). May not be repeated for credit.*

This course investigates land development in America from the perspective of political imperatives and policy frameworks at the local, state, and national levels. It leverages insights from political science, history, law, and urban planning to understand how policy does (and does not) guide land use patterns, and how it might do so differently in the future.

**ENVIRON 407 / CEE 307. Sustainable Cities**

*Junior or Senior standing and two environmental science classes. (3). (BS). May not be repeated for credit.*

Achieving sustainable urban environments requires an interdisciplinary, systems-level approach to ensure cities are both environmentally and economically sustainable. This course explores how multiple disciplines can be integrated to identify and discuss this broad goal, including law, public health, engineering, finance, communication, land planning, and construction.

**ENVIRON 408. Land Use Policy, Law, and the Environment**

*Junior or senior status. (3). May not be repeated for credit.*

This course provides an overview of the policy and legal justifications for and institutional arrangements used to manage the use and development of land in the U.S., focusing especially on the management of privately owned land by state and local governments for environmental protection purposes.

**ENVIRON 409 / EAS 409 / EEB 487.**

**Ecology of Fishes**

*BIOLOGY 162 or 171, 172 and 173. (3 - 4). (BS). May not be repeated for credit. W. (Lectures: 3 credits; lectures and lab: 4 credits).*

Covers physiological, behavioral, and numerical responses of fishes to biotic and abiotic factors; the relationship between fish and the physical, chemical, and biological parameters of major habitat types; adaptations of fish for survival under different constraints.

**ENVIRON 412 / PUBPOL 412.**

**Environmental Values in Public Policy**

*(3). May not be repeated for credit.*

Public policy embodies an assortment of value systems. While individual value systems express coherent, consistent approaches, public policy expresses an amalgam of values, with corresponding decrease in coherence/consistency. This course explores the relationships between various environmental values and public policy through analysis of policy issues at local, state, and national levels.

**ENVIRON 413 / COMM 413.**

**Environmental Communication**

*(3). May not be repeated for credit.*

This course serves as an introduction to the theory and practice of environmental and science communication. Topics include media depiction's of environmental issues, the role of the media in influencing public

opinion and policy actions, expert environmental communication by scientists and policy-makers, and theories that guide effective strategic environmental communication. We will engage with many of the critical environmental issues of our day, including climate change, fracking, support for renewable energy initiatives, and many more.

**ENVIRON 415 / EAS 415 / EEB 424.  
Behavioral Ecology and Conservation  
Biology**

*BIOLOGY 162 or 171 and completion or concurrent enrollment in either ENVIRON 415 or EEB 424 or EAS 415. (4). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in EEB 492.*

This course will focus on the ways environments shape the behavior and life histories of animals. Because environments pose constraints, behaviors have "better" and "worse" impacts on an organism's survival and reproduction. This course will consider hypothesis in five areas.

**ENVIRON 417 / COMM 417. Marketing  
for Social Change**

*(3). May not be repeated for credit.*

This class presents a systematic approach for using marketing techniques to shift attitudes and behaviors for both individual and social benefits. Students learn multiple skills critical for developing marketing campaigns, including behavior selection, audience segmentation, application of the 4 Ps (product, price, place, and promotion), and messaging strategies. Areas of application include the environment, poverty, and health.

**ENVIRON 418 / ORGSTUDY 418.**

**Leadership and Environmental  
Stewardship in Organizations**

*(3). May not be repeated for credit.*

This course focuses on the skills and strategies that can help you become a more effective leader for the environment. Students will learn about the importance of decision-making, influence, and teamwork for implementing organization change and innovation towards greater environmental stewardship.

**ENVIRON 421. Restoration Ecology**

*BIOLOGY/ENVIRON 281 and  
EEB/ENVIRON 372 OR EEB/ENVIRON  
381. (4). (BS). May not be repeated for  
credit. Rackham credit requires additional  
work.*

This course offers an introduction to the science, policy, and social issues around ecological restoration and explores where local agriculture fits in the larger context of restoration. We examine and discuss a multitude of restoration projects - urban, rural, and natural areas - through the use of case studies, field trips, and guest lectures from local practitioners of restoration ecology. Field trips to local restoration sites will include field exercises to learn how to collect data for site inventory, monitoring, and assessing restoration success.

**ENVIRON 422 / EAS 422 / EEB 440.**

**Biology of Fishes**

*BIOLOGY 162 or 171, 172 and 173. (3).  
(BS). May not be repeated for credit. F.*

Lectures cover many aspects of the biology of lower vertebrates known as fishes, including evolution, physiology, functional morphology, phylogeny, biogeography, ecology, and reproduction. The systematic position of fish among vertebrates is discussed and exemplary assemblages exam.

**ENVIRON 423 / EAS 423 / EEB 441. The  
Biology of Fishes Laboratory**

*BIOLOGY 162 or 171, 172 and 173. (1).  
(BS). May not be repeated for credit.*



This lab provides an intro to field methods used in fish biology and fisheries, and examines the diversity of the Michigan ichthyofauna and major groups of would fishes.

**ENVIRON 424. Stream Restoration: Concepts and Applications**

*Introductory Physics. (3). (BS). May not be repeated for credit. Rackham credit requires additional work.*

The course is divided between lectures and field-based activities. The topics covered include fluid mechanics, turbulence, sediment transport, the ecology of fishes and macroinvertebrates, water quality, current restoration and monitoring techniques, field measurement techniques, and local case studies. A local stream is used for student projects and lecture demonstrations.

**ENVIRON 426 / CLIMATE 421 / EARTH 421. Introduction of Physical Oceanography**

*MATH 115 and 116, and an introductory science course. (3). (BS). May not be repeated for credit. Rackham credit requires additional work.*

This course examines the fundamentals of physical oceanography; the physical properties of the ocean and water masses; circulation of the atmosphere; wind-driven and buoyancy-driven ocean circulation; tides; surface and internal waves; eddies; and mixing.

**ENVIRON 430 / EAS 430 / EEB 489. Soil Ecology**

*BIOLOGY 162 or 171 and 172 and 173, and General Chemistry. Concurrent enrollment in ENVIRON 436/EEB 436 and ENVIRON 435/EAS 435 highly recommended. (3). (BS). May not be repeated for credit. F.*

Soils as central components of terrestrial ecosystems. Major emphasis is placed on physical, chemical, and biological properties and their relationships to plant growth and ecosystem processes.

Understanding is developed using a combination of lectures, field- and lab-based exercises, and individual research.

**ENVIRON 431 / EARTH 431. Terrestrial Biomes Past, Present and Future**

*BIOLOGY 171, or one of EARTH (GEOSCI) 116, 119, 120, or 205/206; or Graduate standing. (Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit. Rackham credit requires additional work.*

As the major organizing feature of terrestrial ecosystems, biomes are dependent on the organisms, ecosystems, and climate of the planet. This course surveys important biological innovations, examples of past ecosystems from the fossil record, the relevance of climate to terrestrial environments, and the changing world of today and tomorrow.

**ENVIRON 432 / AAS 432. Violent Environments: Oil, Development and the Discourse of Power**

*(4). May not be repeated for credit.*

This course will examine and compare discourses and practices concerned with resource extraction, resource distribution, energy security, and "modernity" in Africa, Europe, the Middle East, and Latin America. In particular, we'll explore how oil exploration in postcolonial states has created spaces of violence and possibilities for development, and has continually reshaped the idea of what constitutes the nation.

**ENVIRON 433 / EAS 433 / EEB 433. Ornithology**

*BIOLOGY 171, 172 or 174, and 173, or*

*BIOLOGY 192 and 173; or BIOLOGY 195 & 173. (4). (BS). May not be repeated for credit.*

During the lecture, students have the opportunity to learn about many unique features of birds. In the mandatory lab, students have the opportunity to learn about birds by using museum specimens, and by observing birds on field trips.

**ENVIRON 436 / EAS 436 / EEB 436.**

**Woody Plants: Biology and Identification**  
*BIOLOGY 171 or equivalent. (4). (BS). May not be repeated for credit. Rackham credit requires additional work.*

Ecology, systematic and identification of trees, shrubs, and vines are studies in weekly field trips to diverse Michigan ecosystems--including upland, wetland, and floodplain forests. Lectures focus on glacial landscape history, biogeography, and ecology of Michigan forests.

**ENVIRON 438 / EAS 518. Wildlife Ecology and Management**

*BIOLOGY 171, plus one Introductory Interdisciplinary Environment course such as ENVIRON 110, ENVIRON 111, or ENVIRON 201. (3). (BS). May not be repeated for credit.*

This course focuses on the ecological processes and conservation management tools relevant to the survival of free-ranging mammal, bird, reptile and amphibian populations. Students will utilize a diversity of approaches ranging from field research to computer exercises to address wildlife ecology, management, and conservation issues. Topics that will be discussed include wildlife habitat assessment, population abundance and density estimates, nutritional ecology, wildlife disease management, as well as endangered species restoration, both in the US and international context.

**ENVIRON 442 / EARTH 442. Earth Surface Processes and Soils**

*MATH 115 and CHEM 130. (4). (BS). May not be repeated for credit.*

Study of processes resulting in landforms on the Earth's solid surface and the formation of soils on these landforms. Emphasis includes present-day processes as well as the evolution of landforms over geologic time. Several required field trips will examine landforms and processes in southern Michigan.

**ENVIRON 446 / EARTH 446.**

**Paleoclimatology**

*MATH 115 and 116 and EARTH 305, or permission of instructor. (4). (BS). May not be repeated for credit. Rackham credit requires additional work.*

This course examines climate change throughout Earth's history. Topics include the following: description of Earth's climate history, physics of the Earth's climate, methods of reconstructing past climate and climate forcings, and biological causes and consequences of climate change.

**ENVIRON 450 / EARTH 450. Ecosystem Science in the Rockies**

*Introductory Geology [EARTH 119&118 or 116 or 120, or ENVIRON 119&118 or 116], AND (either General Ecology [ENVIRON 281 or BIOLOGY 281] or Introductory Environmental Science [EARTH 201 or 202 or 219, or ENVIRON 209 or 202 or 229]). (Prerequisites enforced at registration.) At least two courses from the following list: Environmental Geochemistry EARTH 325), Geobiology (EARTH 313), Earth Materials (EARTH 315), Earth's Surface and Sediments (EARTH 305). (5 in the half-term). (NS). (BS). May not be repeated for credit.*

This is a 4-week course taught at Camp Davis, WY using the Rocky Mountains as a field laboratory to gain field-based knowledge and experience while developing an understanding of geological and meteorological processes and the distribution and function of grasslands, forests, and alpine ecosystems of the region. This course is designed for majors in geological and environmental sciences, natural resources and other students who have a general interest in this subject matter.

**ENVIRON 451 / EAS 451 / EEB 451.  
Biology of Mammals**

*BIOLOGY 171, (172 or 174) & 173; or BIOLOGY 192 & 173; or BIOLOGY 195 & 173. (4). (BS). May not be repeated for credit.*

Evolution, distribution, ecology, behavior, anatomy, and classification of mammals, with emphasis on North American species.

**ENVIRON 453. Tropical Conservation and Ecology**

*One Introductory Interdisciplinary Environment course, such as ENVIRON 110, 111, or 201. (3). (BS). May not be repeated for credit.*

Tropical and subtropical regions are the most biologically diverse regions of our planet, but they are facing many challenges. This course will explore fundamentals of the conservation and ecology of these regions, and examine how local and global-based approaches address key issues like sustainable use, conservation, and conflicts between humans and wildlife.

**ENVIRON 457 / AAS 457. When China Comes to Town: Environment and the Politics of Development in Africa**  
*May not be repeated for credit.*

This course will address post-colonial African states as a historically unique social form that presents special challenges for the socioeconomic and political analysis of environment and development. The course will focus on the growing interest of emerging world economic powers such as China in Africa's natural resources.

**ENVIRON 460 / EARTH 460.  
Paleobiology and Paleoenvironments**

*At least two courses from following list: EARTH 305, EARTH 313, EARTH 418. (5). (BS). May not be repeated for credit. Rackham credit requires additional work.*

This course will help students to understand Earth's biological and environmental evolution over geologic time. Through field-based case studies, students will learn an array of observational and analytical skills drawing from, but not limited to, sedimentology, stratigraphy, paleobotany, paleozoology, paleoclimate, paleoecology.

**ENVIRON 461 / ANTHRBIO 461.  
Primate Conservation Biology**

*An introductory course on primates, ecology, or conservation biology is advised. No quantitative or statistical training is required. (3). (BS). May not be repeated for credit.*

This seminar fosters critical consideration of issues within primate conservation biology. Topics will include: alternative conceptual approaches, mathematical models, assessing the status of primate populations and habitats, major threats, the role of ecology, theory vs. practice, conservation priority setting, strategies, tactics, and the role of local human communities.

**ENVIRON 462. Topics in Environmental Social Science**

*At least one environmentally related course prior to this class. (1 - 4). May be repeated*

*for a maximum of 12 credits. Rackham credit requires additional work.*

This special topics course seeks to examine environmental problems and issues from a social science perspective. Specific social science topics will vary by term.

**ENVIRON 463. Topics in Environmental Natural Science**

*At least one environmentally related natural science course prior to this class. (1 - 4). (BS). May be repeated for a maximum of 12 credits. Rackham credit requires additional work.*

This special topics course seeks to examine environmental problems and issues from a natural science perspective. Specific natural science topics will vary by term.

**ENVIRON 464. Topics in Culture and Environment**

*At least one environmentally related course prior to this class. (1 - 4). May be repeated for a maximum of 12 credits. Rackham credit requires additional work.*

This special topics course seeks to examine environmental problems and issues from a humanities perspective. Specific topics will vary by term.

**ENVIRON 465. Interdisciplinary Environmental Topics**

*At least one environmentally related course prior to this class. (1 - 4). May be repeated for a maximum of 12 credits. Rackham credit requires additional work.*

This special topics course seeks to examine environmental problems and issues from an interdisciplinary perspective. Specific topics will vary by term.

**ENVIRON 467 / CHEM 467 / CLIMATE 467 / EARTH 465 / ENSCEN 467.**

**Biogeochemical Cycles**

*MATH 116, CHEM 210, and PHYSICS 240*

*(or 260). (4). (BS). May not be repeated for credit. F, W.*

The biogeochemical cycles of water, carbon, nitrogen, and sulfur; the atmosphere and oceans as reservoirs and reaction media; the fate of natural and man-made sources of carbon, nitrogen, and sulfur compounds; the interactions among the major biogeochemical cycles and resultant global change; greenhouse gases, acid rain and ozone depletion.

**ENVIRON 468 / PUBPOL 468. Oil and Gas Policy in the US**

*May not be repeated for credit.*

Hydraulic fracturing and horizontal drilling have made the United States the world's largest producer of oil and natural gas. What does that mean for the domestic economy, energy prices, foreign policy, climate change, and local environments? This course will begin with an overview of the domestic and global energy system. It will briefly describe the history of oil and gas production in the United States, and how that history has helped shape global energy markets.

**ENVIRON 473 / ANTHRBIO 463 / PSYCH 463. Statistical Modeling and Data Visualization in R**

*Basic knowledge of statistics (e.g., linear regression). Some prior experience with R is advisable, but not required. (4). (BS). (QR/1). May not be repeated for credit. Rackham credit requires additional work.*

This course is a boot camp in statistical modeling and data visualization using the R computer language. Topics include basic R programming, data exploration, statistical modeling, model comparison, parameter estimation and interpretation, and the visual display of quantitative information.

**ENVIRON 475 / EAS 475 / EHS 588.**  
**Environmental Law**

*(3). May not be repeated for credit.*

Introduces students to environmental law and the impact of the legal process on decisions that affect the environment.

Topics include common law tort actions, toxic tort actions, statutory controls of pollution and other environmentally harmful activities. Additional areas include administrative agency structure and performance, constitutional rights to environmental quality and more.

**ENVIRON 476 / EAS 476 / EEB 476.**  
**Ecosystem Ecology**

*General Ecology and a 400-level course in Aquatic or Terrestrial Ecology. (3). (BS). May not be repeated for credit. W.*

Current theories about the control and function of ecosystems, the approaches and techniques being used to test these theories, and the application of theory to the management and restoration of ecosystems.

**ENVIRON 479 / EARTH 477.**

**Hydrogeology**

*MATH 116; and High school knowledge of PHYSICS, CHEMISTRY, and EARTH (GEOSCI) or equivalent. (4). (BS). May not be repeated for credit.*

Introduction to physical hydrogeology with particular emphasis on processes and direct applications to geological settings and problem solving. The hydrologic cycle, physical rock framework, and properties of aquifer systems are described and quantified. Groundwater flow and mass transport equations are covered, as well as pump test design and analysis. Natural tracers and groundwater dating are discussed.

**ENVIRON 499. Senior Honors Thesis**  
*Consent of instructor required. ENVIRON 399 and permission of instructor. (1 - 6).*

*(INDEPENDENT). May be repeated for a maximum of 6 credits. Continuing Course. Y grade can be reported at end of the first-term to indicate work in progress. At the end of the second term, the final grade is posted for both term's elections.*

With the aid of the course instructor and faculty sponsor, the research plan developed in the Junior Honors Seminar is implemented and data/information is collected, analyzed, and synthesized. An oral presentation is made and the thesis is submitted to the faculty sponsor.

## **French (FRENCH)**

**FRENCH 100. Intensive Elementary French**

*No prior instruction in French OR placement of FRENCH 101. [No previous FRENCH coursework, excluding FRENCH 240, 241, 244, 340, 341, 342, 343, 344, 345, 402, 444, 453] OR [By assignment of FRENCH 100 or 101 by Placement Exam (Student Group FR01 or Placement score 01)]. (Prerequisites enforced at registration.) Students with any prior study of French must take the Placement Test. (8 in the half-term). May not be repeated for credit. No credit granted to those who are enrolled in or have completed FRENCH 101, 102, 103, 113 or RCLANG 190.*

This course introduces students to French language and culture with an emphasis on communication. The content-based approach integrates grammar with functional use.

**FRENCH 101. Elementary French**  
*No prior instruction in French OR placement of FRENCH 101. [No previous*

*FRENCH coursework, excluding FRENCH 240, 241, 244, 340, 341, 342, 343, 344, 345, 402, 444, 453] OR [By assignment of FRENCH 100 or 101 by Placement Exam (Student Group FR01 or Placement score 01)] . (Prerequisites enforced at registration.) Students with any prior study of French must take the Placement Test. (4). May not be repeated for credit. No credit granted to those who are enrolled in or have completed FRENCH 100, 113, or RCLANG 190.*

The sequence of FRENCH 101/102 presents the essentials of French grammar, vocabulary, and culture needed to communicate in French at a moderate speed. Vocabulary and structures are practiced through communicative activities stressing listening and speaking. Authentic documents are used to develop reading skills. Cultural awareness and listening skills are also developed through listening and video materials.

#### **FRENCH 102. Elementary French, Continued**

*FRENCH 101 (completed with a minimum grade of C- or better). (Prerequisites enforced at registration.) (4). May not be repeated for credit. No credit granted to those who have completed FRENCH 100, 103, 111 or 112, or RCLANG 190.*

The sequence of FRENCH 101/102 presents the essentials of French grammar, vocabulary, and culture needed to communicate in French at a moderate speed. Vocabulary/structures are practiced through communicative activities stressing listening and speaking. Authentic documents are used to develop reading skills. Cultural awareness/listening skills are also developed through listening/video materials.

#### **FRENCH 103. Review of Elementary French**

*Students with any prior study of French must take the Placement Test. Only the placement score and not language coursework completed at a previous school will determine placement; RCLANG 150. (Prerequisites enforced at registration.) (4). May not be repeated for credit. No credit granted to those who are enrolled in or have completed FRENCH 100, 102, 113, or RCLANG 190.*

A refresher course for students with previous training in French, but not ready for a second-year course.

#### **FRENCH 113. Accelerated Reading in French**

*(4). May not be repeated for credit. No credit granted to those who have completed FRENCH 100, 101, 102, 103, 111, 112, or RCLANG 190. Completion of FRENCH 113 does not satisfy, even partially, the LSA language requirement.*

Accelerated course designed to develop reading and translation competence in French.

#### **FRENCH 230. Intensive Second-Year French**

*One of FRENCH 100, 102, or 103 or RCLANG 190 (completed with a minimum grade of C- or better); OR assignment of FRENCH 231 on Placement test. (Prerequisites enforced at registration.) (8 in the half-term). (Lang Req). May not be repeated for credit. No credit granted to those who have completed FRENCH 231 or 232 or RCLANG 290 or 310.*

#### **FRENCH 231. Second-Year French**

*One of FRENCH 100, 102, or 103 or RCLANG 190, (completed with a minimum grade of C- or better); OR assignment of FRENCH 231 on Placement test. (Prerequisites enforced at registration.) (4). May not be repeated for credit. No credit granted to those who have completed FRENCH 230 or RCLANG 290 or 310.*

FRENCH 231 develops and refines listening, speaking, reading, and writing skills; provides strategies for effective communication and reading; reviews and adds to previously learned grammatical structures and uses; develops an awareness of French-speaking cultures; utilizes technology to help with the study of French and to have greater access to Francophone cultural documents.

**FRENCH 232. Second-Year French, Continued**

*FRENCH 231 (completed with a minimum grade of C- or better); OR RCLANG 250; OR assignment by placement test. (Prerequisites enforced at registration.) (4). (Lang Req). May not be repeated for credit. No credit granted to those who have completed FRENCH 112 or 230 or RCLANG 290 or 310.*

FRENCH 232 uses literature, magazine articles, videos, and songs to explore the history of France and several Francophone countries. Students are expected to review and learn various grammatical elements and vocabulary in order to participate in classroom activities and discussions. Linguistically, it focuses on supporting opinions, making comparisons, hypothesizing, and composing sophisticated sentences.

**FRENCH 235. Advanced Practice in French**

*FRENCH 230 or 232 with a grade of C- or higher; or RCLANG 290 or 310; or assignment by placement test; or FRENCH 250x AP credit. Only the placement score and not language coursework completed at a previous school will determine placement. (Prerequisites enforced at registration.) Students who receive transfer credit from for FRENCH 232 and wish to continue with their language study are strongly encouraged to take the placement exam to*

*be certain that they are prepared for FRENCH 235. (3). May not be repeated for credit.*

Through current events and their historical background, this course focuses on some concepts essential to French-Francophone Studies: slavery, colonialism, decolonization, migration, race relations, globalization, gender and sexuality. While stressing a communicative approach, the content of this course will be presented with a review and expansion of grammatical structures.

**FRENCH 240. French and Francophone Topics in Translation**

*A knowledge of French is not required. Enrollment restricted to first- and second-year students. (3). (HU). May not be repeated for credit. Taught in English.*

Intensive study of a selected topic in the cultures and societies of French-speaking peoples, taught in English using translated materials.

**FRENCH 241 / HISTART 271. Origins of Modernism: Art and Culture in Nineteenth Century France**

*(4). (HU). May not be repeated for credit.*

This course examines a series of remarkable episodes in modern French painting, from the establishment of an official, state-sponsored form of Classicism to the succession of movements that emerged in opposition to official art. The course is also designed to encourage close readings of images within the parameters of their historical contexts and of recent critical debates.

**FRENCH 270. French and Francophone Literature and Culture**

*FRENCH 235 or RCLANG 320 (completed with a minimum grade of C- or better). [note to Registrar's Office: includes F235 student group as prerequisite option].*

*(Prerequisites enforced at registration.) (3). (HU). May be repeated for a maximum of 12 credits. May be elected more than once in the same term.*

Intensive study of a topic, theme, or genre in the literatures and other cultural productions of French-speaking peoples, providing an introduction to the methods and practice of literary and cultural study in the French language and opportunities for development of linguistic proficiency beyond the 4th semester level.

**FRENCH 272. French and Francophone Film, Media, and Culture**

*FRENCH 235 or RCLANG 320 (completed with a minimum grade of C- or better). [note to Registrar's Office: includes F235 student group as prerequisite option]. (Prerequisites enforced at registration.) (3). (HU). May be repeated for a maximum of 12 credits. May be elected more than once in the same term.*

Intensive study of a topic in the culture of French-speaking peoples with emphasis on film, television, and other modern media, providing an introduction to the methods and practice of film and media study in the French language and opportunities for development of linguistic proficiency beyond the fourth-semester level.

**FRENCH 274. French and Francophone Societies and Culture**

*FRENCH 235 or RCLANG 320 (completed with a minimum grade of C- or better). [note to Registrar's Office: includes F235 student group as prerequisite option]. (Prerequisites enforced at registration.) (3). (HU). May be repeated for a maximum of 12 credits. May be elected more than once in the same term.*

Intensive study of a topic in the culture, politics, and structures of French-speaking societies providing an introduction to the

methods and practice of cultural and social study in the French language and opportunities for development of linguistic proficiency beyond the 4th semester level.

**FRENCH 276. Spoken and Written Performance in French**

*FRENCH 235 or RCLANG 320 (completed with a minimum grade of C- or better). [note to Registrar's Office: includes F235 student group as prerequisite option]. (Prerequisites enforced at registration.) (3). (HU). May be repeated for a maximum of 12 credits. May be elected more than once in the same term.*

Intensive practice in the creation, production and performance of culture through the French language providing opportunities for development of linguistic proficiency beyond the 4th semester level.

**FRENCH 281. Internship in France or Other Francophone Countries**

*FRENCH 235 and one course in FRENCH numbered 250-299 or FRENCH 235 and one RCLANG 320 (if no FRENCH course numbered 250-299 or RCLANG 320 has been taken, simultaneous enrollment with FRENCH 281 is allowed). (Prerequisites enforced at registration.) (3). (EXPERIENTIAL). May not be repeated for credit. Offered mandatory credit/no credit.*

This is a three-credit course for the academic work associated with an internship that involves the extensive use of French in a location in which French is a primary language. Course requirements consist of oral and written assignments, pre- and post-internship meetings, and presentations. Aside from these requirements, the class does not meet.

**FRENCH 333. French Phonetics**

*FRENCH 235 or RCLANG 320 and two courses in FRENCH numbered 250-299; or two courses in RCLANG 320 and one course in FRENCH numbered 250-299.*



*[note to Registrar's Office: includes F200 student group as prerequisite option].*  
*(Prerequisites enforced at registration.) (3).*  
*May not be repeated for credit.*

Introduction to the discipline of phonetics in addition to practical exercises and practice to refine one's accent.

**FRENCH 335. Composition and Stylistics**

*FRENCH 235 or RCLANG 320 and two courses in FRENCH numbered 250-299; or two courses in RCLANG 320 and one course in FRENCH numbered 250-299.*  
*[note to Registrar's Office: includes F200 student group as prerequisite option].*  
*(Prerequisites enforced at registration.) (3).*  
*May not be repeated for credit.*

This course focuses on textual interpretation and written production. Students will acquire stylistic, narrative, rhetorical and prosodic tools indispensable in textual analysis and written activities.

**FRENCH 337. Seminar in Translation**

*FRENCH 235 or RCLANG 320 and two courses in FRENCH numbered 250-299; or two courses in RCLANG 320 and one course in FRENCH numbered 250-299.*  
*[note to Registrar's Office: includes F200 student group as prerequisite option].*  
*(Prerequisites enforced at registration.) (3).*  
*May not be repeated for credit.*

Study of and practice in translation of a variety of different text types, to enhance students' knowledge and command of syntactic and stylistic features of French and English, to develop their sensitivity to linguistic register, and to the ways in which translation conveys, transforms, or distorts meaning and style.

**FRENCH 340. French Literature in Translation**

*A knowledge of French is not required. (3;*

*2 in the half-term). (HU). May not be repeated for credit. Taught in English.*

**FRENCH 343 / HISTORY 323 / MEMS 323. French Enlightenment**

*(3). (HU). May not be repeated for credit.*

Through primary source readings, discussions, and lectures, students gain an understanding of the French Enlightenment as a part of the critical response to French society, politics, and culture before the French Revolution. Through readings in secondary sources students are introduced to current debates about the Enlightenment. All Readings are in English translation.

**FRENCH 344 / HISTORY 313. The Revolutionary Century: France, 1789-1900**

*(4; 3 in the half-term). (SS). May not be repeated for credit.*

The French revolution of 1789 announced the beginning of a new age in which established social and political traditions were to be swept away before the bracing winds of cultural novelty and political experimentation. Using a variety of sources--biography, historical documents, novels, and recent studies--this class explores the social and political history of France's revolutionary century, paying special attention to its resonance beyond its borders.

**FRENCH 346 / HISTART 370. Realism and Impressionism**

*(4). (HU). May not be repeated for credit.*

This course focuses on Parisian visual culture from 1848 to the end of the nineteenth century. Its principal objective is to evaluate Realist and Impressionist painting in relation to new forms of print media, emergent forms of popular and mass culture, and an unstable social and political landscape.

**FRENCH 350. Special Topics in French and Francophone Studies**

*FRENCH 235 or RCLANG 320 and two courses in FRENCH numbered 250-299; or two courses in RCLANG 320 and one course in FRENCH numbered 250-299. [note to Registrar's Office: includes F200 student group as prerequisite option]. (Prerequisites enforced at registration.) (3). (HU). May be repeated for a maximum of 12 credits. May be elected more than once in the same term.*

Readings and topical studies relating to French speaking cultures (in Europe, Africa, North America, and Indian Ocean) not addressed in other courses, as well as to aspects of French and Francophone culture that may require special treatment.

**FRENCH 360. French Asia Pacific**

*FRENCH 235 or RCLANG 320 and two courses in FRENCH numbered 250-299; or two courses in RCLANG 320 and one course in FRENCH numbered 250-299. [note to Registrar's Office: includes F200 student group as prerequisite option]. (Prerequisites enforced at registration.) (3). May be repeated for a maximum of 6 credits. May be elected more than once in the same term.*

Study of the French presence in Asia and the Pacific, including Indochina, Vietnam, India and the Indian Ocean, French Melanesia and Polynesia. Topics could also include French encounters with other societies and cultures in Asia and the Pacific in places France did not establish a colonial presence. Taught in French.

**FRENCH 361. French American Studies**

*FRENCH 235 or RCLANG 320 and two courses in FRENCH numbered 250-299; or two courses in RCLANG 320 and one course in FRENCH numbered 250-299. [note to Registrar's Office: includes F200 student group as prerequisite option].*

*(Prerequisites enforced at registration.) (3). May be elected twice for credit. May be elected more than once in the same term. Taught in French.*

Pan-American or regionally focused studies of the French Americas. Taught in French.

**FRENCH 362. Quebec and French Canadian Studies**

*FRENCH 235 or RCLANG 320 and two courses in FRENCH numbered 250-299; or two courses in RCLANG 320 and one course in FRENCH numbered 250-299. [note to Registrar's Office: includes F200 student group as prerequisite option]. (Prerequisites enforced at registration.) (3). May be elected twice for credit.*

Introduction to the history and legacy of French presence in Canada, on-going relations between the two regions, and the francophone culture that has resulted from shared traditions.

**FRENCH 363. Caribbean Studies**

*FRENCH 235 or RCLANG 320 and two courses in FRENCH numbered 250-299; or two courses in RCLANG 320 and one course in FRENCH numbered 250-299. [note to Registrar's Office: includes F200 student group as prerequisite option]. (Prerequisites enforced at registration.) (3). May be elected twice for credit.*

Introduction to the history and legacy of French presence in the Caribbean, on-going relations between the two regions, and the francophone culture that has resulted from shared traditions.

**FRENCH 364. African Studies (Maghreb)**

*FRENCH 235 or RCLANG 320 and two courses in FRENCH numbered 250-299; or two courses in RCLANG 320 and one course in FRENCH numbered 250-299. [note to Registrar's Office: includes F200 student group as prerequisite option].*

*(Prerequisites enforced at registration.) (3).  
May be elected twice for credit.*

Introduction to the history and legacy of French presence in North Africa, on-going relations between the two regions, and the culture that has resulted from shared traditions.

**FRENCH 365. African Studies (Sub-Saharan)**

*FRENCH 235 or RCLANG 320 and two courses in FRENCH numbered 250-299; or two courses in RCLANG 320 and one course in FRENCH numbered 250-299.  
[note to Registrar's Office: includes F200 student group as prerequisite option].  
(Prerequisites enforced at registration.) (3).  
May be elected twice for credit.*

Introduction to the history and legacy of French presence in Sub-Saharan Africa, on-going relations between the two regions, and the francophone culture that has resulted from shared traditions.

**FRENCH 368. Enlightenment, Revolution, and Romanticism**

*FRENCH 235 or RCLANG 320 and two courses in FRENCH numbered 250-299; or two courses in RCLANG 320 and one course in FRENCH numbered 250-299.  
[note to Registrar's Office: includes F200 student group as prerequisite option].  
(Prerequisites enforced at registration.) (3).  
(HU). May be elected twice for credit.*

Study of the philosophical trends, literature, culture, and artistic productions of France spanning the early eighteenth century to the early nineteenth.

**FRENCH 369. Literature, History, and Culture of Modernity**

*FRENCH 235 or RCLANG 320 and two courses in FRENCH numbered 250-299; or two courses in RCLANG 320 and one course in FRENCH numbered 250-299.  
[note to Registrar's Office: includes F200*

*student group as prerequisite option].  
(Prerequisites enforced at registration.) (3).  
(HU). May be elected twice for credit.*

Study of the philosophical trends, literature, culture, and artistic productions of France spanning the mid-nineteenth century to the present.

**FRENCH 374. Problems in Society and Social Theory**

*FRENCH 235 or RCLANG 320 and two courses in FRENCH numbered 250-299; or two courses in RCLANG 320 and one course in FRENCH numbered 250-299.  
[note to Registrar's Office: includes F200 student group as prerequisite option].  
(Prerequisites enforced at registration.) (3).  
May be elected twice for credit.*

Examination of the structures of French society as well as social theories that have emerged in France.

**FRENCH 378. Studies in Genre**

*FRENCH 235 or RCLANG 320 and two courses in FRENCH numbered 250-299; or two courses in RCLANG 320 and one course in FRENCH numbered 250-299.  
[note to Registrar's Office: includes F200 student group as prerequisite option].  
(Prerequisites enforced at registration.) (3).  
May be repeated for a maximum of 6 credits.*

Questions treating the rise, codification, mixing, modification, and/or rejection of one or more artistic genres.

**FRENCH 379. Studies in Gender and Sexuality**

*FRENCH 235 or RCLANG 320 and two courses in FRENCH numbered 250-299; or two courses in RCLANG 320 and one course in FRENCH numbered 250-299.  
[note to Registrar's Office: includes F200 student group as prerequisite option].  
(Prerequisites enforced at registration.) (3).*

*May be repeated for a maximum of 6 credits.*

Introduction to issues of gender and sexuality as they have arisen in France and the particular formulation they have received there.

**FRENCH 380. Intermediate Business French**

*FRENCH 235 or RCLANG 320 and two courses in FRENCH numbered 250-299; or two courses in RCLANG 320 and one course in FRENCH numbered 250-299. [note to Registrar's Office: includes F200 student group as prerequisite option]. (Prerequisites enforced at registration.) (3). May not be repeated for credit. No credit granted to those who have completed or are enrolled in FRENCH 414. A maximum of nine credits from FRENCH 380, 381, and 414 as well as any of their equivalents accepted as transfer and/or study abroad credit can count toward the concentration or academic minor.*

This course is designed to familiarize the students with the language of business transactions in France. It deals with both written and spoken commercial French. It is partly built around a fictitious company whose activities are divided into themes dealing with various aspects of the business world.

**FRENCH 381. Internship in France or Other Francophone Countries**

*FRENCH 235 or RCLANG 320, and one course in French numbered FRENCH 250 through 299 or a second RCLANG 320; or study abroad equivalent. [note to Registrar's Office: includes F200 student group as prerequisite option]. (Prerequisites enforced at registration.) FRENCH 380. (3). (EXPERIENTIAL). May be repeated for a maximum of 9 credits. May be elected more than once in the same term. A maximum of nine credits from*

*FRENCH 380, 381, and 414 as well as any of their equivalents accepted as transfer and/or study abroad credit can count toward the concentration or academic minor. Offered mandatory credit/no credit.*

Preparation for internship experience; completion of internship in a Francophone country; follow-up class upon return.

**FRENCH 399. Independent Study**

*Two courses in FRENCH numbered 250-299; or FRENCH 235 and two RCLANG 320; or FRENCH 235, one course in FRENCH numbered 250-299, and one RCLANG 320. (Prerequisites enforced at registration.) (1 - 3). (INDEPENDENT). May not be repeated for credit.*

**FRENCH 414. Advanced Business French**

*FRENCH 380; or two courses in FRENCH numbered 250-299; or FRENCH 235 and two RCLANG 320; or FRENCH 235, one course numbered FRENCH 250-299 and one RCLANG 320. (Prerequisites enforced at registration.) (3). May not be repeated for credit. No credit granted to those who have completed or are enrolled in BA 415. A maximum of nine credits from FRENCH 380, 381, and 414 as well as any of their equivalents accepted as transfer and/or study abroad credit can count toward the concentration or academic minor.*

The emphasis is on: 1) a general view of economic development in contemporary France; 2) a detailed analysis of the functioning of economic and commercial practices; 3) the study of communication within the business community. Case history method.

**FRENCH 444. Readings in French and Francophone Studies (in English Translation)**

*One course in FRENCH numbered 240 or above. (Prerequisites enforced at*

registration.) (3). May not be repeated for credit. Taught in English.

**FRENCH 491. Senior Honors Course**

*Seniors, with permission of the Honors Advisor. (3). (INDEPENDENT). May not be repeated for credit. Continuing Course. Y grade can be reported at end of the first-term to indicate work in progress. At the end of the second term of FRENCH 492, the final grade is posted for both term's elections.*

First semester of supervised independent study for the purpose of completing an honors thesis in French.

**FRENCH 492. Senior Honors Course**

*Senior standing. (Prerequisites enforced at registration.) FRENCH 491. (3). (INDEPENDENT). May not be repeated for credit.*

Supervised independent study leading to the following: completion of an honors thesis; a program of selected readings and conferences, term papers, or reports; and written examinations.

## **Film, Television, and Media Std (FTVM)**

**FTVM 150 / RCHUMS 150. Introduction to Film, Television, and Media**

*(4). (HU). May not be repeated for credit.*

This course provides an introduction to film, television, and media. You will learn the critical vocabulary and methods of media analysis, and use this knowledge to make your voice heard in the form of audiovisual essays rather than written papers. The course is designed to build

basic video editing and sound recording skills throughout the semester--no prior experience is needed. With a focus on representations of race, gender, class, and sexual identities, you will learn how to assess film, television, and digital media with an eye (and ear) keenly attuned to the ways that style shapes the meanings of the media that surround all of us in everyday life. We are committed to a model of student-centered learning, so your experience in this course will not resemble a typical, large-lecture format. Instead, we will engage in interactive, peer learning activities such as discussions, debates.

**FTVM 190. First-Year Film Seminar**

*Enrollment restricted to first-year students, including those with sophomore standing. (3; 2 in the half-term). (HU). May not be repeated for credit.*

The goal of this course is to help students understand the ways in which cinema functions as a form for artistic expression. The course will examine cinematically specific structures (time and space manipulation, montage, etc.) as well as examine film's relationship to other artistic enterprises such as theater, literature, painting, etc. Although based on this premise, topics will rotate.

**FTVM 202. Introduction to Digital Media Studies**

*(4). (HU). May not be repeated for credit. AMCULT 202, ENGLISH 280.*

This course examines contemporary topics in digital studies by focusing on current debates prompted by the relationship between new media and society. Students are introduced to key frameworks for studying the aesthetic, social, political, and economic impact of internet connectivity, digital platforms, technological innovation, small screens, and mobile media.

**FTVM 203. Media Production Mini Course I**

*(1). (CE). May be elected three times for credit. May be elected more than once in the same term.*

This course covers specific media production topics, allowing students from all majors to gain experience in an aspect of making media.

**FTVM 210. Introduction to Screenwriting**

*FTVM 150 or FTVM (SAC 236). (3). May not be repeated for credit.*

After taking this course, students will understand how timeless dramatic principles function in feature films, television shows, and new media. Students will also understand how the elements of storytelling (characterization, point-of-view, subtext, symbolism, dramatic irony, etc.) translate to motion pictures in ways different from fiction and the stage.

**FTVM 250 / JUDAIC 250 / MIDEAST 280. Screening Jewish Cultures**

*(3). (HU). (R&E). May not be repeated for credit.*

An exploration of Jewish Diversity through films about and by Jews from how Jews fit in the black/white scheme, to propaganda, race, and antisemitism in Nazi and post-Holocaust films to Israel's diversity as an immigrant society reflecting on casting, language use, subtitling, cross-dressing, and genre choices that affect the cinematic construction of Jewishness in relationship to other social groups.

**FTVM 272. Classical Film Theory**

*(3). May not be repeated for credit.*

What is cinema? What are its defining properties? What should film do, and what does it do best? How do spectators perceive and understand projected moving images?

These are kinds of questions that classical film theory attempted to answer. This course examines the writings of a number of classical film theorists, working to understand, apply, and interrogate their respective arguments in relation to a series of selected films.

**FTVM 290. Introduction to Media Production**

*FTVM 150 or RCHUMS 150, or FTVM (SAC) 236 completed with a minimum grade of C- or better. (Prerequisites enforced at registration.) (4). (CE). May not be repeated for credit.*

FTVM 290 is a hands-on survey course in media production introducing television, digital video, and film. Students gain first hand experience in strategies and techniques of scripting and pre-production, production, and post-production. Students will master a basic understanding of the aesthetics and processes of film, video, and television production.

**FTVM 300. Movie/Serial Television Production I**

*FTVM 290; and major in Film, Television, and Media. (Prerequisites enforced at registration.) (4). May not be repeated for credit.*

This introductory motion picture course familiarizes students with dramatic narrative movie production from interpreting the screenplay through location production techniques and post-production. It provides students with a solid understanding of how standard movie production processes and techniques are used to effectively communicate ideas in Dramatic Narrative productions (any genre: comedy to drama). Students work in teams of four to six to produce two short films as well as participating in two in-class dramatic narrative film productions.

**FTVM 301. Documentary I**

*FTVM 290 and FTVM Major.*

*(Prerequisites enforced at registration.) (4).*

*May not be repeated for credit.*

This course is designed to teach the theoretical, aesthetic and technical principles of making a meaningful and compelling documentary. An introduction to documentary, this class will focus on knowing what makes a story compelling and how to clearly convey the ideas visually. The craft of shaping of story ideas, creating powerful images that drive the story, capturing and use of sound, script writing, narration, and advanced editing with Final Cut Pro will be explored.

**FTVM 302. Multi-Camera Television Production**

*FTVM 290; and major in Film, Television, and Media. (Prerequisites enforced at registration.) (4). May not be repeated for credit.*

Building on previous television experience, this course is designed to focus on the relationship between technique and content in television programs. Students receive continued hands-on experience in multi-camera studio television production through a series of increasingly complex directing projects.

**FTVM 303. Media Production Mini Course II**

*(1). (CE). May be elected three times for credit. May be elected more than once in the same term.*

This is a workshop-based course designed to teach specific topics, approaches, and subjects in media production.

**FTVM 304. Topics in Media Production I**

*FTVM 290 with a minimum grade of C- or better, and a declared major in Film, Television, and Media. (Prerequisites*

*enforced at registration.) (4). May be repeated for a maximum of 8 credits. May be elected more than once in the same term.*

This course provides intermediate experience in special production topics. Film, video, television and/or digital production may focus on a particular subject area and/or approach to the medium.

**FTVM 305. The Experimental Screen**

*FTVM 290. (Prerequisites enforced at registration.) (4). May not be repeated for credit.*

Following up on some of the concepts in FTVM 290, this course encourages students to consider alternative and hybrid practices in moving image and sound production. We will examine the numerous production and presentation tools and how they can be used to make compelling time-based media projects. Students will work individually and in small groups to conceptualize, write and produce works for a variety of settings in a range of media including 16mm film, HD video, portable mini cameras and other resources.

**FTVM 306. Animation and Digital Media Practices I**

*FTVM 290. (Prerequisites enforced at registration.) Students should have basic working knowledge of the Macintosh platform, Photoshop, and digital video. (4). May not be repeated for credit.*

This course is an intensive, 15-week introduction to time-based new media processes and practices. With an emphasis on individual and team-based activities, students engage with an array of materials, hardware and software to produce short projects for a variety of potential platforms that include single-channel presentation, web-based programming, portable media, installation and live audio/visual performance. Using 2D animation as a

starting point we consider a number of current strategies to produce media (both lens-based and non lens-based), how it has evolved, and how contemporary new media interface with current cinematic and artistic practices.

**FTVM 308. Screenwriting for Non-Majors**

(3). (CE). *May not be repeated for credit.*

In this course designed for non-majors, students are required to write character profiles, a treatment, a complete three-act step outline for their proposed screenplay, and a first act of approximately 25 pages.

**FTVM 309. Shorts from Short Stories**

*FTVM 290 with a minimum grade of C- or better, and a declared major in Film, Television, and Media. (Prerequisites enforced at registration.) (4). (CE). May not be repeated for credit.*

This fast-paced adaptation course encompasses both screenwriting and production, taking published works of short fiction by contemporary authors and turning these short stories into short screenplays and then completed short films.

**FTVM 310. Screenwriting I: The Feature Script**

*FTVM 210, FTVM 290, FTVM majors. (Prerequisites enforced at registration.) (3). May not be repeated for credit.*

This course teaches students to write a feature-length screenplay. Students begin with the development of a concept, proceed to writing a treatment, and then spend the majority of the semester working on the full script. Students will read and critique each other's work.

**FTVM 311. Writing for Television I: The Spec Script**

*FTVM 210, FTVM 290, FTVM major.*

*(Prerequisites enforced at registration.) (3). May not be repeated for credit.*

This course teaches students to write full length teleplays for various small-screen formats. The class has rotating formats so students will focus on one genre or serial format during a given semester, such as sitcoms, dramas, soap-operas, etc.

**FTVM 313 / RCHUMS 313 / SLAVIC 313. Russian and Ukrainian Cinema**

(3). (HU). *May not be repeated for credit.*

Before the Bolshevik Revolution of 1917, Russian cinema genres resembled those common in Europe at the time. In the 1920s, however, Russian filmmakers, armed with bold new ideas about cinematic art and with a revolutionary political ideology, created theories of "montage" and a decade of acknowledged film masterpieces. In the 1930s, the experimental directions of early Soviet cinema were replaced by the doctrine of "socialist realism," a style closer to that of classical (Hollywood) narrative cinema, with themes intended to foster the political and didactic agenda of the state. After Stalin's death in 1953, however, filmmakers were able to reintroduce personal and even religious and philosophical themes, as well as return to a more 'poetic' style, particularly in Ukrainian film. As censorship ended during the Gorbachev period of glasnost (openness), 1985-91, a more honest and naturalistic cinema emerged, along with renewed stylistic experimentation. In the 1990s and in the first decades of the 21st century Russian cinema has reacted to American-style genre films by adapting those patterns to deal with new pressing concerns, such as ethnic conflict and the economic traumas of the transition to capitalism. We will view, analyze and discuss fifteen films from the 1920s through the 2000s-with an eye both



to their intrinsic artistic structure and to the social and cultural background and the political events with which they deal.

**FTVM 314 / POLISH 314. Polish Cinema**  
(3). (HU). *May not be repeated for credit.*

Course covers Polish cinema from WWII to the present, tracing the development of film styles in the context of the historical, political, and cultural features of Polish society, with focus on the use of realist norms, intricate symbolism, and absurdist allegory to critique the loss of civic values under Communism.

**FTVM 315 / CZECH 315. The Czech New Wave and Its Legacy**  
(3). (HU). (R&E). *May not be repeated for credit.*

This course covers an extremely important film movement in Eastern Europe, encompassing a broad range of film styles, from cinema verite (Milos Forman) to surrealism and the absurd (Chytilova, Svankmajer). It also critiques authoritarian systems, ethnic discrimination, and sexism. Fourteen films are studied and discussed, with accompanying readings. Three medium-length papers are required.

**FTVM 316 / ITALIAN 316. Screening Italian-Americans**  
(3). (R&E). *May not be repeated for credit.*

This course examines the history of Italian Americans' representation from gangster films to *The Jersey Shore*. It also explores how the American film and television industries have historically translated stereotypes about Italians' national, racial, and ethnic difference into a wide range of appealing representations to achieve popular and political consensus.

**FTVM 317. WOLV TV**  
(4). (CE). *May not be repeated for credit.*

This course is designed for students involved in WOLV TV. Shows produced for WOLV could be considered as some of the work expected for the class and critical analysis of these shows will be an important piece of the course work.

**FTVM 321 / MIDEAST 331. Iranian Cinema: Re/Presenting a Nation**  
(3). (HU). (R&E). *May not be repeated for credit.*

This course provides an overview of the history of Iranian cinema, with an eye for identifying the major trends, genres, and filmmakers from the 1960s to the present day.

**FTVM 325. New Line and New Hollywood Cinema**  
(3). *May not be repeated for credit.*

This class examines New Line Cinema as a way to better understand the cultural, economic, and historical conditions of contemporary cinema. By looking at the different films, genres, and franchises put out by New Line, we will see how they have shaped the cultural scene in the United States since 1967.

**FTVM 331 / ENGLISH 331. Film Genres and Types**  
*FTVM 150 or FTVM (SAC) 236. (3). (HU). May be repeated for a maximum of 9 credits. May be elected more than once in the same term.*

Careful analytical studies of representative films from various film genres. The course concentrates on one particular genre every semester it is offered. Past subjects have included non-narrative film, post-1972 gore, farce, and the American musical.

**FTVM 333 / GERMAN 333. Fascist Cinemas**

*FTVM 150 or FTVM (SAC) 236. (3). (HU). (R&E). May not be repeated for credit.*

This interdisciplinary course explores the fascist-era cinemas of Germany, Spain, Italy, and Japan. It focuses on a set of common themes to identify both commonalities and specificities of a given context or historical moment.

**FTVM 334 / AMCULT 334 / COMM 334. Race, Gender, Sexuality and U.S. Culture in Video Games**

*(4; 3 in the half-term). May not be repeated for credit.*

This course examines how video games function as a window into U.S. race relations. We will study the history, theory, and practice of video games in the U.S. with particular attention to racial stereotyping, user demographics, diversity of the industry, and racial conflict in shared world and social games.

**FTVM 335. Authorship and the Archive: Exploring the Film, Theater, and TV Collections of the U of M Special Collections Library**

*FTVM 150 or FTVM (SAC) 236, FTVM 272. (3). (HU). May not be repeated for credit.*

The University of Michigan Special Collections Library is home to extensive archives and materials documenting the careers of a number of important film and media makers. Students in this course conduct original primary-source archival research using unique materials found in the collections while also viewing and analyzing selected audiovisual works.

**FTVM 340. Writing Film Criticism**

*FTVM 150 or FTVM (SAC) 236. (Prerequisites enforced at registration.) (3). (HU). May not be repeated for credit.*

This course is aimed at helping students write illuminating and stylistically engaging film criticism. Students will do this within the context of screening contemporary films and reading various types of critical writing in popular and academic criticism.

**FTVM 346 / AMCULT 346 / DIGITAL 346 / GERMAN 346. Media Matter:**

**From Print to Screen Culture**

*(3). (HU). May not be repeated for credit.*

This course explores the histories of writing, photography, radio, film, television, and the computer in order to gain a firmer understanding of how technology shapes culture, politics, and personal identity in the German-speaking world and beyond.

**FTVM 350. The Silent Screen**

*(3). (HU). May not be repeated for credit.*

The screening of moving images encompasses a long and fascinating history that begins even before the emergence of cinema. International in scope and intermedial in approach, this course examines the diversity of screen practices that preceded the introduction of synchronized sound at the end of the 1920s.

**FTVM 352. Film History: Origins to the French New Wave**

*FTVM 150 or FTVM (SAC) 236. (3). (HU). May not be repeated for credit.*

This course introduces students to the history of cinema from its technological and cultural origins in the late nineteenth century to the global impact of the French New Wave. The objectives are to orient students to a wide range of cinema, establish the relationships between films from different aesthetic, industrial, and national contexts, and illuminate the development of narrative form and film style.

**FTVM 353. Film History: Post New Wave**

*FTVM 150 or FTVM (SAC) 236. (3). (HU). May not be repeated for credit.*

This course examines the development of cinema during a period characterized by significant changes in film form and style as well as by important industrial and technological developments. It considers the international dimensions of these changes as well as their specific national and institutional contexts. The course also addresses questions of historical method in film scholarship and the relevance of this period to current trends in film production and reception.

**FTVM 354. New Media History**

*FTVM 150 or FTVM (SAC) 236. (3). (HU). May not be repeated for credit.*

The history of new media extends back into the histories of media and technology far deeper than we might first imagine. Computers, software programs, networks and the innovative social, cultural and artistic exchanges and representations that occur through them have emerged from, adapted and re-formed prior media like film and television while also introducing and spreading new kinds of content and experiences across a range of networks and devices. This class looks back at the history of media in order to best understand our present notion of what new media is and how it has come to be. From photography to weaving, radio to television, automobiles to airplanes, we seek to understand how the technologies of the Industrial age are part of the history of our current and future forms of new media.

**FTVM 355. Television History**

*FTVM 150 or FTVM (SAC) 236. (3). (HU). May not be repeated for credit.*

This course traces the development of television from the medium's historical, industrial and technological roots in radio to the advent of new audiences, technologies and forms in the 1990s. Addressing television as a global phenomenon, we will investigate television's institutions, structures, and programming from various perspectives in order to understand television's role in mass culture.

**FTVM 358. Italian Film: History, Art, Entertainment**

*(3). (HU). May not be repeated for credit. No credit granted to those who have completed or are enrolled in ITALIAN 358.*

Focusing on the post-WWII period, this course looks at Italian cinema from a number of perspectives: political, commercial, social, and aesthetic.

**FTVM 366. Topics in Film, Television and Popular Culture**

*(3). May be repeated for a maximum of 9 credits. May be elected more than once in the same term.*

This course addresses the role of film and television as popular media. It emphasizes the acquisition and use of analytical skills relevant to the given topic and serves as an introduction to cultural studies. Students will be taught to read and analyze specific popular films, genres, or figures; at the same time, the course introduces broader issues in cultural studies, such as definitions of popular/mass culture and the 'culture industry', the role of intertextuality, reception or globalization in popular culture, and the function of gender and sexuality in popular culture. Topics may include: James Bond as Popular Hero; Serials in Film and TV; Popular Cinema Beyond Hollywood; Cult Films/Cult Shows.

**FTVM 367. Digital Media and Identity**  
(3). (HU). *May not be repeated for credit.*

This course examines how identity (who we are) and identification (how we connect to representations) functions in relationship to media that depicts deeply technologized cultures and states of virtuality. In doing so we will consider how identity is mapped onto virtual spaces and enacted within digital media culture. We will pay particular attention to how gender, race, and class are configured in relation to digital identities and representations of identity in cinema.

**FTVM 368. Topics in Digital Media Studies**

*FTVM 367. (3). May be repeated for a maximum of 9 credits. May be elected more than once in the same term.*

This course explores topics relevant to film and video studies and emerging entertainment, communications, and computer technologies. Courses methodologically use critical theory, industry studies, media and cultural studies to digital media representations and experiences. Topics include but are not limited to digital media theory, video games, and virtually and identity.

**FTVM 372. Contemporary Film Theory**  
*FTVM 150 or FTVM (SAC) 236. (3). (HU). May not be repeated for credit.*

This course examines approaches to film theory. It explores how different theories and methods of analysis built on structural and post-structural presuppositions and paradigms have influenced recent film theory, its consideration of narrative practice, the psychological experience of viewing, the construction of moving image representations, and the impact of technology on aesthetic practice.

**FTVM 375. Television Theory and Criticism**

*FTVM 150 or FTVM (SAC) 236. (3). May not be repeated for credit.*

Introduction to various methodologies in study of commercial television programming; semiotic, linguistic, rhetorical, cultural, etc. Throughout the course, emphasis will be upon inquiry into what television is saying and how messages are represented for mass comprehension.

**FTVM 376. New Media Theory**  
*FTVM 150 or FTVM (SAC) 236. (3). (HU). May not be repeated for credit.*

This course surveys the major theories of digital media culture from theories of media convergence to "cyberfeminist" analysis of identity politics and accounts of the formal properties of digital media.

**FTVM 379 / HISTART 379 / HISTORY 379 / JUDAIC 379. Jewish Photographers Picture the Modern World**

*(3). (HU). May not be repeated for credit. Rackham credit requires additional work.*

This course traces a history of image making by Jews in twentieth-century Europe and the U.S. While Jewish photographers participated in many different aspects of photography, particular attention will be given to documentary photography.

**FTVM 380 / AMCULT 380 / DIGITAL 380 / LATINOAM 380. Studies in Transnational Media**

*Prior coursework in Film Television, and Media, Communications (TV), or Latino Studies. Knowledge of Spanish is not required. (3). May not be repeated for credit.*

Drawing from writings in cultural theory and criticism in both English and Spanish. This course will examine national and transnational trends in Spanish and

Portuguese language TV, alternative video and cinema since WW II.

**FTVM 381 / AMCULT 381 / LATINOAM 381. Latinas/Latinos and the Media**

*Consent of department required. (3). (HU). May not be repeated for credit.*

This course examines the access and contributions of Latinas/os to the U.S. media from an historical perspective, with a culminating emphasis on the contemporary period. The cultural scope is pan-Latino, covering a range of genres and formats, from documentary to experimental film and television.

**FTVM 391. Editing Theory and Practice**

*FTVM 290 with a minimum grade of C- or better, and a declared major in Film, Television, and New Media. (Prerequisites enforced at registration.) (4). (CE). May not be repeated for credit.*

With a focus on theory and craft, this class will explore editing as the third and final authoring of a motion picture. With an emphasis on technique and storytelling over software, this class will initially challenge students to consider the power of the "cut" and from there quickly progress into more advanced editing methods and considerations.

**FTVM 392. Cinematography**

*FTVM 290 with a minimum grade of C- or better, and a declared major in Film, Television, and Media. (Prerequisites enforced at registration.) (4). (CE). May not be repeated for credit.*

This course is an introduction to cinematography where students learn the basics of motion picture photography as it applies to the analog film medium.

**FTVM 400. Movie/Serial Television Production II**

*Consent of instructor required. A 300- (or 400-) level production course in a relevant emphasized area: FTVM 300, 301, 302, or 304. (4). May not be repeated for credit.*

This is an intermediate sync-sound movie production course. It familiarizes students with dramatic narrative (any genre comedy to drama) sync-sound movie production from interpreting the screenplay through sync-sound shooting and post-production. Students have access to high-end production equipment and work in large teams to produce a substantial sync-sound final project. They also participate in dramatic narrative productions in class in collaboration with Theatre and Drama students.

**FTVM 401. Documentary II**

*FTVM 301, FTVM majors only. (Prerequisites enforced at registration.) (4). May not be repeated for credit.*

This advanced course is designed to teach the theoretical, aesthetic and technical principles of making compelling non-fiction productions. The class includes readings and viewing of clips to investigate current and past issues in non-fiction production that include documentary form, objectivity in documentary production, ethics, and representation.

**FTVM 402. Topics in Television Production**

*FTVM 302 & FTVM major. (Prerequisites enforced at registration.) (4). May not be repeated for credit.*

This is an advanced course in television production focusing on a multi-camera studio or location production. Possible topics may include Situation Comedy or Live Event Production.

**FTVM 403. Television Sketch Comedy**

*Consent of instructor required. FTVM 310*

or FTVM 311, FTVM 300 or FTVM 302.  
(4). *May not be repeated for credit.*

From television's earliest history, sketch comedy has been an integral part of the television landscape. Through screenings, readings, discussion, guest speakers, and productions. Television Sketch Comedy will explore this perennial form. Students will collaborate on original sketch comedy programs in a variety of forms.

#### **FTVM 404. Topics in Media Production II**

*A 300- (or 400-) level production course in the relevant emphasized area: FTVM 300, 301, 302, or 306; and permission of instructor. (4). May be repeated for a maximum of 8 credits. May be elected more than once in the same term.*

An advanced course in special production topics that may include film, video, television and/or digital production within a particular subject area and/or approach to the medium. It also may focus on collaborations with other courses or units.

#### **FTVM 405. Screendance**

*FTVM Majors. (Prerequisites enforced at registration.) A 300 (or 400) level production course in the relevant emphasized area: FTVM 300 or 301 and permission of instructor. (4). May not be repeated for credit.*

From Maya Deren to Merce Cunningham, to music video and beyond, this course will explore the unique challenges of capturing and creating dance for the camera. Through class screenings of film and video work, class exercises, and reading and discussion, students will learn about various historical and contemporary issues and approaches in combining dance and the moving image. Students will work alone and in small collaborative groups to create their own works integrating dance and video. Through

creative projects, students will develop their own visual style and an increased proficiency with digital video cameras and editing.

#### **FTVM 406. Animation and Digital Media Practices II**

*Consent of instructor required. FTVM 306 or equivalent experience and permission of instructor. (4). May not be repeated for credit.*

This intensive course further explores and builds upon the practices and strategies in FTVM 306. Students work individually and in small groups to research new media practice, new software and hardware, and new presentation methods. Rotating topics include: special effects for cinema; audio/visual performance; web-based serial production; and 2D digital animation. Research and seminar-based presentations along with workshops and demonstrations ultimately culminate in the design and production of individual or team-based final projects.

#### **FTVM 410. Screenwriting II: The Rewrite**

*FTVM 310 and FTVM concentrators. (3). May not be repeated for credit.*

This course follows FTVM 310 as an intermediate course in the art and practice of screenwriting. It stresses creative dramatic writing and focuses on critical tools for rewriting. Each student is expected to write or rewrite a feature length screenplay.

#### **FTVM 411. Writing for Television II: Pilots**

*FTVM 311. (Prerequisites enforced at registration.) FTVM 290 and 310. (3). May not be repeated for credit.*

This course offers students who have succeeded in FTVM 410 the opportunity to conceive and develop their own hour-long

television program, from the creation of a "show bible" to the completion of a full-length spec script of the pilot episode.

**FTVM 421. TV Pilot Production**

*Consent of instructor required. (4). May not be repeated for credit.*

TV Pilot is a production/writing course. Students work collaboratively to produce a full-length TV Pilot conceived in 411 Writing for Television II. Students are admitted from any U of M unit based on appropriate skills; by permission of instructor. This course prepares you for both creative and crew positions in TV and Movie Industries.

**FTVM 422. Topics in Avant-Garde Film**

*FTVM 150 or FTVM (SAC) 236. (3). May not be repeated for credit.*

Historical and theoretical studies of topics in avant-garde film and video. The class examines the cultural contexts of the films as well as their formal innovations.

**FTVM 423. Practicum for the Screenwriter**

*FMTV 290, 310, and 410. (4). May not be repeated for credit.*

This class is a writing practicum where the student will learn the role of the screenwriter in the greater process of the production media. Each student will participate in the various creative steps involved in bringing a narrative script to the screen.

**FTVM 427. Screenwriting III**

*FTVM 310 and 410. Limited to students whose work is judged as showing outstanding potential in writing for the screen. (3). May not be repeated for credit.*

An advanced screenwriting course that provides individual and small group instruction to select students who have

completed basic (FTVM 310) and intermediate (FTVM 410) screenwriting. Students will write a final draft of a revised original screenplay (see FTVM 410) and a first draft of a new screenplay.

**FTVM 440 / AAS 440. African Cinema**  
*AAS 200. (3). May not be repeated for credit.*

A critical and interdisciplinary look at the development of African cinema from its inception in the 1960s, at the height of the sociopolitical upheavals experienced by many nations in the transition from colonialism to independence, to the recent phase of introspection and diversification.

**FTVM 441. National Screens**

*FTVM 150 or FTVM (SAC) 236. (3). May be repeated for a maximum of 6 credits. May be elected more than once in the same term.*

An in-depth exploration of the evolution and forms of specific national or regional cinema in terms of its stylistic, socio-political, economic, and technological dimensions. Close study of the development of a cinema (e.g. Japanese, Eastern European, British) or of a film movement, e.g., Italian Neorealism, German Expressionism, French New Wave.

**FTVM 455. Topics in Film Studies**

*FTVM 150 or FTVM (SAC) 236. (3). May be repeated for a maximum of 9 credits. May be elected more than once in the same term.*

Studies in various film topics, such as silent film, women and film, German Expressionism, and Latin-American film.

**FTVM 458 / ASIAN 458. Film Culture in Korea**

*(3). May not be repeated for credit.*

This course will explore the history of Korean cinema through the framework of national/transnational cinema discourse, auteur/genre theory, globalization, the division system, and the problem of nation/state which evokes the question of identity. Students will learn Korean cinema through key films, directors, and dominant genres.

**FTVM 461 / WGS 461.**

**Explorations in Feminist Film Theory**

*WGS 240 or AMCULT 240; and junior standing. (3). May not be repeated for credit.*

This course offers an in-depth exploration of feminist theories that address film in relation to gender. Discussion focuses on contemporary feminist scholarship that draws upon a variety of viewpoints, including psychoanalysis, cultural theory, postmodernism, historical research and ideological theory.

**FTVM 475. Popular Film and TV Culture**

*At least one FTVM studies course. One 200/300 level course in theory is strongly advised. (e.g. literary theory, feminist theory, Frankfurt school.). (3). (R&E). May not be repeated for credit.*

An upper-level introduction to critical theory and cultural studies of popular film and television, drawn from theoretical traditions including the Frankfurt School, Marxism, feminism, post-colonialism, post-structuralism, and critical race studies.

**FTVM 480. Internship**

*Consent of instructor required. (2). (EXPERIENTIAL). May be repeated for a maximum of 6 credits. May be elected more than once in the same term. Offered mandatory credit/no credit.*

This course is restricted to FTVM majors who work, under careful supervision, in some part of the media industry. Students work in some aspect of preproduction, production, or postproduction, in the creative or business areas of media, documenting their experiences and learning in a journal that must be submitted for final credit.

**FTVM 489. Senior Screenwriting Tutorial**

*FTVM 410, FTVM majors only. (Prerequisites enforced at registration.) (3). (INDEPENDENT). May not be repeated for credit.*

This course is one of the options for the capstone experience required of Dramatic Writing concentrators who choose the screenwriting sequence. Students write a screenplay as a thesis under the supervision of a faculty member.

**FTVM 495. Senior Honors Seminar**

*Consent of instructor required. (1 - 6). May be repeated for a maximum of 6 credits.*

This course is a year-long workshop led by a faculty member which includes all seniors writing Honors theses, or completing Honors creative production projects in Film, Television, and Media.

**FTVM 499. Independent Study**

*Consent of instructor required. (1 - 4). (INDEPENDENT). May be repeated for a maximum of 8 credits. May be elected more than once in the same term.*

Independent study on a subject to be determined by student in conjunction with a faculty member. Does not count toward concentration requirements. Must be approved by Department in term prior to enrollment. In exceptional cases, students can petition for enrollment during current term.



**FTVM 500. Directed Study in Film, Television, and Media**

*Consent of instructor required. (1 - 4). (INDEPENDENT). May be repeated for a maximum of 6 credits. May be elected more than once in the same term.*

Directed Study on a subject to be determined by student in conjunction with a faculty member.

**Geography (GEOG)**

**GEOG 111 / CLIMATE 172 / EARTH 172 / ENVIRON 111. Climate Change and Sustainability: Environmental Challenges of the 21st Century**

*(4). (ID). (BS). (QR/2). May not be repeated for credit. May not be included in a concentration plan. Satisfies the geography requirement for State of Michigan certification for social studies teachers. W.*

This course explores impacts of modern human society on land, ocean, and atmosphere, considering all aspects relevant to a sustainable future. Throughout the semester, students work on a sustainability pledge to apply class material to everyday life.

**GEOG 145 / INTLSTD 101. Introduction to International Studies**

*(3). (SS). May not be repeated for credit. Meets the geography requirement for public teacher certification in the School of Education.*

The purpose of this course is to explore the ways in which ideas, people, goods, services, diseases, and natural resources have flowed across political and cultural borders during human history, to examine the consequences of those flows, and to

understand how an interest in these topics can be the basis of a professional career.

**GEOG 201 / EARTH 201. Introduction Physical Geography**

*(4; 3 in the half-term). (NS). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in GEOSCI 144 or 202 or EARTH 144 or 202 or 219 (or any combination thereof). Students who have completed EARTH 331 or GEOSCI 331 will receive only 3 credits. F.*

This introduction to physical geography emphasizes the nature and dynamics of the Earth system including the atmosphere, hydrosphere and solid Earth, along with their interactions. Topics include weather systems, climate change, biogeography, soils, plate tectonics, erosion, fresh water resources, landforms, and ice ages, all of which are discussed in the context of Earth Systems Science.

**GEOG 591. Special Work in Human Geography**

*Consent of instructor required. (2 - 3). May be repeated for credit. Rackham credit requires additional work.*

Directed study and readings related to Human Geography.

**German (GERMAN)**

**GERMAN 100. Intensive Elementary Course**

*(8). May not be repeated for credit. No credit granted to those who have completed or are enrolled in GERMAN 101, 102 103 or RCLANG 191.*

The completion of the content of GERMAN 101 and GERMAN 102 in one semester.

**GERMAN 101. Elementary Course**

*All students with prior coursework in German must take the placement test. (4). May not be repeated for credit. No credit granted to those who have completed or are enrolled in GERMAN 100, 103, or RCLANG 191. F, W, Su.*

GERMAN 101 is an introductory course for students who have not previously studied German. Learning a new language for the first time is exciting and fun, and the course curriculum and materials focus on engaging students' interest, creativity, and sense of humor. The course focuses systematically on the concurrent development of students' ability to understand spoken and written German and to speak and write German themselves, and on exposing students to a broad range of aspects of German culture. While children may be good at picking up a second language when living in the culture, adults are much better at learning languages in the classroom. This course aims to take advantage of this by helping students to develop effective language learning strategies and by providing students with a wide range of tools and resources to help them to learn the language. By the end of the term students will have a firm foundation in some of the fundamental elements of German grammar and will be able to understand and respond appropriately to a variety of texts and basic conversational situations.

**GERMAN 102. Elementary Course**

*GERMAN 101. (4). May not be repeated for credit. No credit granted to those who have completed or are enrolled in GERMAN 100, 103, or RCLANG 191. F, W, Sp.*

GERMAN 102 is the continuation of GERMAN 101. By the end of the academic

term, students will have been exposed to all the essentials of German grammar which will then be reviewed and extended in the third and fourth terms. Students will be able to cope with a variety of conversational situations and written texts. In particular, they will have the necessary "survival skills" for a visit to a German-speaking country, as well as a basic foundation for doing intellectual work in German.

**GERMAN 103. Review of Elementary German**

*Assignment by placement test or permission of department. (5). May not be repeated for credit. No credit granted to those who have completed or are enrolled in GERMAN 100, 101, 102, or RCLANG 191.*

This course provides a review of the fundamental components of the German language for students who have had German language instruction before entering the University of Michigan. It focuses systematically on the concurrent development of students' ability to understand spoken and written German, speak and write German themselves, and exposure to a broad range of aspects of German culture.

**GERMAN 111. First Special Reading Course**

*Permission of the department. (4). May not be repeated for credit. The course does not satisfy the LSA foreign language requirement. Taught in English.*

**GERMAN 112. Second Special Reading Course**

*GERMAN 111 or placement test. (4). May not be repeated for credit. This course does not satisfy the LSA foreign language requirement. W, Su.*

**GERMAN 127 / JUDAIC 101 / YIDDISH 101. First Year Yiddish I**

*(4). May not be repeated for credit. No credit granted to those who have completed*

*or are enrolled in JUDAIC 431 or YIDDISH 431.*

This is the first of a two-term sequence designed to develop basic skills in speaking, understanding, reading, and writing Yiddish. Active class participation is required as are periodic quizzes, exams, a midterm, and a final.

**GERMAN 128 / JUDAIC 102 / YIDDISH 102. First Year Yiddish II**

*JUDAIC/YIDDISH 101. (4). May not be repeated for credit. No credit granted to those who have completed or are enrolled in JUDAIC 432 or YIDDISH 432.*

This is the second of a two-term sequence designed to develop basic skills in speaking, understanding, reading, and writing Yiddish. Active class participation is required as are periodic quizzes, exams, a midterm and final.

**GERMAN 210. German Pronunciation**  
*Concurrent enrollment in GERMAN 221, 230, 231, 232, or RCLANG 291. (1). May be repeated for a maximum of 2 credits.*

The goal of this course is to improve confidence with pronunciation of German to enhance speaking in other courses. A variety of resources will be applied in class for fine tuning your spoken German. This course emphasizes proper enunciation rather than conversation.

**GERMAN 221. Accelerated Third Semester German**

*GERMAN 102 and assignment by placement test. (5). May not be repeated for credit. No credit granted to those who have completed GERMAN 230 or 231. Four credits granted to those who have completed GERMAN 102 or 103.*

Intensive review of basic grammar and more advanced practice in the four basic language skills (reading, writing, listening,

and speaking). Substantial emphasis on providing a firm grammatical base, and on reading, discussing, and writing about authentic German texts from natural and social science to history, literature and the arts.

**GERMAN 227 / JUDAIC 201 / YIDDISH 201. Second Year Yiddish I**

*JUDAIC/YIDDISH 102. (4). May not be repeated for credit. No credit granted to those who have completed or are enrolled in JUDAIC 531 or YIDDISH 531.*

This is the third term of a language sequence in Yiddish. The course is designed to develop fluency in oral and written comprehension, and to offer a further understanding of the culture within which Yiddish has developed. Special emphasis will be devoted to reading material.

**GERMAN 228 / JUDAIC 202 / YIDDISH 202. Second Year Yiddish II**

*JUDAIC/YIDDISH 201. (4). (Lang Req). May not be repeated for credit. No credit granted to those who have completed or are enrolled in JUDAIC 532 or YIDDISH 532.*

This is the fourth term of a language sequence in Yiddish. The course is designed to develop fluency in oral and written comprehension, and to offer a further understanding of the culture within which Yiddish has developed. Special emphasis will be devoted to reading material.

**GERMAN 230. Intensive Second-Year Course**

*GERMAN 102 or 103 or equivalent and assignment by placement test, or permission of instructor. (8). (Lang Req). May not be repeated for credit. No credit granted to those who have completed or are enrolled in GERMAN 221, 231, 232, or RCLANG 291.*

Intensive German II covers all of second-year German in one academic term. The

goals of the course are to expand vocabulary, improve communication skills, and master grammatical structures and syntax to a level of competency that meets advanced intermediate standards for proficiency. One hour of class develops essay writing and oral communication skills, focusing on autobiographical and literary texts about the major events in 20th- and 21st-Century German cultural history. The second hour is devoted to in-depth study and practice of grammar aimed at developing students' ability to apply correct forms and syntax and be aware of stylistic nuances even when using the language spontaneously. Through engagement with course materials including films and other visual and performance texts, and through interaction with teachers and classmates both in formal and informal contexts, students develop speaking, aural comprehension, and writing skills. By the end of the term, students are able to understand the content of texts and lectures of a non-technical nature and of general interest, and to communicate with some ease with a native speaker in spoken and written language. Though training for study abroad or work abroad are not course objectives, per se, students are often well qualified to do either after completion of this course.

**GERMAN 231. Second-Year Course**  
*GERMAN 102 or 103 and assignment by placement test. (4). May not be repeated for credit. No credit granted to those who have completed or are enrolled in GERMAN 230, 221, or RCLANG 291.*

Students will review and extend their grammatical knowledge by means of an online grammar consisting of summaries, explanations, lots of examples, practice exercises and "diagnostic exercises"; designed to make learning grammar fun and interesting. The feature films, DVD and

video clips, readings and other course materials will cover a variety of fields and themes ranging from popular culture, contemporary social issues and history to classical music, art, and literature. By the end of the course, students should be able to survive without using English in a German-speaking country, have enough conversational skills to meet people and enjoy themselves, be comfortable surfing the web in German, be able to read and write independently about short texts covering a wide range of topics, and be quite familiar with all the basics of German grammar in order to pursue their own specific interests in GERMAN 232 and beyond.

**GERMAN 232. Second-Year Course**  
*GERMAN 221 or 231; or assignment by placement test. (4). (Lang Req). May not be repeated for credit. No credit granted to those who have completed or are enrolled in GERMAN 230 or RCLANG 291. All sections of GERMAN 232 address special topics, e.g., music, philosophy, science, current political issues, etc. F, W, Sp, Su.*

In this course, students complete the four-term introductory language sequence by selecting one of several "special topics" courses intended as an introduction to the study of an academic discipline, such as Music, Politics and Society, Film, or Science, taught in German. Students should emerge from the course prepared and motivated to do work (or read for pleasure) in German throughout their academic career and beyond. Students are strongly encouraged to arrange their schedules so they can enroll in the section whose topic interests them the most, in order to get the maximum benefit from this course. Interest in the course content is the most effective motivation for language study. More generally, students should be ready by the

end of the course to pursue an internship or study abroad in Germany.

**GERMAN 234. German Grammar**

*Concurrent enrollment in GERMAN 112, 221, 230, 231, 232, or RCLANG 291. (1). May be repeated for a maximum of 2 credits.*

The goal of this course is to improve your confidence with German grammar to enhance writing in other German courses. This course will include interactive instruction followed by discussion where students can get their questions answered about any grammar topic.

**GERMAN 300. German Grammar and Composition**

*GERMAN 230 or 232 or RCLANG 291 or the equivalent as per placement test results. (4). May not be repeated for credit. Taught in German.*

This course seeks to increase the accuracy of students' grammar and vocabulary through conversation, writing, and reading. Its content is focused on everyday situations and current events.

**GERMAN 303. Topics in German Culture and the Arts**

*(3 - 4). (HU). May be elected three times for credit. Taught in English.*

This course introduces students to the Humanities aspects of the interdisciplinary field of German Studies: German Culture, Literature, Cinema, and the Arts. The course is taught in English.

**GERMAN 304. Studies in German Culture**

*(1 in the half-term). (HU). May be elected three times for credit. May be elected more than once in the same term. Taught in English.*

German Minicourses are intended to introduce a specific German topic to general student audiences. Basic concepts and analytical techniques are introduced, and the students gain significant knowledge of a clearly-defined topic.

**GERMAN 305. Studies in German Society and Politics**

*(1 in the half-term). (SS). May be elected three times for credit. Taught in English.*

German mini-courses are intended to introduce a specific German topic related to German Society and Politics (examples: Migration to Germany, Questions of National Identity, The Rise of Extremism, The Role of Germany within Europe, Multiculturalism in Germany) to undergraduates. Basic concepts and analytical techniques are introduced, and the students gain significant knowledge of a clearly defined topic.

**GERMAN 306. Conversation Practice**

*GERMAN 230, 231, or 232; concurrent enrollment in a 300-level course is encouraged but not necessary. (1). May be elected three times for credit. This course does not satisfy the language requirement.*

The goal of this course is to increase students' confidence in speaking on any topic. It will focus on a variety of topics ranging from practical language situations to current cultural events to areas of students' academic interests.

**GERMAN 309 / HONORS 309 / JAZZ 309 / RCHUMS 307. Imagination**

*(3). (HU). May not be repeated for credit. Taught in English.*

The Romantics made major claims for imagination: that it was both an artistic and cognitive faculty. This seminar will begin by considering both the structure of the Romantic literary imagination and the

Romantic theory of knowledge and will conclude by investigating Freud's Interpretation of Dreams as a philosophy of aesthetic imagination. Taught in English.

**GERMAN 310. Studies in German Culture**

*Residence in Max Kade German House; others by permission of instructor. (2). May be repeated for a maximum of 4 credits.*

This course, for residents of the Max Kade Living Learning Community, will work on enhancing German language skills for ongoing discussions in a German-speaking environment, and will provide cultural exposure in various media relevant in a major German city as preparation for an educational trip to Germany in May. Topics will vary each time the course is offered in order to take advantage of relevant performances, exhibitions, and lectures, and in order to make it possible for students to retake the class. Some portion of the course will be conducted in German.

**GERMAN 312. Cityscapes**

*Consent of department required. Max Kade Resident or GERMAN 221/231 or 310. (1). May be elected four times for credit.*

Students will be immersed in Germany's current issues relevant to geographically selected areas, as well as build language skills and specific cultural knowledge. This course is only open for students in the Max Kade House.

**GERMAN 315. Introduction to German Literature**

*GERMAN 230 or 232 or RCLANG 291 or the equivalent as per placement test results. (3). (HU). May not be repeated for credit.*

This course introduces students to German history and culture through a survey of German literature, ranging from Baroque to post-unification literature. While organized chronologically, the course also discusses

core themes (such as war and literature). Finally, the course explores questions of literary genre and literature's relation to other artistic media.

**GERMAN 322 / HISTORY 322. The Origins of Nazism**

*(4). (HU). (R&E). May not be repeated for credit. Taught in English.*

This course explores the origins and the outcomes of the Nazi seizure of power in Germany in 1933. Because no single factor can explain why Germans consented to Nazi rule or why so few resisted Nazi persecution and genocide, we will take a multi-layered approach to this question, examining the relationships among the political, cultural, and social, and economic change. First exploring the vibrant culture and fractured politics of the Weimar Republic in which the Nazis rose to power, we will then analyze the ideologies and practices of the Nazi "racial state" and the forces that drove it into war and genocide. Students will also examine the blurry lines between consent and dissent, complicity and resistance in the everyday lives of both perpetrators and victims of the regime. Team-taught by two professors from History and German, course materials will include not only historical texts, but also film, art, literature, and personal memoirs from the Weimar and Nazi periods.

**GERMAN 325. Intermediate German**

*GERMAN 230 or 232 or RCLANG 291 or the equivalent as per placement test results. (3). May be elected twice for credit. May be elected more than once in the same term. Taught in German.*

This course is designed to improve proficiency in written and spoken German by way of introduction to various topics in German Studies. Topics to be offered include: German Politics, Film and

Literature, Berlin, The German Language Past and Present, German Expressionism, and German Youth Culture.

**GERMAN 326. Intermediate German**

*GERMAN 230 or 232 or RCLANG 291 or the equivalent as per placement test results. (3). May be elected twice for credit. May be elected more than once in the same term. Taught in German.*

This course is designed to improve proficiency in written and spoken German by way of introduction to various topics in German Studies. Topics to be offered include: German Politics, Film and Literature, Berlin, The German Language Past and Present, German Expressionism, and German Youth Culture.

**GERMAN 327 / JUDAIC 301 / YIDDISH 301. Advanced Yiddish I**

*JUDAIC 102 or YIDDISH 202. (3). May not be repeated for credit. No credit granted to those who have completed or are enrolled in JUDAIC 631 or YIDDISH 631.*

This is the third year of the language sequence, focusing on reading and speaking Yiddish. Literary, historical and other texts will be considered, along with film, folklore, and music. Students will also learn how to approach handwritten documents.

**GERMAN 328 / JUDAIC 302 / YIDDISH 302. Advanced Yiddish II**

*JUDAIC/YIDDISH 301. (3). May not be repeated for credit. No credit granted to those who have completed or are enrolled in JUDAIC 632 or YIDDISH 632.*

This is the third year of the language sequence, focusing on reading and speaking Yiddish. Literary, historical and other texts will be considered, along with film, folklore, and music. Students will also learn how to approach handwritten documents.

**GERMAN 329. Independent Study**

*Consent of instructor required. (1 - 4; 1 - 2 in the half-term). (INDEPENDENT). May be repeated for a maximum of 8 credits. F, W, Sp, Su.*

Open only to undergraduate students whose program requires training in areas not covered by scheduled courses. Must be arranged with the faculty member and approved by the department

**GERMAN 333 / FTVM 333. Fascist Cinemas**

*FTVM 150 or FTVM (SAC) 236. (3). (HU). (R&E). May not be repeated for credit. Taught in English.*

This interdisciplinary course explores the fascist-era cinemas of Germany, Spain, Italy, and Japan. It focuses on a set of common themes to identify both commonalities and specificities of a given context or historical moment.

**GERMAN 336. German in Song**

*GERMAN 230 or 232 or RCLANG 291 or the equivalent as per placement test results. (3). (CE). May not be repeated for credit. Taught in German.*

The objectives of this course include improving confidence in speaking and enunciating German through singing and creative vocalization, while exploring topics relevant to Germany society. The class will form an a cappella choir and part of class time will be spent on oral performance. You do not have to be a good singer or musician to participate - there will be a role for everyone. The culmination of our work will be a concert performance at the end of the semester.

**GERMAN 346 / AMCULT 346 / DIGITAL 346 / FTVM 346. Media Matter: From Print to Screen Culture**

*(3). (HU). May not be repeated for credit. Taught in English.*

This course explores the histories of writing, photography, radio, film, television, and the computer in order to gain a firmer understanding of how technology shapes culture, politics, and personal identity in the German-speaking world and beyond.

**GERMAN 350. Business German**

*GERMAN 230 or 232 or RCLANG 291 or the equivalent as per placement test results. (3). May not be repeated for credit. Taught in German.*

This course introduces students to the language of business German and gives them insight into Germany's place in the global economy. The course is organized around major business and economic topics, such as: the geography of business in German; the European Union and Germany's roll therein; trade; traffic and transportation; marketing; industry; money and banking; and ecology. In addition to the basic text, students will read actual business, merchandising, and advertising material; newspapers and magazines. There will also be short videos on business and related topics. The language of instruction is German.

**GERMAN 351. Practice in Business German**

*Internship in a German-speaking country. (1 - 3). (EXPERIENTIAL). May not be repeated for credit.*

Students will write three lengthy reports, in German, on their internship experience; provide copies of follow-up correspondence with the employer and host family; and make an oral presentation on the experience in an upper-level Business German course.

**GERMAN 357. Tutoring High-School and K-8 German**

*Sophomore standing and above. Completion of one graded German course*

*beyond GERMAN 300. (Prerequisites enforced at registration.) (3). (EXPERIENTIAL). May not be repeated for credit.*

Undergraduates tutor students who are learning German in local public high schools or assist in offering German to elementary schools and middle schools. The goals are to strengthen ties between local schools and the university, to introduce teaching as a potential career path to undergraduates, to heighten awareness of foreign languages, and to promote the study of German.

**GERMAN 358. German Teaching Assistance for Children at the Deutsche Schule Ann Arbor (DSAA)**

*Sophomore standing or beyond. Completion of two of the following courses: GERMAN 300, 325, 326, 332, 336, 350, 351, 357, 380, 385, 425, 426, 430, 431, 454, 457, 464, or 499. (1). (EXPERIENTIAL). May not be repeated for credit.*

Students assist a kindergarten or preschool teacher at the Deutsche Schule Ann Arbor (DSAA), a learning community that teaches German to Ann-Arbor-area children. Students provide roughly 2.5 hours of teaching assistance approximately every other Saturday. Students also submit short reports in German describing their progress and meet with UM-instructor.

**GERMAN 375 / MEMS 375 / SCAND 375. Celtic and Nordic Mythology**

*(3). (HU). May not be repeated for credit. Taught in English.*

A study of the Celtic and Nordic cycles of myths and sagas, including the Nibelungenlied, Tristan and Isolde cycles, the Irish Tain, the Welsh Mabinogi, the Scandinavian Edda and some of the literature based on mythology of these cycles.



**GERMAN 379 / POLSCI 386 / SOC 379.  
Sports, Politics, and Society**

*One introductory course in sociology or political science. (3). (SS). May not be repeated for credit. No credit for those who have completed SOC 212/GERMAN 212. Taught in English.*

This course embraces broadly-based theories of society and politics to comparatively examine sports in the U.S. and Europe. Sports are closely tied to societal values on both sides of the Atlantic and furnish an excellent example for the study of popular attitudes and behavior.

**GERMAN 386. Fairy Tales**

*(3). (HU). May not be repeated for credit.*

This course is an introduction to the German folk tales collected by the Brothers Grimm, their modern adaptations (both literary and visual), and the most important scholarship devoted to them. Assignments include readings in the tales themselves, film adaptations, theoretical engagements, and a number of interpretative and creative writing assignments. Taught in English.

**GERMAN 388. Topics in German Literature**

*GERMAN 300, 315, 325, 326, 332, or 336. (3). (HU). May be elected three times for credit. May be elected more than once in the same term.*

A seminar for advanced undergraduates which focuses on a special German literature topic each time the course is offered. Topics vary from term to term.

**GERMAN 391 / HISTORY 386 /**

**JUDAIC 386. The Holocaust**

*(4). (SS). (R&E). May not be repeated for credit. Taught in English.*

This course examines the destruction of European Jewry (1933-1945), its causes and effects. Major themes include the

resurgence of political and racial and anti-Semitism in the nineteenth century, European Jewry in the period before World War II, the rise of the Nazis to power and the response of European society and European Jewry, the "final solution," and the literature of the Holocaust.

**GERMAN 396 / AAS 395 / HISTORY**

**396. Germany and the Black Diaspora**

*(3). (HU). (R&E). May not be repeated for credit. Taught in English.*

This course explores German-speaking Europe's historical relationship to the Black Diaspora. How have Germans and people of African descent come into contact with each other throughout history? What have been some of the outcomes of this contact? In asking these questions, we will explore how definitions of identity and race have changed over time.

**GERMAN 398. German Studies Topics in English Translation**

*(3 - 4; 3 in the half-term). May be elected twice for credit. May be elected more than once in the same term. Taught in English.*

Various themes such as "History of German Cinema" and "The German and European Left." Classes are taught by various members of the faculty according to student interest and faculty availability.

**GERMAN 401 / HISTORY 416.**

**Nineteenth-Century German and European Intellectual History**

*(3). May not be repeated for credit. Taught in English.*

Between the upheavals of the French Revolution and the First World War, the European nations witnessed an utter transformation of their world. The relations of person to the nation, to the state, to history, and the physical world were rethought from top to bottom. Our exploration of modern ideas will take us

from rationalism to racism, and from utopian ideologies to the birth of psychoanalysis.

**GERMAN 402 / HISTORY 417.**

**Twentieth-Century German and European Thought**

*(3). May not be repeated for credit. Taught in English.*

This course will present a survey of the principal European intellectual movements of the twentieth century. We shall examine the interplay of political and cultural movements, and pay consistent attention to the difficulty of self-definition of the intellectual within rapidly changing social and cultural contexts. Socialism, Liberalism, Fascism, Surrealism, Existentialism, Cultural Marxism, Structuralism, Feminism, and Post-structuralism.

**GERMAN 407 / MUSEUMS 407.**

**Museums and Literature**

*Consent of instructor required. MUSEUMS 301 or German major/minor. (3). May not be repeated for credit. Rackham credit requires additional work.*

This course develops historical and theoretical perspectives for understanding the intersections of European literature and museum culture. By probing how texts and exhibitions use objects to construct narratives, the course works to understand what museums and literature have in common and how they differ. This course can be taken for graduate credit.

**GERMAN 416. Seminar in German Studies**

*One year beyond GERMAN 232. Students may not take the same topic twice. (3; 2 in the half-term). May be repeated for a maximum of 12 credits. May be elected more than once in the same term.*

A seminar taught in German for students who focuses on special topics which vary from term to term.

**GERMAN 425. Advanced German**

*GERMAN 325, 326 or permission of instructor. (3). May not be repeated for credit. Taught in German. GERMAN 426 may be taken independently of GERMAN 425. Rackham credit requires additional work.*

Various approaches will be utilized to improve the students' proficiency. Written assignments include a weekly composition of at least two pages. Occasionally students are required to listen to a tape or watch a videocassette concerning the history or culture of the German-speaking countries.

**GERMAN 426. Advanced German**

*GERMAN 325, 326 or permission of instructor. (3; 2 in the half-term). May not be repeated for credit. W. Taught in German. Rackham credit requires additional work.*

Various approaches will be utilized to improve the students' proficiency. Written assignments include a weekly composition of at least two pages. Occasionally students are required to listen to tape or watch a videocassette concerning the history or culture of the German-speaking countries.

**GERMAN 430 / BA 499. Doing Business in German**

*One 300-level course taught in German or permission of instructor. (3). May not be repeated for credit. W. Taught in German.*

This course introduces students to the language of German business and gives them insight into Germany's place in the global economy. The course is organized around major business and economic topics, such as: the geography of business and industry in German; the European Union

and Germany's role therein; traffic, transportation and trade; social structure; economic structure; ecology. In addition to the basic text, students will read actual business, merchandising, and advertising material; newspapers and magazines. There will also be short videos on business and related topics.

**GERMAN 431. Business German: Management and Marketing**

*GERMAN 350 or 430. (3). May not be repeated for credit. Taught in German.*

This course offers authentic terminology and information as they apply to professional practices in the fields of management, marketing, and company forms in the German-speaking world. Language of instruction is German.

**GERMAN 449. Special Topics in English Translation**

*(3 - 4; 3 in the half-term). May be elected three times for credit. May be elected more than once in the same term. Taught in English. Rackham credit requires additional work.*

A course for advanced undergraduates and graduate students which focuses on various topics each time the course is offered.

**GERMAN 451. Faust Uncensored**

*(3; 2 in the half-term). May not be repeated for credit.*

This course will cover the four great literary versions of the Faust legend: Marlowe's, Goethe's, Thomas Mann's, and Bulgakov's (The Master and Margarita), and will include brief background lectures on a wide variety of related topics.

**GERMAN 457. Twentieth Century German Fiction**

*One year beyond GERMAN 232. (3; 2 in the half-term). May be elected twice for*

*credit. Taught in German. Rackham credit requires additional work.*

Study of German prose literature (Novelle and novel) of the 20th Century.

**GERMAN 464. Postwar German Ethnicities in Literature and Culture**

*One year beyond GERMAN 232. (3). (R&E). May not be repeated for credit. Taught in German.*

This seminar pursues questions concerning the nexus between nation, race, ethnicity, gender, sexuality, class, and religion in postwar Germany. Based on a survey over the cultural history of specific ethnic groups, students discuss cultural representations that challenge conventional notions of "Germanness." We evaluate various approaches to cultural productions by ethnic communities in Germany and their implications for the concept of German culture.

**GERMAN 470. Workshop in Translation**

*Two courses taught in German beyond GERMAN 232. (3). May not be repeated for credit.*

This course introduces advanced German students to translation practices and theories, as well as to the business and advanced study of translation. We focus upon producing translations from German to English. We will orient ourselves around the professional standards and guidelines of the American Translators Association (ATA), so that students will receive direct experience with approaches to translation in a "real world" environment.

**GERMAN 472. Un/Translatability in Theory and Practice**

*Two courses taught in German beyond GERMAN 232. (3). May not be repeated for credit.*

This course addresses the concepts of un/translatability from both a theoretical and practical perspective. In addition to key theorists of translation from within the German literary tradition and beyond, we will read the work of two authors - Paul Celan and Yoko Tawada - whose essays, poetry and short stories embrace metaphors of translation and encounter. Through our own select translations of these authors' work, we will explore the difficulties, but also potential benefits of literary translation.

**GERMAN 491. German Honors  
Proseminar**

*Senior Honors standing. (3; 2 in the half-term). May not be repeated for credit. Continuing Course. Y grade can be reported at end of the first-term to indicate work in progress. At the end of the second term of GERMAN 492, the final grade is posted for both term's elections. F.*

**GERMAN 492. German Honors  
Proseminar**

*Senior Honors standing. (1 - 3). May not be repeated for credit. W.*

This course can be elected only by students who have completed the Senior Honors Proseminar, GERMAN 491. In GERMAN 492, students write their Honors thesis on a topic of their own selection. Each student works under the supervision of a faculty member who has a research interest in the general area of the thesis topic. The grade is based on the quality of the thesis, which will be read by at least one faculty member in addition to the thesis director, and on the student's performance in an oral defense of the thesis before a faculty committee. An Honors citation is also awarded if the student's overall performance in GERMAN 491 and 492 is judged to be of Honors caliber.

**GERMAN 517 / ANTHRCUL 519 /  
LING 517. Principles and Methods of**

**Historical Linguistics**

*Graduate standing, or permission of instructor. (3; 2 in the half-term). May not be repeated for credit.*

**GERMAN 531 / EDCURINS 431.**

**Teaching Methods**

*Senior standing; and candidate for a teaching certificate. (3). May not be repeated for credit. F.*

**GERMAN 540. Introduction to German  
Studies**

*Permission of instructor. (3). May not be repeated for credit.*

**Greek (GREEK)**

The skills taught in Latin and Greek are useful in many ways. The critical thinking and analytical skills (gleaned from a thorough knowledge of Latin and Greek) will benefit you in any class you take at the university. Students interested in subjects in the sciences and engineering will find the development of these skills invaluable. All students can benefit from improved English skills, particularly those students interested in Communications, Journalism, Law, and all the Humanities. Many students find Latin and Greek so helpful and fascinating that they choose these languages as a concentration or academic minor. Learning Latin and Greek is no more difficult than learning Spanish or French. We teach time-saving language learning strategies and skills in a highly structure format. Because these are ancient languages, we focus primarily only on reading texts. Our department provides free "drop-in" tutoring available to all students in the Elementary Latin and Greek courses.

**GREEK 101. Elementary Greek**

*(4). May not be repeated for credit.*

*Graduate students should elect GREEK 502. F.*

**GREEK 102. Elementary Greek**

*GREEK 101. (Prerequisites enforced at registration.) (4). May not be repeated for credit. No credit granted to those who have completed or are enrolled in GREEK 103 or 503. Graduate students should elect GREEK 503. W.*

**GREEK 103. Intensive Elementary Greek I**

*(6). May not be repeated for credit. No credit granted to those who have completed or are enrolled in GREEK 101 or 102, or any subsequent GREEK class. Graduate students should elect as GREEK 504.*

This course provides students with a reading knowledge of Attic Greek by teaching them the essential morphological and syntactical structures of Attic Greek, and introducing them to reading extended short passages. This course covers in one semester the equivalent of 2 semesters in a non-intensive course.

**GREEK 301. Second-Year Greek**

*GREEK 102 or 103. (Prerequisites enforced at registration.) (4). May not be repeated for credit. No credit granted to those who have completed or are enrolled in GREEK 507. The language requirement is satisfied with successful completion of both GREEK 301 AND 302. Graduate students should elect GREEK 507. F.*

Selections from Attic Prose.

**GREEK 302. Second-Year Greek**

*GREEK 102 or 103. (4). (Lang Req). May not be repeated for credit. No credit granted to those who have completed or are enrolled in GREEK 508. Graduate students should elect as GREEK 508. The language requirement is satisfied with successful completion of both GREEK 301 AND 302. W.*

The course is the second half of the second-year ancient Greek language sequence. The primary goal of the student in Greek 302 is to learn how to read Homer; hence emphasis is placed on Homeric vocabulary and grammar. The class will translate and discuss passages from the Odyssey.

**GREEK 307 / MELANG 307. The Synoptic Gospels: Matthew, Mark and Luke**

*GREEK 101 and 102; and permission of instructor. (4). May not be repeated for credit. Taught in Greek. The language requirement is satisfied with successful completion of both GREEK 307 AND 308.*

Careful attention will be paid to the morphology and syntax of Koine Greek, particularly as the morphology and syntax contrasts with Attic Greek. The three Gospels will be read in their entirety, with close attention paid to stylistic differences in the accounts.

**GREEK 401. Readings in Classical Greek Prose**

*GREEK 302. (3). May be repeated for a maximum of 9 credits.*

**GREEK 402. Greek Drama**

*GREEK 302. (3). May be repeated for a maximum of 9 credits. W.*

**GREEK 463. Plato: Dialogues**

*GREEK 401. (3). May not be repeated for credit.*

Selections from Plato's dialogue frame discussion of the development of Greek philosophy, and of the place of the philosopher in the city-state. Particular attention is paid to Greek conceptualization of abstract ideals, and the socio-cultural terms in which these are debated.

**GREEK 470. Topics in Greek Literature**

*Consent of department required. (3). May*

*be elected twice for credit. Rackham credit requires additional work.*

This course explores a topic in ancient culture through extensive reading of primary texts in the original language. Students will read, translate and discuss a variety of texts relevant to the topics.

**GREEK 473 / MELANG 470. Advanced Koine**

*Two years of Greek, one term of New Testament Greek (300 level or equivalent). (3). May not be repeated for credit.*

Interpretation of selected New Testament texts with attention to philological, historical, and theological problems. This course also provides an introduction to questions of the textual transmission of New Testament writings.

**GREEK 495. Senior Honors Research**  
*Consent of instructor required. Upperclass standing. (1 - 3). (INDEPENDENT). May be repeated for a maximum of 6 credits.*

This course is intended for Honors concentrators writing a thesis in Ancient Greek.

**GREEK 499. Supervised Reading**  
*Consent of instructor required. (1 - 4). (INDEPENDENT). May be repeated for credit. May not be included in a concentration plan in Greek Language and Literature or Classical Languages and Literatures. Continuing Course. Y grade can be reported at end of the first-term to indicate work in progress. At the end of the second term, the final grade is posted for both term's elections. F, W, Sp, Su.*

**GREEK 506. Advanced Greek Composition**  
*GREEK 410. (3). May not be repeated for credit.*

**GREEK 556. Greek Philosophical Literature I**

*Graduate standing in Classical Studies or permission of instructor. (3). May not be repeated for credit.*

## **Modern Greek (GREEKMOD)**

**GREEKMOD 101. Elementary Modern Greek**

*(4). May not be repeated for credit. No credit granted to those who have completed GREEKMOD 500 or 501.*

An introduction to the readings, writing, and speaking skills of modern demotic Greek, approached through oral-aural training and systematic study of grammar.

**GREEKMOD 102. Elementary Modern Greek, II**

*GREEKMOD 101. (4). May not be repeated for credit. No credit granted to those who have completed GREEKMOD 500 or 502.*

The second part of an introduction to the readings, writing, and speaking skills of modern demotic Greek, approached through oral-aural training and systematic study of grammar.

**GREEKMOD 201. Second Year Modern Greek I**

*GREEKMOD 102. (4). May not be repeated for credit. No credit granted to those who have completed GREEKMOD 503.*

This course is designed to improve the speaking, reading, and writing, as well as listening skills of the students. The course begins with a thorough review of materials taught in the first year and continues with the completion of grammar and syntax and the introduction of new vocabulary. Emphasis is placed on linguistic accuracy in speaking and writing. Besides the familiar

drills, homework includes a greater amount of creative writing. Journalistic prose, short stories, literary excerpts, as well as films and television materials are included in the course.

**GREEKMOD 202. Second Year Modern Greek, II**

*GREEKMOD 201. (4). (Lang Req). May not be repeated for credit. No credit granted to those who have completed GREEKMOD 504.*

This course is designed to improve students' speaking, reading, writing, and listening skills. It begins with a thorough review of materials taught in the first year and continues with the completion of grammar and syntax and the introduction of new vocabulary. Emphasis is placed on linguistic accuracy in speaking and writing. In addition to the familiar drills, homework includes more creative writing in the form of journalistic prose, short stories, literary excerpts, films, and television materials.

**GREEKMOD 214. Introduction to Modern Greek Culture**

*(3). (SS). May not be repeated for credit.*

Designed to introduce students to the culture of contemporary Greece, this interdisciplinary course examines cultural, religious, social, and political trends as reflected in literature, music, folklore, popular culture, and ideology. Emphasis is given to the last two centuries but the survey begins with the late Byzantine and Ottoman eras.

**GREEKMOD 301. Intermediate Modern Greek I**

*GREEKMOD 202. (3). May not be repeated for credit. No credit granted to those who have completed GREEKMOD 505.*

Selections from Modern Greek poetry and prose with grammar review and discussion of cultural content.

**GREEKMOD 325. Athens, Present and Past**

*(3). (HU). May not be repeated for credit.*

From its ancient presence as a center of art, politics, philosophy, and commerce to its reemergence as a modern capital city, Athens has always been a city in transition. In this class, we explore Athens neighborhood by neighborhood through photographs, films, travel descriptions, maps, poetry, plays, political writing, and fictional and non-fictional narrative.

**GREEKMOD 330. Translating Modern Greek, Reporting the World**

*Third-semester Modern Greek or the equivalent, demonstrated through placement testing. (3). (HU). May not be repeated for credit.*

This interactive class challenges intermediate to advanced learners of Greek, including heritage speakers, to build on their linguistic and cultural knowledge by translating texts on contemporary events from Greek to English. Through comparison of Greek and English reports and reckoning with the challenges of bringing Greek perspectives into English, students develop an appreciation of the importance and difficulty of translation.

**GREEKMOD 340 / COMPLIT 340. Travels to Greece**

*(3). (HU). May not be repeated for credit.*

The course examines the literature of modern travel to Greece and the issues it raises about antiquity, modernity, ethnography, otherness, exoticism, orientalism, and Western identity. Readings include works by British, French, German, American, and Greek authors. Art, film, and the media are also used to provide different measures of comparison.

**GREEKMOD 350. Topics in Modern Greek**

(3). (HU). May be elected twice for credit.  
May be elected more than once in the same term.

This course offers an opportunity to explore topics in Modern Greek.

**GREEKMOD 375 / CLARCH 375.**

**Engaging Antiquity: Heritage, Museums, Media, Tourism, and Communities**

(3). (HU). May not be repeated for credit.

How do we experience the past in the present? We explore different "sites" of such encounters: from Spartacus and the Vikings to Game of Thrones, gaming and advertising, urban and tourist development, the ethical and legal implications of antiquities trade, the role of museums, and the agency of communities.

**GREEKMOD 399. Directed Study**

*Consent of instructor required. (1 - 4).*

(INDEPENDENT). May not be repeated for credit.

For students who wish to participate in an ISAC (Integrated study abroad into the curriculum) component of a Modern Greek Course.

**GREEKMOD 495. Senior Honors Research**

*Consent of instructor required. Junior or senior standing. (1 - 3). (INDEPENDENT). May be repeated for a maximum of 6 credits.*

This course is intended for Honors concentrators writing a thesis in Modern Greek.

**GREEKMOD 499. Supervised Reading**

*Permission of instructor. (1 - 3).*

(INDEPENDENT). May be repeated for a maximum of 9 credits.

Undergraduate supervised study in Modern Greek literature.

## Great Books Program (GTBOOKS)

**GTBOOKS 191. Great Books**

*First-Year students in the Honors Program.*

(4). (HU). (FYWR). May not be repeated for credit. No credit granted to those who have completed or are enrolled in GTBOOKS 201 or CLCIV 101.

**GTBOOKS 201. Great Books of the Ancient World**

(4). (HU). May not be repeated for credit.

No credit granted to those who have completed or are enrolled in GTBOOKS 191 or CLCIV 101.

**GTBOOKS 212 / COMPLIT 222. Great Books in World Literatures**

(3). (HU). May not be repeated for credit.

This course studies great books of world literatures across temporal, generic, and geographic boundaries. The goals are to appreciate the complexity of the texts themselves and their intimate relationship with the cultures that produced them. The course encourages critical thinking about the concept of "world literature" and its relevance to texts we study.

**GTBOOKS 246 / ISLAM 219 /**

**MIDEAST 219. Great Books of the Middle East**

(3). (HU). May not be repeated for credit.

This course explores the classics of Islamic literature, including scripture, poetry, theology, novels, and historical works written in Arabic, Persian and Turkish. The readings focus on two themes: justice, governance and the Islamic polity; and love, both mystical love for God and romantic love. We will study works that approach these themes from different historical, geographical and cultural perspectives, and



that have proved to have global resonance - for a Muslim readership and beyond. All works read in English.

**GTBOOKS 331 / SPANISH 331. Great Books of Spain and Latin America**  
*Open to students at all levels. (3). (HU). May not be repeated for credit.*

Readings in translation of important works in Spanish and Latin American literature.

## Hebrew Studies (HEBREW)

### **HEBREW 101. Elementary Modern Hebrew I**

*(5). May not be repeated for credit. No credit granted to those who have taken or are enrolled in HEBREW 103 (HJCS 110).*

The focus of instruction is on the development of basic communication skills in standard modern Hebrew. Speaking, writing, reading and listening comprehension are emphasized in classroom activities in a cultural context. This course is taught in small sections. Class discussions and activities are exclusively in Hebrew.

### **HEBREW 102. Elementary Modern Hebrew II**

*HEBREW 101 OR PLACEMENT BY EXAM. (Prerequisites enforced at registration.) (5). May not be repeated for credit. No credit granted to those who have taken or are enrolled in HEBREW 103 (HJCS 110).*

The focus of instruction is on the development of basic communication skills in standard modern Hebrew. Speaking, writing, reading and listening comprehension are emphasized in

classroom activities in a cultural context. This course is taught in small sections. Class discussions and activities are exclusively in Hebrew.

### **HEBREW 201. Intermediate Modern Hebrew I**

*HEBREW 102, 103, OR PLACEMENT BY EXAM. (Prerequisites enforced at registration.) (5). May not be repeated for credit. No credit granted to those who have completed or are enrolled in HEBREW 203 (HJCS 210).*

In this course students study contemporary Hebrew as it is used in Israel today. It is a low-intermediate class. The purpose of this class is to expand and strengthen beginners' Hebrew skills so that they become more self-assured, communicative and versatile when they listen to, read, speak, and write Hebrew. It emphasizes both communicative and cultural themes and focuses on developing a rich and active vocabulary in several language domains.

### **HEBREW 202. Intermediate Modern Hebrew II**

*HEBREW 201 or PLACEMENT BY EXAM. (Prerequisites enforced at registration.) (5). (Lang Req). May not be repeated for credit. No credit granted to those who have completed or are enrolled in HEBREW 203 (HJCS 210).*

The focus of instruction is on further development of intermediate language skills in Modern Israeli Hebrew with special emphasis on oral and written communication. In addition to the textbook, materials on contemporary Israeli culture and society in the age of globalization are presented through the use of recent movies, short literary and non-literary texts, web resources and popular music.

### **HEBREW 203. Intensive Intermediate Modern Hebrew**

*HEBREW 102 OR 103. (Prerequisites*

*enforced at registration.) (10). (Lang Req). May not be repeated for credit. No credit granted to those who have completed HEBREW 201 (HJCS 201) or HEBREW 202 (HJCS 202).*

This course is a 10-credit intensive course equivalent in content, objectives, requirements and credits to the non-intensive two-semester sequence HEBREW 201/202. It continues development of listening, speaking, reading, and writing skills through texts, and practice, focusing on newly introduced vocabulary and grammatical structures.

**HEBREW 206. Business in Hebrew**

*Students who place in HEBREW 202 are eligible to take this course. HEBREW 206 does not meet the LSA Language Requirement. May not be repeated for credit.*

The course focuses on the acquisition of communicative skills in the Israeli business world. Students attain professional and social skills that help them to continue to attend internship in Israel and develop business relations with Israeli corporation.

**HEBREW 301. Advanced Hebrew I**

*HEBREW 202, 203 OR PLACEMENT BY EXAM. (Prerequisites enforced at registration.) (3). May not be repeated for credit.*

The objectives of this course are to enhance writing and speaking skills; review basic language structures and enrich vocabulary. The course materials consist of texts from Modern Hebrew prose both fiction and non-fiction.

**HEBREW 302. Advanced Hebrew II**

*HEBREW 301 or PLACEMENT BY EXAM. (Prerequisites enforced at registration.) (3). May not be repeated for credit.*

The course materials consist of texts from Modern Hebrew prose: fiction and non-fiction. Writing and speaking skills are enhanced through a series of related assignments. Review of basic language structures and enrichment of vocabulary are among the objectives of this course.

**HEBREW 305. Topics in Advanced Spoken Hebrew**

*HEBREW 202 or by placement exam.*

*(Prerequisites enforced at registration.)*

*Students are not permitted to elect the same topic more than once. (2). May be elected three times for credit.*

Course topics will vary. The goal of this course is the advancement of students' skills in spoken Modern Hebrew, through presentations, group discussions, vocabulary-building exercises, and other interactive assignments/activities. Taught entirely in Hebrew.

**HEBREW 404. Ethnicity in Israeli Literature and Culture**

*HEBREW 302 (HJCS 302). (3). May not be repeated for credit.*

This course focuses on Israeli literature, film, and music created by Jewish immigrants from the Middle East and North Africa. We consider how the categories of ethnicity, class, and gender have been constructed in Israel and ask why the Mizrahi/Ashkenazi divide continues to be so central to Israeli culture, society, and politics.

**HEBREW 405 / JUDAIC 405. The Holocaust in Israeli Culture**

*HEBREW 301, or third-year proficiency in Hebrew. (3). May not be repeated for credit.*

This is an advanced course in Hebrew, which stresses reading comprehension of texts, as well as writing and oral

communication skills. The course examines how the Holocaust has been represented and reckoned within stories, poems, artwork, plays and films, from World War II until recent years.

**HEBREW 409. Readings in Modern Hebrew**

*Consent of instructor required.  
Intermediate level proficiency or higher in modern Hebrew. (1 - 2). (INDEPENDENT).  
May be elected four times for credit. May be elected more than once in the same term.*

This course is intended for Hebrew language students who wish to take an independent study that requires them to read texts in modern Hebrew.

**HEBREW 410. Topics in Modern Hebrew Language**

*Completion of at least HEBREW 202 or intermediate Hebrew proficiency. (3). May be elected three times for credit.*

This course is aimed at undergraduate and graduate students with intermediate Hebrew language proficiency. Topics will vary, focusing on aspects of culture, linguistics, literature, music, religion, film, history, etc. All material will be in Hebrew, and the class will be taught in Hebrew.

**HEBREW 499. Independent Study in Hebrew**

*Consent of department required. (1 - 4). (INDEPENDENT). May be elected three times for credit. May be elected more than once in the same term.*

An independent study course in the area of Hebrew language. The intended language of instruction is modern Hebrew.

## **History of Art (HISTART)**

**HISTART 194. First Year Seminar**

*Enrollment restricted to first-year students, including those with sophomore standing. (3). (HU). May not be repeated for credit. May not be used to meet the prerequisite requirement for the History of Art major.*

**HISTART 200. Art across Cultures**

*(4). (HU). May not be repeated for credit.*

In this course we look at a range of case studies to investigate art from many parts of the world and many periods. Lectures are organized topically, with broad geographic representation so as to explore naturalism, abstraction, social uses of art, cultural politics, constructions of gender, the status of artists, and more, as issues pertinent to art production generally, rather than the province of a particular nation or culture.

**HISTART 201. Great Monuments from the Stone Age to the Middle Ages**

*(3). (HU). May not be repeated for credit.*

This course explores selected great monuments such as: magic-charged cave art of prehistory; fabled wonders of ancient Egypt, Mesopotamia, Greece, and Rome; medieval Christian, Jewish, and Islamic visions of piety and power. In different ways, all express intersections of nature and cosmos; spirituality, social identity, and authority.

**HISTART 202. Art in Europe and the Americas: 1400 to the Present**

*(4). (HU). May not be repeated for credit.*

This course will introduce students to significant developments in visual art in Europe and the Americas from 1400 to the present. Lectures will explore how the making and viewing of art has been impacted by broader historical forces, including religion, technology, politics, economic conditions, and cultural discourses.

**HISTART 205. Sacred Places**

(3 - 4). (HU). *May not be repeated for credit.*

This course introduces a sampling of significant sacred sites, shrines, and artworks throughout the world. These holy places are examined in terms of the festivals and religions with which they are associated, including ancient Mesopotamian, Egyptian, Greek, and Roman religions, Judaism, Christianity, Islam, Buddhism, and Hinduism.

**HISTART 208 / AAS 208. Introduction to African Art**

(4). (HU). (R&E). *May not be repeated for credit.*

This class investigates several pivotal issues and lie behind the surfaces of some extraordinary objects and practices of a selected group of African and African Diaspora cultures. Students learn how to see and understand a wide range of African visual practices. Topics include architecture, textiles, body adornment, painting, graphic communication systems, photography, dance, ritual performance and sculpture. Such practices continue to unfold on the African continent as people are transformed and endure in the African Diaspora.

**HISTART 210. History of Photography**

(4). (HU). *May not be repeated for credit.*

A survey of the history of photography tracing its technical and aesthetic development, related to the other arts and the social context in which it evolved.

**HISTART 211 / WGS 211.****Gender and Popular Culture**

(4). (HU). *May not be repeated for credit.*

**HISTART 212 / ARCH 212.****Understanding Architecture**

(3). *May not be repeated for credit. Not*

*open to students enrolled in Architecture. W.*

**HISTART 213 / ARCH 213. Architecture in Modernity**

(4). (HU). *May not be repeated for credit.*

This is a survey course on modern architecture in relation to other modernist discourses in the 19th and 20th centuries.

**HISTART 215 / ARCH 215. Building Business: Corporations, Architecture, and the Built Environment from the Medici to McDonalds**

(4). (HU). *May not be repeated for credit.*

The course charts corporations in and around cities throughout the world, moving in reverse chronological order from buildings such as the Burj Khalifa or the Hong Kong and Shanghai Banking Corporation to early banks, colonial corporations, and monasteries. In between, we survey skyscraper, factory, corporate campus, and big box, all intimately tied to the rise of financial capital in global society.

**HISTART 216 / WGS 215.****Contested Spaces: Art, Architecture, Politics**

(4). (HU). (R&E). *May not be repeated for credit.*

This course examines "contested spaces" in the Americas, and encourages students to think critically about how specific sites and objects participate in the construction of class, race, and gender. It focuses on spaces that were central to the formation of modernity and that served to index broader networks of power.

**HISTART 220 / CLARCH 220. Great Buildings of Ancient Greece and Rome**

(4; 3 in the half-term). (HU). *May not be repeated for credit.*

Architecture provides a unique perspective on classical civilization. Buildings such as the Parthenon and the Colosseum are marvels of both engineering and design, and they still have great expressive power. This course introduces students to key monuments of Greek and Roman architecture from prehistoric to early mediaeval times.

**HISTART 221 / CLARCH 221.**

**Introduction to Greek Archaeology**

(4; 3 in the half-term). (HU). *May not be repeated for credit.*

The archaeology of Crete and Greece to the age of Alexander and the contributions made to the history of civilization through excavation.

**HISTART 222 / CLARCH 222.**

**Introduction to Roman Archaeology**

(4; 3 in the half-term). (HU). *May not be repeated for credit.*

**HISTART 224 / AAS 224. African Visual Cultures: Akan/Kongo/Yoruba**

(3). *May not be repeated for credit.*

This course introduces a broad range of perspectives on African visual cultures by focusing on three cultural groups: the Akan, the Yoruba and the Kongo. Lecture and discussion topics are thematic and cross-cultural, examining the visual image in contexts before, during, and after European colonialism as well as in Diasporic transformations.

**HISTART 230 / AMCULT 230. Art and Life in 19th-Century America**

(3). (HU). *May not be repeated for credit.*

This lecture/discussion class surveys painting, sculpture, architecture, and the visual and material culture of everyday life. It examines the impact of industrialization, Westward expansion, international art

movements, and the rise of middle-class taste. Assignments include museum visits, readings in historical sources and recent critical interpretations, and original research.

**HISTART 237 / AMCULT 237 / RCHUMS 237. On the Margins of the Art World - Self-Taught Artists in the U.S.**

(3). (ID). *May not be repeated for credit.*

This course surveys a broad range of artists variously known as "Outsider", "Self-Taught", or "Folk" artists. In addition to exploring these artists' work, this course explores boundaries between Fine Art and other creative practices, and explores broader issues regarding creativity, marginality, art, and culture.

**HISTART 240 / MEMS 240. The Visual Arts in Medieval Society**

(3). (HU). *May not be repeated for credit.*

A study of masterworks of medieval art in relation to society, environment, technology, and literature and as an expression of a phase in the development of the moral and intellectual ideas of the western world. Emphasis is on the fortress, the castle, the city, the cathedral, the abbey, and the book. Lectures and discussions are supplemented by museum trips and by readings in medieval epic, romance, and general history in addition to more specialized studies in the history of art.

**HISTART 243 / ASIAN 243.**

**Introduction to South Asian Art: Art of India**

(3). (HU). *May not be repeated for credit.*

Studying the visual arts of South Asia constitutes a gateway toward understanding the entirety of the intellectual and cultural heritage of humanity, from antiquity to the present day. The assemblages of objects and images produced and used in South Asia -

Buddhist stupas, sprawling temple-cities, embroidered textiles, Mughal paintings, Satyajit Ray films and much else - represent more than the inheritance of South Asia, home to a fifth of the world's population. In addition to introducing these objects and images, this survey course will also explicate how they are equally the heritage of many other cultures because many of them have emerged from encounters with other mediums and with other civilizations, which, in turn, have been reflected, reshaped, and reformed by the art of subcontinent. This course includes field trips to art and archaeology museums in the Ann Arbor area.

**HISTART 244 / AMCULT 244. Art of the American Century (1893-1968)**

(3). (HU). *May not be repeated for credit.*

This lecture class surveys the artistic, visual, and material world of the United States from its rise as a world power in the 1890s through the questioning of the American Dream in the 1960s. Class discussions introduce fundamental concepts and skills of art history while examining challenging interpretive readings. All students welcome

**HISTART 250 / MEMS 250. Italian Renaissance Art**

(4). (HU). *May not be repeated for credit.*

This course examines the principal monuments of Italian Renaissance Art: Giotto's Arena Chapel, Botticelli's Birth of Venus, Michelangelo's David and Sistine Chapel Ceiling, and Leonardo da Vinci's Mona Lisa.

**HISTART 253. The Mediterranean: Art History**

(HU). *May not be repeated for credit.*

This course explores the art of the Mediterranean, focusing on Constantinople, Sicily, Egypt and the Holy Land. We study

a range of artefacts which took shape as a result of the vibrant cross-cultural encounters that animated the region. The course as part of the cross-disciplinary team-taught course "The Mediterranean."

**HISTART 255. Visual Mythology**

(3). (HU). *May not be repeated for credit.*

This course explores the "afterlife" of classical mythologies by focusing on the classical revival of the Renaissance. It also studies the intersection of these traditions with contemporary representations, chiefly in film. The course familiarizes students with core myths from Ovid's Metamorphoses, and themes like transformation, desire, and creativity.

**HISTART 260. European Painting and Sculpture of the Seventeenth Century**

(3). (HU). *May not be repeated for credit.*

The art of the seventeenth century as embodied in the work of its greatest masters: Rembrandt, Vermeer, Caravaggio, Bernini, Rubens, Poussin, and Velazquez. An attempt is made to define both the panoramic variety and underlying philosophical unity of the Baroque Age.

**HISTART 271 / FRENCH 241. Origins of Modernism: Art and Culture in Nineteenth Century France**

(4). (HU). *May not be repeated for credit.*  
F.

This course examines a series of remarkable episodes in modern French painting, from the establishment of an official, state-sponsored form of Classicism to the succession of movements that emerged in opposition to official art. The course is also designed to encourage close readings of images within the parameters of their historical contexts and of recent critical debates.

**HISTART 272 / RCHUMS 272. Modern Art: Avant-Garde to Contemporary**  
(4; 3 in the half-term). (HU). *May not be repeated for credit.*

This course surveys the work of major 20th century European and American artists with a focus on two fundamental issues. First, we consider the way in which avant-garde artists have repeatedly interrogated the nature of signification itself, or in other words, how form produces meaning. Second, we explore the avant-garde's ambitious but theoretically controversial relationship to revolutionary politics. The course is designed to help students develop the vocabulary as well as analytical and visual tools necessary in dealing with the great diversity of works and critical debates that constitute the history of 20th century art.

**HISTART 285 / ISLAM 285 / MIDEAST 285. Visual Culture Islam**  
(4). (HU). *May not be repeated for credit.*

We survey the arts in the Islamic world from Spain to India, 7th-19th centuries. Students study a limited selection of architectural monuments and luxury arts (books, paintings, objects) in light of the art historical and socio-economic parameters of their production and consumption. The visual culture also anchors our study of the spiritual and intellectual values of Islam and the formation and development of its distinctive culture idioms.

**HISTART 292 / ASIAN 292. Introduction to Japanese Art and Culture**  
(4). (HU). *May not be repeated for credit. No credit granted to those who have completed or are enrolled in HISTART 495.*

This course takes an interdisciplinary approach to the history of Japanese visual culture, introducing the art of the

archipelago from ancient times through the present day. Although primarily a chronological examination of key artistic monuments, it also discusses thematic issues in Japanese art history, such as nature, gender, and modernity.

**HISTART 294. Special Topics**  
(3). (HU). *May be elected three times for credit.*

Topics are determined each semester in relation to both the undergraduate curriculum in History of Art and the interests and specializations of the instructor.

**HISTART 299. Experiential Study**  
*Consent of instructor required. (1 - 3). (EXPERIENTIAL). May be repeated for a maximum of 6 credits. This course is not intended for students who are pursuing research. Offered mandatory credit/no credit.*

This course is intended for students who wish to receive credit for an internship or other experiential work under the direction of a member of the faculty. This course is not intended for students who are pursuing research.

**HISTART 302 / ANTHRCUL 302 / WGS 302. Sex and Gender in Japan**  
(3). (SS). *May not be repeated for credit.*

Explore attribution and construction of gender in Japan historically and in the present time.

**HISTART 304 / ASIAN 304. The Art of Yoga**  
(3). (ID). *May not be repeated for credit.*

As yoga becomes increasingly popular it is important to query its early development, transformation over the centuries, and the possibilities and perils that it holds forth to

its practitioners. Graphing milestones in the history of yoga, this course is also an introduction to South Asian visual, literary, and religious culture.

**HISTART 305 / ASIAN 335. Himalayas: An Aesthetic Exploration**

*Undergraduate and graduate students seeking to enroll for this course should have completed at least one course on the arts/languages/religions of South/Central/East Asia. (3). (HU). May not be repeated for credit.*

Studying Himalayan art and architecture offers an opportunity to embark on expeditions to distant frontiers, acquire critical appreciation of the impact of geography on cultural production and gain deeper understanding of historical process that have transpired in this region and continue to exert an influence in our own times.

**HISTART 334 / WGS 334.**

**Women in the Visual Arts: Images and Image-Makers**

*One course in Women's Studies or History of Art. (3). (HU). May not be repeated for credit.*

The course studies women as both image-makers and role-players in the visual arts, examining their histories from the mid-18th to the beginning of the 20th century. It offers an introduction to how meanings about women and gender are produced through visual representation and how gender structures critical writing on art.

**HISTART 338. Representing Fashion: Costume and Dress in the Visual Arts**

*(4). (HU). May not be repeated for credit.*

The course explores representations of fashion and costume in art and visual culture of early modern and modern Europe, focusing on the nineteenth and twentieth centuries. We pay particular

attention to the conventions of visual representation in images of fashion and costume, from fine art painting to journal illustration and photography, thus allowing these images to operate in different registers.

**HISTART 341. The Gothic Age**

*(3). (HU). May not be repeated for credit.*

During the 13th and 14th centuries, Paris was pre-eminent in the arts. Parisian artisans created trendsetting works of art that exerted an influence in all parts of Europe. This course is devoted to reconstructing the medieval city and becoming acquainted with surviving architectural monuments.

**HISTART 342 / RCHUMS 344. Reason and Passion in the 18th Century Europe**

*Sophomore standing. (3). (HU). May not be repeated for credit.*

This course examines significant works of visual art, literature, and philosophy created in Europe and the American colonies in the eighteenth century in light of the questions "what is a person?" and "what is the relation of the individual to society?"

**HISTART 343. God, Love, and War: The Art of Byzantium and Medieval Western Europe**

*(3). (HU). May not be repeated for credit.*

This course explores the art and architecture of Byzantium and Western Europe from the tenth to the fifteenth century with an emphasis on religion, the luxury and amatory arts, and war. Its aim is to understand the intricate artistic networks that linked the diverse regional, religious, and cultural factions of the medieval world.

**HISTART 345 / MEMS 345.**

**Introduction to Medieval Architecture**

*(3). (HU). May not be repeated for credit.*



This course provides an introduction to the built environment of the Middle Ages from the fall of Rome to the dawn of the Renaissance. Students will integrate the study of architecture with the study of medieval culture, exploring for example the impact of the cult of saints, princely courts and civil authority, religious reform and radicalism and rising urbanism.

**HISTART 346 / RELIGION 346. The Moving Image in the Middle Ages**

(3). (HU). May not be repeated for credit.

This course examines contexts in which the Byzantine image disproves the traditional notion (or burden) of stillness imposed upon it. These contexts range from the public arena of processions in which icons (images) were the center of visual attention, to the walls of Byzantine churches and palaces where they performed, to the miracles in which they supposedly came "alive".

**HISTART 348 / MEMS 348. The Medieval Book**

(3). (HU). May not be repeated for credit.

This course focuses on an art form highly developed in the Middle Ages: the richly illuminated hand-written book. Students come to know such masterworks as the Lindisfarne Gospels and the Tres Riches Heures as they are learned about significant episodes in the history of manuscript production, beginning with the invention of the codex in late antiquity and ending with the advent of the printed book in the early modern era.

**HISTART 351. The Art and Poetry of Michelangelo**

HISTART 102 or 251. (3). May not be repeated for credit.

An intensive study of Michelangelo's visual art and poetry designed to introduce

Renaissance theories of style and invention while focusing on the artist's preoccupation with the body as a source of visual and verbal metaphors.

**HISTART 352 / RCHUMS 346. Art and Philosophy in the Renaissance Tradition**

(3). (HU). May not be repeated for credit.

This seminar explores fundamental philosophical and moral issues in European visual art and writing about art from the early modern period (c. 1400-1780). Students learn to unpack the ideas and intellectual agendas of both natural philosophy (science) and moral philosophy (ethics) in several visual and literary genres.

**HISTART 353. Meaning in the Making**

At least one previous lower level course in History of Art is preferable. (3). (HU). May not be repeated for credit.

This seminar investigates the relationship between an object's meaning and the process by which it is made. We examine techniques and materials of production, like silverpoint drawing, tempera painting, and wood sculpture. The visual culture of early modern Europe (c. 1400-1700) is our focus, but other perspectives are welcome.

**HISTART 354 / ANTHRCUL 354. Art, Science, and Technology: The Human Body as an Experiment**

(3). (ID). May not be repeated for credit.

This multimedia, interdisciplinary seminar is devoted to exploring the global history and present-day expressions of the relationship between art, science, and technology, and how they are integrated. To this end we will cultivate both a new visual literacy and a new literacy in science and technology.

**HISTART 355 / MEMS 355. The Miraculous and the Diabolical in Late**

### **Medieval and Early Modern Europe**

(3). (HU). *May not be repeated for credit.*

In this course we investigate 'supernatural' phenomena in the visual arts: divine acts, miracles, magic, and sorcery. We are interested in how and why people in late medieval and early modern Europe distinguished between the 'supernatural' and the 'natural', as well as the extreme fluidity of these terms.

### **HISTART 356. The Self in the Portrait**

*Sophomores or above. (3). (HU). May not be repeated for credit.*

This course examines key episodes in history of portraiture in Western art since the 15th century with emphasis on the self-portraits of artists - from Van Eyck to Cindy Sherman - who repeatedly turned to this mode of self-fashioning as a vehicle for philosophical statements about the purposes of artistic representation.

### **HISTART 357. Art and Money**

(3). (HU). *May not be repeated for credit.*

This course investigates art and money as cultural systems that raise questions about value - its source, how it is measured, and traded. Using case studies from the seventeenth century to the present, it explores how aesthetic, social, and economic values get negotiated in the making, marketing, and consumption of art.

### **HISTART 358. The Destruction of Art**

(3). (HU). *May not be repeated for credit.*

This course will focus on acts of violence and defacement directed at works of art in a wide range of historical global cultures. These transformative acts will be contextualized and conceptualized, as we explore how visual art can operate as sites of contestation, where competing belief systems, regimes of knowledge, aesthetic

values, and political ideals come into conflict and are given charged expression.

### **HISTART 362 / AAS 362. Expressive Cultures of the Black Atlantic: Vision and Time**

*HISTART 208/AAS 208 and upperclass standing. (3). May not be repeated for credit.*

This course addresses a diversity of Black Atlantic visual cultures, both in Africa and in the Diaspora, with a focus on how historical memory and the experience of the passage of time are articulated in objects and performances.

### **HISTART 370 / FRENCH 346. Realism and Impressionism**

(4). (HU). *May not be repeated for credit.*

This course focuses on Parisian visual culture from 1848 to the end of the nineteenth century. Its principal objective is to evaluate Realist and Impressionist painting in relation to new forms of print media, emergent forms of popular and mass culture, and an unstable social and political landscape.

### **HISTART 371. Weimar Culture**

(3). (HU). *May not be repeated for credit.*

This course examines German art, literature, and film between 1918 and 1933. It introduces students to a set of terms, concepts, and methods that will allow them to describe, analyze, interpret, and compare a variety of different types of culture produced between World War I and World War II.

### **HISTART 372. Global Modern Art**

(3). (HU). *May not be repeated for credit.*

The course studies the variegated modern and contemporary art movements that have taken place across Mexico to South Africa, India, Australia and China, and the kind of

concepts required to think modern and contemporary art in a truly globalized way.

**HISTART 373. Global Politics and Contemporary Art**

*(3). (HU). May not be repeated for credit.*

Focusing on art made after the seminal year of 1945, this course examines artistic production and reception under various forms of political rule with a special emphasis on the relationship between visual art produced under authoritarian rule.

Taking a broad international and interregional approach, this course traces art's complex relationships to globalism.

**HISTART 377. Perspectives in Recent Art**

*HISTART 102 or 272. (3). May not be repeated for credit.*

This course considers advanced art since 1960, addressing works in painting, sculpture, photography, video, installation, and other media. The class encourages students to view art in its social contexts, seeing it as means of representing and thinking through social and cultural concerns.

**HISTART 378. Sculptural Practices - Modern and Contemporary**

*HISTART 272 or at least one 100 or 200 level HISTART course. (3). May not be repeated for credit.*

The course explores the changes that took place in sculptural practice from the end of the nineteenth century to the present. It examines the hybrid forms of sculpture that emerged as the focus shifted from object-based work to installations and interventions for the environment.

**HISTART 379 / FTVM 379 / HISTORY 379 / JUDAIC 379. Jewish**

**Photographers Picture the Modern World**

*(3). (HU). May not be repeated for credit. Rackham credit requires additional work.*

This course traces a history of image making by Jews in twentieth-century Europe and the U.S. While Jewish photographers participated in many different aspects of photography, particular attention will be given to documentary photography.

**HISTART 380 / CLARCH 380. Minoan and Mycenaean Archaeology**

*Consent of instructor required. Upperclass standing, CLARCH/HISTART 221 and 222, and permission of instructor. (3). May not be repeated for credit.*

A systematic, thematically-organized survey of the archaeology and art of the Aegean world in the Bronze Age, from the rise of state-level societies (the Minoans of Crete and the Mycenaeans of mainland Greece), to their collapse in the Greek 'Dark Ages'.

**HISTART 382 / ANTHRARC 381 / MIDEAST 338. Introduction to Egyptian Archaeology**

*(4; 3 in the half-term). (HU). May not be repeated for credit.*

This course focuses on the material culture and disposition of archaeological sites in ancient Egypt and Nubia from c. 3200 BCE-285 ac. The logic and nature of both sacred and secular landscapes are explored, and specific sites, some well known (such as the extensive temple precinct at Karnak and the Meroitic pyramids).

**HISTART 383. Modern Art in a Multi-Ethnic Asia**

*At least one course in either History of Art or Asian Studies. (4). (HU). (R&E). May not be repeated for credit.*

This course discusses modern art in Asia (construed in this context as the countries

comprising East, Southeast, and South Asia) as a function of the encounter between groups identified primarily on the basis of their racial and ethnic origin. Beginning from roughly the late 18th century, this course explores constructs of race and ethnicity through visual representation.

**HISTART 385 / ASIAN 393. Human Rights in China from Classical Times through the 18th Century: a Historical and Cultural Survey**

(3). (HU). *May not be repeated for credit.*

This course surveys debates relevant to human rights issues in China up through the Eighteenth-century. Apart from secondary readings, it focuses on primary sources, including visual art, poetry, essays, or official documents, to illustrate how issues of equality, justice, or freedom of speech were understood and contested in China.

**HISTART 389 / CLARCH 389 / CLCIV 379. Pompeii**

(3 - 4). (HU). *May not be repeated for credit.*

This course uncovers the urban fabric of Pompeii (Italy) as revealed by more than two centuries of excavation. We look at how it was laid out, at public and private buildings and their decoration, and at its the wider cultural, geographical and historical contexts. Using archaeology and translated texts, we explore aspects of the lives of the inhabitants, including their economy; social interaction; politics; and, choices.

**HISTART 392. Anime to Zen: Japanese Art through Contemporary Popular Culture**

(4). (HU). *May not be repeated for credit.*

This course examines examples of a wide variety of Japanese films, photography, painting, sculpture, comics, and new media to illuminate ideas about nature and place,

personal and national identity, fantasy and virtual realities, humanity and its borders, beauty and ugliness, violence and war, the body, gender, sex, and consumption.

**HISTART 393. Undergraduate Seminar**

(3). (HU). *May be elected five times for credit. May be elected more than once in the same term. W.*

Topics are determined each semester in relation to both the undergraduate curriculum in History of Art and the interests and specialization's of the faculty.

**HISTART 394. Special Topics in the Humanities**

(3). (HU). *May be repeated for a maximum of 12 credits. May be elected more than once in the same term. F, W, Sp, Su.*

The areas covered vary from term to term in relation to the interests and specialization of the instructor.

**HISTART 395. Mini Seminar Course in History of Art**

(1 - 2 in the half-term). (HU). *May be elected five times for credit. May be elected more than once in the same term.*

Topics are determined each semester in relation to both the undergraduate curriculum in History of Art and the interests and specializations of the faculty.

**HISTART 396. Good Stories: Japanese Visual Narratives**

(3). (HU). *May not be repeated for credit.*

This class draws on theories of narrative from Western and Asian art and literature to explore various examples of Japanese visual storytelling. Lectures will survey the history of illustrated narratives in Japan from seventh to twenty-first centuries, emphasizing close visual, textual, and historical analyses. The objects to be analyzed range from eighth century scrolls

depicting the life of the Buddha to modern animation and children's books, with special emphasis on illustrated texts.

**HISTART 398. Mini Lecture Course in History of Art**

*(1 - 2 in the half-term). (HU). May be elected five times for credit.*

Topics are determined each semester in relation to both the undergraduate curriculum in History of Art and the interests and specializations of the faculty.

**HISTART 399. Independent Study**

*Consent of instructor required. (1 - 3). (INDEPENDENT). May be repeated for a maximum of 6 credits.*

Undergraduate students may work independently with a faculty member from the department of the History of Art.

**HISTART 406 / AAS 407. Looking at African Things**

*HISTART 208/AAS 208. (3). May not be repeated for credit. Rackham credit requires additional work.*

This course examines the shifting historical terms and narratives that constitute and justify the creation, display and reception of African object, both in and out of Africa, in such contexts as museums, photographic archives, world's fairs, theme parks and other cultural spectacles.

**HISTART 408 / AAS 480. The Future of Africa's past: Material Culture, History, and Heritage**

*AAS 200 (CAAS 200). (3). May not be repeated for credit.*

The course examines the material culture of precolonial African societies as historical "documents," as evidence of the social, political, religious, and economic processes that shaped these societies. In addition to dealing with the significance of these things

in the past, the course considers what they mean in the present, as heritage.

**HISTART 424 / CLARCH 424.**

**Archaeology of the Roman Provinces**

*Upperclass standing, and*

*CLARCH/HISTART 221 or 222. (3). May not be repeated for credit.*

**HISTART 430 / CLARCH 420. Greece before History: The Art and Archaeology of Greek Lands ca 3500 to 700 BCE**

*(3). May not be repeated for credit.*

This course explores the origins, character and collapse of complex societies of the Late Bronze Age in the Aegean. Sources of evidence include architecture, artifacts, mortuary practices and the distribution of sites within the wider landscape. We also explore recent work on documentary sources, including the linear B (Mycenean) tablets.

**HISTART 431 / AMCULT 433. Made in Detroit: A History of Art and Culture in the Motor City**

*Upperclass standing; prior coursework in Art History, U.S. History, American Culture, or Urban studies, and permission of instructor. (3). May not be repeated for credit.*

This course examines modern art, architecture, music, and culture in the local context of Detroit's urban, social, and racial history in the twentieth century. Students undertake challenging readings in theories of modernity then apply them in Detroit through original research.

**HISTART 433 / CLARCH 433. Greek Sculpture**

*Upperclass standing, some preparation in Classical Civilization, Classical Archaeology or History of Art. (3; 2 in the half-term). May not be repeated for credit. Rackham credit requires additional work.*

History of Greek sculpture from the 8th century to the 4th century BCE. Treats free-standing statuary and relief and architectural sculpture in stone, bronze, terracotta, and gold and ivory. Examines evolving functions of Greek sculpture, and relationships between stylistic development and social and political change.

**HISTART 435 / CLARCH 435. The Art and Archaeology of Asia Minor**

*Upperclass standing. (3). May not be repeated for credit.*

**HISTART 439 / CLARCH 439. Greek Vase Painting**

*Upperclass standing. (3; 2 in the half-term). May not be repeated for credit.*

**HISTART 440 / CLARCH 440. Cities and Sanctuaries of Classical Greece**

*Upperclass standing, and a course in archaeology. (3; 2 in the half-term). May not be repeated for credit.*

**HISTART 450. Avant-Garde Legacies**

*(3). May not be repeated for credit. Rackham credit requires additional work.*

Visual art practices today are variously inspired by the legacy of the avant-gardes. And so, the course addresses the formation, variation, break up and legacies of the avant-gardes today, focusing on Europe and America.

**HISTART 463. Art and Visual Culture in the Dutch Golden Age**

*(3). May not be repeated for credit.*

This course explores the role of the pictorial arts in the making of the Dutch Republic. It considers painting, drawing, prints, maps, book illustrations and the range of pictorial technologies that constituted Dutch visual culture in the seventeenth century, and generated new ways of seeing and understanding the world.

**HISTART 466 / ASIAN 465. Sacred Image/Sacred Place in Japanese Art**

*(3). May not be repeated for credit. Rackham credit requires additional work.*

This class surveys the religious arts of Japan from pre-history to the present day, with a special focus on different notions of the sacred images and places. It considers how sculpture, painting, architecture, and topography work in concert to produce and condition particular experience of the sacred. The class provides both an overview of the religious currents of Japan as seen through art as well as a thorough introduction to visual analysis of sacred art.

**HISTART 468. Beautiful Writing: Explorations of East Asian Calligraphy**

*(3). May not be repeated for credit.*

This seminar explores practices of brush writing in Japan, with a secondary emphasis on Chinese and Korean calligraphic traditions. We will consider basic linguistic features of East Asian cultures; fundamental art historical ideas including style, abstraction, materiality, connoisseurship, and formal analysis; social and cultural issues such as valuation; and the formation of gender and proto-national identities.

**HISTART 489. Special Topics in Art and Culture**

*(1 - 3). May be elected three times for credit. May be elected more than once in the same term.*

Topics of this course vary depending upon the special interest of faculty and opportunities that arise to enrich the curriculum in particular ways. The particular topic in each case will be indicated by a subtitle.

**HISTART 492 / ISLAM 492. Modern Islamic Art and Visual Culture**

*(3). May not be repeated for credit. Rackham credit requires additional work.*

This seminar explores the function and power of the image in practices of cultural, religious, and political expression in the modern and contemporary Islamic world. Various aspects of the visual are addressed through a study of paintings, art installations, posters, photographs, murals, graffiti, graphic novels, animated movies, and digital media.

**HISTART 497. Upper-Level Seminar**

*Previous coursework in the History of Art. (3). May be elected three times for credit. May be elected more than once in the same term.*

Upper-level undergraduate seminars. Course topics vary and are indicated by subtitles.

**HISTART 498. Honors Colloquium**

*Consent of instructor required. HISTART 393. (3). May not be repeated for credit.*

Directed research and writing in preparation for honors thesis. This course involves weekly meetings of each senior thesis writer, their faculty advisors, and the Director of Undergraduate Studies who oversees the seminar. Class time is divided between group meetings of all parties and individual tutorials between students and their advisors.

**HISTART 499. Honors Thesis**

*HISTART 498. (Prerequisites enforced at registration.) (3). May not be repeated for credit.*

Directed honors thesis research and writing.

**HISTART 534 / CLARCH 534. Ancient Painting**

*Upperclass standing, HISTART 101 and either HISTART/CLARCH 221 or 222. (3). May not be repeated for credit. Rackham credit requires additional work.*

**HISTART 536 / CLARCH 536.**

**Hellenistic and Roman Sculpture**

*HISTART 101; one of CLARCH 221 or 222 or HISTART 221 or 222; and Upperclass standing. (3). May not be repeated for credit. Rackham credit requires additional work.*

## History (HISTORY)

**HISTORY 101 / INTLSTD 205. What is History?**

*(4; 3 in the half-term). (HU). (R&E). May not be repeated for credit.*

This course provides an overview of the various approaches scholars take when studying the past. Students learn that "The Past" is not just lying there waiting to be uncovered, but must be interpreted and analyzed in ways that give meaning to our lives today.

**HISTORY 103. Introduction to History in the Humanities**

*(4; 3 in the half-term). (HU). May not be repeated for credit.*

This course examines an aspect or topic in history not focused on a specific country or time period. Topics are taught from a Humanities perspective.

**HISTORY 105. Introduction to Religion**

*(4; 3 in the half-term). (ID). May not be repeated for credit.*

The class aims to show that religions are sets of ideas, discourses and practices that take on a defined, systematic shape in specific historic contexts of comparison and challenge. It focuses on marginal and often misunderstood traditions of the Americas, giving particular attention to religious

phenomena in the African diasporic and indigenous worlds at specific critical junctures in which the comparative term, "religion," acquired a defined profile and played an important role. In relation to the United States, the course gives special attention to First Amendment issues of "freedom of religion," and various legal challenges arising since the 19th century.

**HISTORY 195. The Writing of History**  
(4). (FYWR). May not be repeated for credit. This course may not be included in a History major. F.

Each section of "The Writing of History" will study a different era and topic in the past, for the common purpose of learning how history is written and how to write about it. Students will read the work of modern historians, documents and other source materials from the past. The goal will be to learn how to construct effective arguments, and how to write college-level papers.

**HISTORY 196. First Year Seminar in Social Sciences**  
Enrollment restricted to first-year students, including those with sophomore standing.  
(3). (SS). May not be repeated for credit.

A basic introduction to historical thinking and method through small-course seminar experience. Topics will vary from term to term; however, no matter what the topic, students can expect to spend a great deal of time learning to think critically about historical questions and to write well. As such, the Freshman seminar should serve as an introduction to upper-level course work in history and related fields of study.

**HISTORY 197. First-Year Seminar in the Humanities**  
Enrollment restricted to first-year students, including those with sophomore standing.  
(3). (HU). May not be repeated for credit.

A basic introduction to historical thinking and method through small-course seminar experience. Topics vary from term to term; however, no matter what the topic, students can expect to spend a great deal of time learning to think critically about historical questions and to write well. As such, the Freshman seminar should serve as an introduction to upper-level course work in history and related fields of study.

**HISTORY 200. Ancient Greece to 323 B.C.E.**  
(4). (HU). May not be repeated for credit.

A survey of ancient Greek history from the Bronze Age until the death of Alexander the Great. Topics to be discussed include: interactions between Greece and other ancient civilizations, especially those of the Near East and Egypt; the development of Greek city-states (e.g., at Athens and Sparta); local or regional identities and the formation of a common Greek identity (panhellenism); economy, society and culture.

**HISTORY 201. Rome**  
(4). (HU). May not be repeated for credit.  
W.

**HISTORY 202. Doing History**  
(3). May not be repeated for credit.  
HISTORY 202 is a required gateway seminar for history concentrators, to be taken the academic term after declaring the concentration.

The aim of this course is to provide History students with a structured and cohesive foundation in the analytical, methodological, writing and historiographical skills involved in "doing history." Students engage a diverse set of primary sources (letters, diaries, memoirs, reports of agencies of state or local government, trial records, photographs, to name a few).



**HISTORY 203 / ASIAN 200.****Introduction to Japanese Civilization:  
Japan Before Today**

(3). (HU). *May not be repeated for credit.*

This course investigates Japan from the turn of the last millennium--when rival chieftains appealed to the Chinese court for recognition before there was a Japan as such--through the late 20th century--an age of giant cell phones and fears that Japan was going to buy up the US.

**HISTORY 204 / ASIAN 204. East Asia:  
Early Transformations**

(4; 3 in the half-term). (HU). (R&E). *May not be repeated for credit.*

The course introduces the histories, cultures, and societies of East Asia, including China, Japan and Korea from the archaeological phases through early modern times, ca 1700. It emphasizes social transformation that was made possible through international exchanges of knowledge and goods, technological innovations and adaptations, literacy and thoughts.

**HISTORY 205 / ASIAN 205. Modern  
East Asia**

(4; 3 in the half-term). (SS). (R&E). *May not be repeated for credit.*

An interdisciplinary analysis of the impact of the modern world on the traditional cultures of China, Japan, Korea, and related areas, and the subsequent transformation of the societies of these countries, with an examination of the differing responses of China and Japan to the modern challenge.

**HISTORY 206 / ASIAN 206. Indian  
Civilization**

(4; 3 in the half-term). (HU). *May not be repeated for credit.*

A lecture survey of the civilizations of India from earliest times to the present.

**HISTORY 207 / ASIAN 207. Southeast  
Asian Civilization**

(4; 3 in the half-term). (SS). (R&E). *May not be repeated for credit.*

A lecture survey of the civilization of Southeast Asia -- both the Indo-China peninsula and the islands from Indonesia to the Philippines -- from earliest times to the present.

**HISTORY 209 / INTLSTD 209 /  
RELIGION 209. Death, Immortality,  
and Afterlife**

(3). (ID). *May not be repeated for credit.*

This course aims to answer this big question "What makes us human" by exploring the 'deep history' of humanity from prehistory to the present by exploring death as a universal phenomenon. It employs a multidisciplinary and multi-species approach by bringing history and the four sub-fields of anthropology in a conversation.

**HISTORY 210 / MEMS 210. Early  
Medieval Europe, 300-1000**

(4; 3 in the half-term). (SS). (R&E). *May not be repeated for credit. F.*

A survey course covering the decline of Rome and the rise of Germanic monarchy, the Carolingian and Ottonian Empires, the growth of feudalism, monasticism and papal reform.

**HISTORY 211 / MEMS 211. Later  
Medieval Europe, 1000-1500**

(4). (SS). (R&E). *May not be repeated for credit. W.*

A survey of political, economic, religious, and intellectual developments within western Christendom. Special emphasis on main currents of medieval thoughts.

**HISTORY 212 / MEMS 212. Renaissance Europe**

*(3). (HU). May not be repeated for credit.*

Social, cultural, intellectual traditions and innovations, predominantly in Italy, with comparisons with northern Europe, 1300-1500, will be the subject of this course.

**HISTORY 214 / AMCULT 241. Health, Biology, and Society: What is Cancer?**

*(3 - 4). (ID). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in BIOLOGY 241.*

This course explores the question "What is Cancer?" from the natural sciences, social sciences, and the humanities, and seeks to educate and train students in a multidimensional and holistic understanding of health and society. One goal of the course is to provide an integrated overview of how scholars in various fields approach broad and complicated topics.

**HISTORY 215. The History of Disaster**

*(4; 3 in the half-term). (HU). May not be repeated for credit.*

This course ranges widely through space and time to explore the history of natural disasters: fires, floods, famines, hurricanes, tsunamis, earthquakes, and more. We consider how such episodes can be represented and how people use such episodes to consider their place in the world.

**HISTORY 216. War and Society in the 20th Century: World War I**

*(3 - 4; 3 in the half-term). (HU). May not be repeated for credit.*

This class will examine the causes, developments, and consequences of World War I, the event that according to many historians inaugurated the twentieth century

and the era we are still living in. We will approach the history of this conflict from many perspectives. We will not only rely on the tools of military and political history, but also on those of literary criticism, art and music history, and historical ethnography, to investigate how ordinary people, on and off the fronts, made sense of what in retrospect seem like impossible challenges and traumas. We will look at the ways the war was experienced, debated, and remembered in a variety of different social and geographical contexts, from the European capitals to the increasingly restless colonial world.

**HISTORY 217. Topics in the History of Human Rights**

*(3 - 4; 3 in the half-term). (ID). May be repeated for a maximum of 10 credits. May be elected more than once in the same term.*

This course offers an overview of the rise of human rights and their uses and applications in the modern era. In analyzing multiple genealogies of human rights, we pay close attention to shifting meanings of both terms of the equation: "the human" and "rights." The class focuses on key debates and historical events that have shaped human rights discourses and legal instruments. Particular attention is given to international law (for example, the Geneva Conventions), intergovernmental organizations (e.g. League of Nations and the United Nations), and institutions charged with prosecuting human rights violations (such as the International Criminal Tribunal on Yugoslavia). In analyzing the development of legal and normative regimes around human rights, we inquire into how specific disciplinary viewpoints may impact understandings of how and where human rights originated, their efficacy, and their consequences in practice.

**HISTORY 219 / ASIAN 210. The Philippines: Culture and History**  
(3). (HU). (R&E). *May not be repeated for credit.*

This course is an introduction to the historical formation and cultural complexity of the Philippines. It surveys major periods in Philippine history, paying particular attention to the cultural effects of processes and events such as: religious conversion; revolution and nationalism; U.S. Imperialism; modernity, globalization, and migration.

**HISTORY 221. Survey of British History from 1688**

(4). (SS). *May not be repeated for credit.*

**HISTORY 222 / JUDAIC 224 / WGS 224. Sex and Sexuality in Jewish History and Culture**

(3). (HU). *May not be repeated for credit.*

Jewish approaches to gender/sexuality questions in historical, religious, legal, ethical, and imaginative dimensions; Studying historical and received traditions (Bible, Talmud, Kabbalah), their transformations in early modern Jewish communities, contemporary Jewish movements, medieval Jewish practices, imaginaries in Christian and Islamic worlds, the complexities of modern Jewish formations in US and Israel/Palestine.

**HISTORY 223 / ENVIRON 223. Trashed! A History of Garbage in the Modern World**

(4; 3 in the half-term). (ID). *May not be repeated for credit.*

This course traces the history of garbage since the middle of the 19th century and explores how the stuff humans discard and the methods employed for dealing with that stuff have shaped our world. This course connects global, local and public history and makes these connections tangible.

**HISTORY 224 / ENVIRON 224 / PUBPOL 224. Global Nuclear Proliferation**  
(4; 3 in the half-term). (SS). *May not be repeated for credit.*

This course presents a global perspective on the history and politics of nuclear weapons. It examines the science and technology of these weapons; the politics of their growth, spread, and control; environmental and health consequences of their development; and the cultural responses and social movements they have engendered.

**HISTORY 226 / AAS 236 / AMCULT 226 / LACS 226 / LATINOAM 226. The Latin Tinge: Latin Music in Social Context in Latin America and the U.S.**  
(4; 3 in the half-term). (HU). (R&E). *May not be repeated for credit.*

This course introduces key Latin musical styles, recordings, and musicians. It requires extensive listening and musical analysis, and develops these historical themes: 1) the origins and development of Afro-diasporic musical styles: 2) the interplay between nationalism and popular music: and 3) international musical flows shaped by Atlantic colonialism, commercial markets, and labor migration.

**HISTORY 227. The Rise and Fall of the British Empire**

(4). *May not be repeated for credit.*

This course takes a critical, panoramic view of the origins, development, and eventual decline of the British Empire. It explores the social, cultural, economic, and political dimensions of this history, by analyzing the diverse and complicated experiences of empire by those who ruled the empire (or at least claimed to), and those who were ruled.

**HISTORY 228 / ANTHRCUL 317 / POLSCI 334 / REEES 397 / SLAVIC 397 / SOC 317. Communism and Capitalism**

### **in Eastern Europe**

(4). (SS). *May not be repeated for credit. No credit granted to those who have completed or are enrolled in REEES 396 or SLAVIC 396 or POLSCI 396 or HISTORY 333 or SOC 393.*

An overview of East Central Europe from 1945 to the present. The first half of the course explores the workings of state socialism from an anthropological perspective (with particular focus on political economy and material culture) from the Stalinist 1950s to the more diversified decades of the 1960s to 1980s. The second half covers the "revolutions" of 1989 and contemporary social, cultural, economic and political processes, including struggles over membership to the E.U.

### **HISTORY 229 / ANTHRCUL 226.**

**Introduction to Historical Anthropology**  
(3). (SS). *May not be repeated for credit.*

This course is designed to examine the ways in which people in different societies and at different times have understood the past and have used history to assign meaning to past events. A variety of different systems, programs, and practices for maintaining and deploying knowledge of the past will be explored, including monuments, commemorations and memorials, oral materials and tradition, museums and exhibitions, personal memoirs, film, photography, and literature. Particular attention will be given to the latency of powerful formations seated in understandings of race, gender, ethnicity, and nation.

### **HISTORY 230. Humanities Topics in History**

(3 - 4; 3 in the half-term). (HU). *May be elected five times for credit.*

This course examines an aspect or topic in history not covered under a specific country

or time period. See Course Guide for term offerings.

### **HISTORY 231. Social Science Topics in History**

(3 - 4; 3 in the half-term). (SS). *May be elected five times for credit.*

This course examines an aspect or topic in history not covered under a specific country or time period. See Course Guide for term offerings.

### **HISTORY 232. Interdisciplinary Topics in History**

(3 - 4; 3 in the half-term). (ID). *May be elected three times for credit. May be elected more than once in the same term.*

This course examines an aspect or topic in history not covered under a specific country or time period.

### **HISTORY 233. History of Sexually Transmitted Diseases from Syphilis to AIDS**

(4; 3 in the half-term). (ID). *May not be repeated for credit.*

Students study how sexually transmitted diseases from the middle ages to the twenty-first century are shaped by social, cultural and intellectual history. Themes include changing ideas about disease causality, nature of epidemiological change, social significance and impact of disease, organized public health response to disease, limitations of medical therapeutics, and the experience of disease sufferers.

### **HISTORY 235 / POLSCI 316. History of Law and Social Justice**

(3 - 4; 3 in the half-term). (SS). *May not be repeated for credit.*

This course examines the evolution of cause lawyering in the United States. Students will learn how some lawyers have used law as an instrument of social change,

challenging the idea of law and legal practice as neutral or scientific. We will explore the ethical obstacles to this practice. We will see how clients, communities, and activists have influenced the practice of law. Students will become familiar with the instruments of legal advocacy: the brief, the oral arguments, the amicus curiae, and the judicial opinion. We will end with a critical rethinking of cause lawyering and how the interests of lawyers and legal organizations may sometimes be at odds with the clients they represent.

**HISTORY 236 / ENVIRON 236.**

**Environment and History in Preindustrial Europe**

(3). (ID). *May not be repeated for credit.*

The course surveys human interactions with European environments in ancient, medieval, and early modern times (500 BCE-1750 CE). It presents the ecological dimensions to selected episodes in the economic history of ancient Greece, imperial Rome, medieval Europe, and the Europe of early nation states. It shows that before the "anthropocene" and the Industrial Revolution of the 1800s European people established dynamic relations with their ecosystems that profoundly modified both humans and ecologies.

**HISTORY 237 / ENVIRON 237. Global Environmental History**

(4; 3 in the half-term). (ID). *May not be repeated for credit.*

This course is an introduction to environmental history, which combines traditional historical methods with findings from ecology to explore how humans have transformed nature and how nature has shaped human history. It focuses on how human-nature interactions can illuminate key problems in global history (e.g. inter-scalar feedbacks, human agency).

**HISTORY 238 / ALA 238 / EARTH 238 / ENVIRON 238 / MIDEAST 278. Zoom: A History of Everything**

(4; 3 - 4 in the half-term). (ID). *May not be repeated for credit.*

This interdisciplinary course in "Big History" integrates the human story with its terrestrial and cosmic surroundings. It uses the notion of "powers of ten" to shift perspectives in space and time. It proceeds logarithmically, "nesting" each topic (and disciplinary perspective) within its predecessor, from astrophysics to history and back again.

**HISTORY 239. The World Before 1492**

(4; 3 in the half-term). (HU). *May not be repeated for credit.*

Long before Columbus, huge areas of the world had been connected and divided by extensive systems of exchange, interaction, and integration. The history of these earlier worlds is the subject of this course. By pursuing comparisons and connections we will cross the boundaries that conventionally divide pre-modern history.

**HISTORY 240. The World Since 1492**

(4; 3 in the half-term). (SS). (R&E). *May not be repeated for credit. Meets pre-1800 and transregional requirements in History.*

This course explores the last 500 years of world history, highlighting major trends and transnational developments. It stresses wider patterns characterizing human societies in different parts of the world and considers various encounters and exchanges within, between, and among different societies and cultures around the globe.

**HISTORY 241 / ISLAM 241. America and Middle Eastern Wars**

(4). (SS). *May not be repeated for credit.*

Briefly covers the 19th century background to the Great Power conflicts that erupted in

the early twentieth-century, including French, British, and Russian imperialism. The course then examines the way in which wars have shaped the emergence of modern nation-states in the Middle East. It treats World War I, the Arab Revolt, the Turkish War in Independence, World War II, the Arab-Israeli Wars of 1948, 1956, 1967, 1973, and 1982, the Algerian Revolution, the Lebanese Civil War, the Afghanistan War, the Iran Iraq War, the Gulf War, and the War with Iraq.

**HISTORY 242 / MIDEAST 201.**

**Madness, Medicine, and Magic in the Middle East**

(4). (HU). *May not be repeated for credit.*

This course introduces the history of medicine in the Middle East, from the ancient world to the modern, with a focus on madness.

**HISTORY 243 / ISLAM 243 / MENAS 243. The Dawn of Islamic History**

(4; 3 in the half-term). (HU). *May not be repeated for credit.*

This course offers neither a conspectus of Muslim religious beliefs and practices nor a comprehensive survey of the political expansion of Islamic states. Rather, by examining the role of Islam in world history through the five themes outlined below, it moves away from viewing Islam as a monolithic, timeless entity and instead explores its diverse pathways without privileging any single narrative or viewpoint. Ultimately, the course asks how useful the category of "Islam" is to understanding the global past. This course examines the history of Islam in its global dimensions and contexts through five key themes: 1. Islam as Religion; 2. Islam as Polity; 3. Islam as Cosmopolis; 4. Islam as Ideology; 5. Islam and Modernity.

**HISTORY 244 / JUDAIC 244 / MENAS 244 / MIDEAST 284. The History of the**

**Arab-Israeli Conflict**

(4; 3 in the half-term). (SS). (R&E). *May not be repeated for credit.*

This course assesses the origins, dynamics, and the amazing, chameleon-like persistence of Arab-Jewish conflict for over a hundred years, from the late 1800s to the present. How did the rivalry begin? Why is no end in sight? And what does the conflict say about truth and morality in international relations?

**HISTORY 245 / AAS 245 / ISLAM 245. Islam in Africa**

*Students will receive no credit if previously taken as HISTORY 357, Topic 3 "Islam in Africa". (Prerequisites enforced at registration.) (3 - 4; 3 in the half-term). (HU). May not be repeated for credit.*

It is well known that Islam is the majority religion in Africa north of the Sahara. It is much less well known that today Islam may be the most widely professed faith south of the desert, in what westerners have often called 'Black Africa', as well. Roughly 1/6th of the world's Muslim population can be found in sub Saharan Africa. This course will examine African Islamic history beginning with the earliest Muslim migrants from Arabia to Ethiopia in the early 7th century CE until the dawn of the 21st century.

**HISTORY 246 / AAS 246. Africa to 1850**

(4; 3 in the half-term). (SS). *May not be repeated for credit.*

The course is an introduction to the peoples and cultures of Sub-Saharan Africa. It begins with a survey of the origins of man and early African civilizations and concludes with the Trans-Atlantic slave trade.

**HISTORY 247 / AAS 247. Modern Africa**

(4; 3 in the half-term). (SS). (R&E). May not be repeated for credit.

This is the second part of a two-course introduction to central themes in Sub-Saharan African history. It deals with the abolition of the slave trade, European imperialism, underdevelopment, nationalism, and decolonization.

**HISTORY 248 / ASIAN 248 / RELIGION 248. Jesus Comes to Asia: Conversion and its Consequences in Asia**  
(4). (HU). (R&E). May not be repeated for credit.

This course provides a broad introduction to the study of Christian conversion and its legacy in the regions now known as South, East, and Southeast Asia.

**HISTORY 249 / ASIAN 274. Introduction to Korean Civilization**  
(3). (HU). May not be repeated for credit.

This course serves as a general introduction to Korean history and culture from earliest times to the present. Topics to be covered include foundation myths, religion, ancient literature, modernization, colonialism, civil war, authoritarianism, rapid industrialization, and democratization in Korea.

**HISTORY 250. China from the Oracle Bones to the Opium War**  
(3). (HU). May not be repeated for credit.  
F.

**HISTORY 251 / ASIAN 241. The Chinese Renaissance: Cultural Transformations in Eleventh-Century China**  
(3). (ID). May not be repeated for credit.

This course examines the profound economic, political, social, philosophical, religious, artistic, and technological developments in the Song Empire (960-

1279). Readings in scholarly articles and translated primary documents reveal a flourishing culture of subtle perception and startling achievement that resembles the European Renaissance both in many of its particulars and in its general significance for human civilization.

**HISTORY 252 / ASIAN 260. Introduction to Chinese Civilization**  
(4). (HU). (R&E). May not be repeated for credit. No assumed knowledge of Chinese history, culture, or language required.

This course introduces students to major problems and controversies in pre-modern Chinese cultural studies. It covers the political, cultural, social, and material history from the Neolithic period to the Mongol conquest in the 13th century.

**HISTORY 253 / MEMS 253. Europe, 300-1648: The Rise and Fall of the Middle Ages**  
(4; 3 in the half-term). (SS). May not be repeated for credit.

Survey of European history from the end of the Roman Empire through the 17th century. The creation of European medieval society out of its Roman, Christian and Germanic components, its evolution through political and scientific revolutions of the 17th century.

**HISTORY 254. Europe, 1648-Present: Legacies of War, Empire, and Revolution**  
(4; 3 in the half-term). (SS). May not be repeated for credit.

An introduction to the major questions of European history from 1648 to the present. Themes include revolution, nationalism, imperialism, and the causes and consequences of Europe's 20th-century wars.

**HISTORY 255 / ASIAN 259. Modern India and South Asia**

*(4; 3 in the half-term). (HU). (R&E). May not be repeated for credit.*

This is an introductory level course on the history of the Indian subcontinent. The course will focus on British colonial rule, independence and partition, and the creation of three new nation-states on the subcontinent: India, Pakistan, and Bangladesh.

**HISTORY 257 / CLCIV 257 / JUDAIC 257. Ancient Law**

*(4; 3 in the half-term). (HU). May not be repeated for credit.*

This course is an historical and comparative introduction to the study of law, thus exposing students to a variety of ancient and medieval legal cultures across the globe. Besides grappling with the basic question of what law actually is, we investigate how law was made and justified, how laws were involved in governing and regulating human relations and transactions, and shifting notions of justice. We examine a range of famous and lesser-known legal sources and materials (codes, narratives, documents, trial records, cases, rituals, performances and ceremonies) as well as literature drawn from history, anthropology, and political theory.

**HISTORY 258 / JUDAIC 210. Sources of Jewish History**

*(3). (HU). May not be repeated for credit.*

This course samples diverse sources of Jewish history that reveal remarkable continuities across centuries despite significant ruptures and impressive innovations. Students encounter distinctive and representative materials of Jewish culture that provide window into the past as well as a powerful lens on today's world.

**HISTORY 259 / JUDAIC 339 / MIDEAST 339 / RELIGION 358. Israel Before the Exile (587 BCE): Its History**

**& Religion**

*(4; 3 in the half-term). (HU). May not be repeated for credit.*

This course encompasses a series of studies in the cultural and political histories of ancient Israel. Early Israelite history and religion from their beginnings to the aftermath of the 6th century CE Babylonian exile will be examined within their respective biblical and ancient Near Eastern contexts (i.e., Palestine-Israel, Mesopotamia, Egypt, Syria, Persia, and Anatolia).

**HISTORY 260. United States to 1865**

*(4; 3 in the half-term). (SS). May not be repeated for credit.*

A history of the American people, their domestic institutions, and their relations with foreign nations, before the American Civil War.

**HISTORY 261. United States, 1865 to the Present**

*(4; 3 in the half-term). (SS). (R&E). May not be repeated for credit.*

A history of the American people, their domestic institutions, and their relations with foreign nations, from the end of the Civil War to the present day.

**HISTORY 262 / AMCULT 263. The American South**

*(4; 3 in the half-term). (SS). (R&E). May not be repeated for credit.*

This course explores race, culture, and "Southernness" in the twentieth century American South. We consider Southern identities in relation to historical events (such as segregation, the black freedom struggle, New Deal economics, recent Latin American migrations) and cultural elements (such as music, food, religion, sports). Throughout the course, we also pay attention to how the region's racial and



cultural history has been shaped by gender, class, nation, and ethnicity.

**HISTORY 265. Minds and Brains in America**

*(4; 3 in the half-term). (HU). May not be repeated for credit.*

This course surveys the science and medicine of mind and brain in the United States. It reviews major developments in psychology, psychiatry, cognitive science, and neurology, along with efforts to apply these in non-scientific arenas. We begin early in the 1800s with asylums, phrenology, and other efforts to address madness. Later in the century, we see the rise of scientific professions against the backdrop of evolutionary theory. Entering the twentieth century, we track how new theories of mind affected public life. The final unit brings these topics and themes up to the present day. Our authors are both famous—including Darwin, Freud, Skinner, and Pinker—and lesser known. This course is meant to provide historical background for further work in mind and brain science. As an introductory humanities course, we also discuss the practice of writing and the mechanisms of historical argument. We read literary fiction in addition to scientific papers, further supplemented by frequent use of (mostly recent) films in lectures.

**HISTORY 266. Twentieth-Century American Wars as Social and Personal Experience**

*(4; 3 in the half-term). (HU). May not be repeated for credit.*

**HISTORY 267 / AAS 267 / AMCULT 267. Religion in the Making of African America**

*(3). May not be repeated for credit.*

This undergraduate course studies the historical development of African American religion. The course begins with discussion of the faith systems created and adapted in

transatlantic slavery. The lectures and interdisciplinary reading assignments examine the multiple evolutions of religious thought and practice among African descended communities in the 19th and 20th centuries. The course examines the U.S. contexts of African American religious culture in their historical relationships with the Caribbean, South America and Africa. The course pays especial attention to the influence of religion in the overlapping affiliations of nation and diaspora.

**HISTORY 269 / JUDAIC 260 / RELIGION 260. Introduction to the Talmud and the Rabbis**

*(3). (HU). May not be repeated for credit.*

Come learn about that great classic of Jewish culture, the Talmud. The Talmud is an idiosyncratic, complex, profound and humorous meditation on many aspects of life including law, ritual, desire and God. This course provides the historical and literary tools necessary to analyze this ancient text produced by the rabbis in the first few centuries CE.

**HISTORY 270 / AMCULT 270. Religion in America**

*(4). (HU). May not be repeated for credit.*

A one-term survey of religious ideas, practices, and institutions in American history from the colonial period to the twentieth century.

**HISTORY 272 / AAS 262. The Civil Rights Movement in the United States, 1941-1975**

*(4; 3 in the half-term). (R&E). May not be repeated for credit.*

This course traces the history of the Civil Rights Movement in the United States from its origins in the early 20th century through the 1960's and beyond. It focuses on the organizations that emerged to press for racial equality and the strategies they

pursued to achieve their goals, from litigation and legislation to mass protest, economic self-help and racial separatism. Finally, the course examines debates over the role of race in public policy in the post-civil rights-era.

**HISTORY 273 / MIDEAST 246. History and Archaeology of Ancient Turkey to the Conquests of Alexander the Great**

*Previous knowledge in the history of ancient Western Asia. (3). (HU). May not be repeated for credit.*

A survey of the archaeology and history of ancient Turkey from the Neolithic beginnings, through the rise of civilization, the exploitation of the land by Mesopotamian traders and kings, the flowering of the Hittite empire, the petty states of the first millennium BCE, and the Persian domination, culminating in the early conquests of Alexander the Great.

**HISTORY 274 / AAS 230. Survey of Afro-American History I**

*AAS 111. (3). (SS). May not be repeated for credit.*

**HISTORY 275 / AAS 231. Survey of Afro-American History, II**

*AAS 111. (3). (SS). May not be repeated for credit.*

**HISTORY 277 / CLCIV 277 / ENVIRON 277. Environmental History of the Ancient Mediterranean**

*(3). (HU). May not be repeated for credit.*

This course concerns the ecology and environmental history of the Mediterranean during the Greek and Roman Periods. Students will be introduced to the discipline of environmental history through case studies drawn from various regions within the broader Mediterranean basin. Attention will also be given to perceptions of the natural world in ancient literature.

**HISTORY 280. The Civil War Era in U.S. History**

*(4; 3 in the half-term). (HU). May not be repeated for credit.*

This course provides a social, political, and cultural history of the Civil War era, defined here as the period stretching from the Missouri Compromise through the collapse of Reconstruction. Focusing on primary sources (letters, novels, speeches, photographs), it aims to help students understand the central struggles of 19th-c. America.

**HISTORY 282. A History of the Economy**

*(4; 3 in the half-term). (SS). May not be repeated for credit.*

When historians study the economy they are interested in far more than the development of institutions like banks or stock markets, far more than the changes over time in indices of productivity or wealth. This course will teach you how the economies that we know today were created, exploring the complicated stories behind the values, social norms, power relations, and unstated assumptions that constitute economic life.

**HISTORY 284 / AMCULT 284. Sickness and Health in Society: 1492 to the Present**

*First-year students must obtain permission of the instructor. (3 - 4; 3 in the half-term). (SS). May not be repeated for credit. **Those who miss the first meeting without advance permission will be dropped from the course..***

This course examines the social and medical factors responsible for sickness and health, and the impact of disease upon society and the medical profession.

**HISTORY 285 / RCSSCI 275. Science, Technology, Medicine, and Society**  
(4). (SS). *May not be repeated for credit.*

Political, social, and cultural aspects of science, technology and medicine. Using case studies drawn from agriculture, information technology, medicine, and other fields, this course provides an introduction to major theories, methods, concepts, and approaches used in the field of Science, Technology, and Society.

**HISTORY 288 / ASIAN 275. India Calling: Culture and Society in Contemporary India**  
(3). (HU). *May not be repeated for credit.*

This course proposes to examine modern Indian culture and society. It will focus on three interrelated themes of Indian culture, tracing their transformations from the pre-modern to the modern: religion, gender, and caste. It will pay particular attention to the manner in which various components of Indian culture were constituted in the colonial and postcolonial periods.

**HISTORY 290 / JUDAIC 290 / MIDEAST 287. Jews and Muslims**  
(3). (HU). *May not be repeated for credit.*

Despite negative portrayals of Jewish-Muslim relations in the media, Jews and Muslims have been in intimate contact since the rise of Islam. This course examines how Jews and Muslims interacted, competed, and coexisted from the Middle Ages to the present, and how the ethnic, religious, and racial categories of "Jew" and "Muslim" have been constructed.

**HISTORY 292 / CLCIV 392. Ancient Medicine in Greece & Rome**  
(4). (HU). *May not be repeated for credit.*

This course thematically examines the historical reception of the theories and practices of Greco-Roman physicians. By

examining ancient Greek medicine in light of the modern fields of pathology, surgery, pharmacology, therapy, obstetrics, psychology, anatomy, medical science, ethics, and education, the student will gain not only a better understanding of the foundations of Western medicine but also an appreciation for how medical terms, theories, and practices take on different meanings with changes in science and society.

**HISTORY 296 / PSYCH 296 / WGS 296. Gender, Sex Differences, and Addiction: Girls Gone Wild**  
(3 - 4; 3 in the half-term). (SS). *May not be repeated for credit.*

This course will unpack the concepts of sex differences, gender, and addictions and place current scientific findings in a historical perspective. Focusing on the U.S., we will look at examples of compulsive behaviors from the colonial era to the present, tracing how they and ideas about gender have changed over time.

**HISTORY 300 / ASTRO 300. The Beginning and The End: A History of Cosmology**  
(3). (ID). *May not be repeated for credit.*

This course discusses the development of modern cosmology, both observational and theoretical, since the late eighteenth century.

**HISTORY 301 / ASTRO 301. Discovery of the Universe**  
(3). (ID). *May not be repeated for credit.*

This course surveys the ways and means by which men and women have learned about the nature of the stellar and galactic systems from the early modern period to the growth of radio astronomy. Course materials come from writings by scientists as well as modern studies of the history of the

physical sciences and the growth of "big" science. This course covers developments in astronomical research in Europe (mostly in theory) and the Americas (mostly in observation).

**HISTORY 302 / CLCIV 302. The Roman Republic**

(4). (HU). May not be repeated for credit.

This course surveys the political and social history of the Roman Republic from the archaic period to the death of Julius Caesar in 44 BCE.

**HISTORY 303 / CLCIV 303 / WGS 303. Women in the Ancient Mediterranean**

(3). (HU). May not be repeated for credit.

This is a course about women's lives during approximately 1,000 years of history (c. 600 BCE - 400 CE). Our focus will be the multicultural world of the Roman Empire, which, at its height, encompassed the entire Mediterranean region. We will examine the changing roles of women in the political, domestic, and religious spheres, as well as how women were implicated in major cultural transformations, such as the rise of Christianity. Students will explore issues of status, power, sexuality, and the family through sources that include literary texts, medical treatises, material culture, and works of art.

**HISTORY 304. Interdisciplinary Topics in History**

(3 - 4; 3 in the half-term). (ID). May be elected five times for credit. May be elected more than once in the same term.

This course examines an aspect or topic in history not covered under a specific country or time period. See the Course Guide for specific term offerings.

**HISTORY 305 / PSYCH 321. American Addictions**

(4; 3 in the half-term). (ID). May not be repeated for credit.

Our subject is addiction. What is it? Why does it matter? This course explores how certain kinds of behavior (and people) have been studied, understood, and treated under the rubric of "addiction" in the United States. We will focus on how theories of addiction and its treatment have embodied different views of personhood, agency, and ethics. One aim of the course is to combine humanistic and scientific ways of thinking, including through individual and collaborative writing projects that bring past and present understandings of addictive substances and behaviors into conversation. This approach is essential to grappling with the political, philosophical, and personal consequences of how we study and stigmatize particular ways of life. Our focus on crucial texts in the history of science and medicine means that we will engage with technical material from psychology, psychiatry, and neuroscience, while our approach to this work will draw on methods from across the humanities. Given recent and ongoing events surrounding opioid use and dependency as well as the intersections of race, gender, and class with addiction and its treatment, we will consistently return to the uses of history in the present.

**HISTORY 306 / ISLAM 319 / MIDEAST 319. History of the Ottoman Empire: The "Classical Age", (ca. 1300-1600)**

Not available to students who have completed AAPTIS 291 (#16) or HISTORY 303 (#10) when taught with the topic "Ten Sultans, One Empire: The Ottoman Classical Age". (Prerequisites enforced at registration.) (3). (HU). May not be repeated for credit.

Using the reigns of the first ten Ottoman sultans as its structural/chronological basis, this course traces the history of the Ottoman

Empire from its humble beginnings in the beginning of the 14th century to its grandeur under Suleyman "the Magnificent."

**HISTORY 307 / ISLAM 320 / MIDEAST 320. History of the Ottoman Empire: The "Post-Classical Age", (ca. 1600-1922)**

*Not available to students who have completed AAPTIS 291 (#17) or HISTORY 303 (#13) when taught with the topic "The Ottoman Empire in the 'Post Classical Age'". (Prerequisites enforced at registration.) (3). (HU). May not be repeated for credit.*

Commencing with an overview of the Ottoman "Classical Age" (ca. 1300-1600), this course will "trace the history of the Ottoman Empire from its grandeur under Suleyman the Magnificent" to its collapse in the first quarter of the 20th century.

**HISTORY 308 / ASIAN 307 / RELIGION 307. Eat, Pray, Love: Devotional Traditions in South Asia**

*ASIAN 220 or 225. (3). (HU). May not be repeated for credit.*

This course explores the meaning and location of devotion within Indian religions. Over the semester, the course grapples with the centrality of practice, beyond the world of scripture and sacred texts, in understanding Religion. Focusing primarily on Hindu, Sikh, and Islamic devotional traditions, this course guides students to a deeper and nuanced understanding of the practice of popular religion in the Indian subcontinent today, as well as in the past.

**HISTORY 309. After Alexander: The Hellenistic Age in the Mediterranean and the Near East**

*HISTORY 200 or 201. (3). (HU). (R&E). May not be repeated for credit.*

Using primary sources in translation and works of modern scholarship, students in

this course explore the Hellenistic world from 323 to 30 BCE. Topics to be addressed include: political changes and continuities, cultural and intellectual developments and the problems of sources and evidence. Particular attention is devoted to the nature and consequences of interactions between different cultural and ethnic groups in the Hellenistic period.

**HISTORY 312 / POLSCI 362. History of European Integration**

*(4; 3 in the half-term). (ID). May not be repeated for credit.*

This course aims to introduce students from humanistic and social scientific backgrounds to the study of European integration and trans-national identity formation, viewed as contested and contingent historical processes.

**HISTORY 313 / FRENCH 344. The Revolutionary Century: France, 1789-1900**

*(4; 3 in the half-term). (SS). May not be repeated for credit.*

The French revolution of 1789 announced the beginning of a new age in which established social and political traditions were to be swept away before the bracing winds of cultural novelty and political experimentation. Using a variety of sources--biography, historical documents, novels, and recent studies--this class explores the social and political history of France's revolutionary century, paying special attention to its resonance beyond its borders.

**HISTORY 315 / AMCULT 308. American Constitutional History**

*Students should have a good general knowledge of United States History, such as that acquired in HISTORY 260 and 261, or equivalent rigorous high school history courses. (4; 3 in the half-term). (SS). (R&E). May not be repeated for credit.*

From the origins of popular sovereignty to today's struggles for equality, this course investigates constitutional thought and activity in America. It examines constitutional amendments, Supreme Court cases, and political struggles (Revolution, the Constitutional Convention and ratification, Civil War, New Deal, Civil Rights era, Immigration, War on Terror), that have affected how "the people" are constituted. Readings will include a large share of primary sources.

**HISTORY 316 / MEMS 316 /**

**WGS 316. Women and Gender in**

**Medieval Europe: 500-1500**

*One course in Women's Studies or History. (3). (SS). May not be repeated for credit.*

The Middle Ages have a bad reputation with respect to women, but just how bad were they? This course explores the history of women and gender relations in medieval European society and culture from roughly 500 to 1500.

**HISTORY 317 / MEMS 317 /**

**WGS 317. Women and Gender in Early**

**Modern Europe, 1500-1800**

*At least one course in WGS or HISTORY. (3). (HU). May not be repeated for credit.*

This course explores the history of women and gender relations in European society and culture from the Protestant Reformation and the opening out to the New World through the French Revolution.

**HISTORY 318. Europe in the Era of Total War, 1870-1945**

*(4; 3 in the half-term). (SS). May not be repeated for credit. F.*

**HISTORY 319. Europe Since 1945**

*(4; 3 in the half-term). (SS). May not be repeated for credit.*

**HISTORY 320. Britain, 1901-1939: Culture and Politics**

*(4; 3 in the half-term). (HU). (R&E). May not be repeated for credit.*

This course will examine British culture and politics from the death of Queen Victoria up to World War II, with particular attention to the nature and structure of politics and the state; the first world war and the processes through which the war experience of mass participation and trauma were understood; cultural and political debates in the interwar years; the growth of mass media; gender; the empire and colonial subjects; the Great Depression; British politics during the rise of Nazi and fascist movements in Europe.

**HISTORY 321. Culture and Politics in Britain Since 1945**

*(4; 3 in the half-term). (HU). May not be repeated for credit.*

This course will examine Britain's history after World War II and include the Cold War, the social and political challenges of the 1960s, the Conservative resurgence of the late 1970s, the Falklands war, and the fall of Margaret Thatcher. Special attention will be paid to the experience of war by civilian populations; the development of a "welfare state" and subsequent challenges thereto; Britain's decline as a world power; protest movements; the nuclear disarmament and peace movements from the late 50s/early 60s through the 80s; the influence of American culture on Britain; decolonization and the participation of Asians and Africans in British culture and politics; Welsh and Scottish nationalism; the Northern Ireland question; and ongoing political and cultural debates about class, education, the media, sexuality and gender roles, and Britain as a multi-cultural society.

**HISTORY 322 / GERMAN 322. The Origins of Nazism**

(4). (HU). (R&E). May not be repeated for credit. Taught in English.

This course explores the origins and the outcomes of the Nazi seizure of power in Germany in 1933. Because no single factor can explain why Germans consented to Nazi rule or why so few resisted Nazi persecution and genocide, we will take a multi-layered approach to this question, examining the relationships among the between political, cultural, and social, and economic change. First exploring the vibrant culture and fractured politics of the Weimar Republic in which the Nazis rose to power, we will then analyze the ideologies and practices of the Nazi "racial state" and the forces that drove it into war and genocide. Students will also examine the blurry lines between consent and dissent, complicity and resistance in the everyday lives of both perpetrators and victims of the regime. Team-taught by two professors from History and German, course materials will include not only historical texts, but also film, art, literature, and personal memoirs from the Weimar and Nazi periods.

**HISTORY 323 / FRENCH 343 / MEMS 323. French Enlightenment**

(3). (HU). May not be repeated for credit.

Through primary source readings, discussions, and lectures, students gain an understanding of the French Enlightenment as a part of the critical response to French society, politics, and culture before the French Revolution. Through readings in secondary sources students are introduced to current debates about the Enlightenment. All Readings are in English translation.

**HISTORY 324. Muslims in Contemporary Europe**

(3). (HU). (R&E). May not be repeated for credit.

This course examines the post-1945 migration of Muslims to Europe. It explores the historical conditions that produced this massive migration, as well as the legal, economic, and socio-cultural parameters that have shaped Muslim communities in postwar Britain, France and Germany. It also considers the transformation of European society wrought by Muslims.

**HISTORY 325 / ASIAN 324 / ISLAM 325 / MEMS 325 / MIDEAST 375 / RELIGION 325. The History of Islam in South Asia**

(4). (HU). (R&E). May not be repeated for credit.

This course examines the history of Muslim communities and institutions in South Asia. It will consider Muslim political expansion and sovereignty, conversion, the interaction between religious communities, Islamic aesthetics, the impact of colonial rule, India's partition and the creation of Pakistan, and the contemporary concerns of South Asia's Muslims.

**HISTORY 326 / ITALIAN 314. Modern Italy: 1815 to Present**

(3). May not be repeated for credit.

This course examines the history of Italy from 1815 to the present. Modern Italy has been a laboratory for the social and political change of western Europe. Nationalism, fascism, and social democracy have found Italy an ideal terrain for their conceptual and historical development. We will focus on national unification post-unification strategies and contradictory nature of Italian democracy in post W.W.II decades.

**HISTORY 327 / WGS 327. The History of Sexuality**

(4; 3 in the half-term). (HU). May not be repeated for credit.

Does sex have a history? This course proposed to respond to this provocative question by demonstrating how modern notions of sexuality have emerged historically. In that sense, sex is not part of nature, it is part of culture, or rather cultures and their histories. This lecture course will introduce students to an exciting new field of historical research. Our approach will be both topical and chronological; from ancient times to the present.

**HISTORY 328. Humanities Topics in History**

(3 - 4; 3 in the half-term). (HU). May be elected five times for credit.

This course examines an aspect or topic in history not covered under a specific country or time period. Topics offered under this course number are taught from a Humanities perspective.

**HISTORY 329. Social Science Topics in History**

(3 - 4; 3 in the half-term). (SS). May be elected five times for credit.

This course examines an aspect or topic in history not covered under a specific country or time period. Topics offered under this course number are taught from a Social Science perspective.

**HISTORY 331 / POLISH 331. Poland in the Modern World**

(4; 3 in the half-term). (HU). May not be repeated for credit.

The history of Poland from the restoration of independence in 1918 until the present day, including coverage of the Nazi occupation during WWII, the four decades of communism, and the path towards integration with Europe after 1989.

**HISTORY 332 / POLSCI 395 / REEES 395 / SLAVIC 395 / SOC 392. Russia and**

**the Soviet Union: Reform, Revolution, and the Socialist Experiment**

(4; 3 in the half-term). (SS). May not be repeated for credit. May not be counted in a Slavic Department academic minor. F.

This interdisciplinary course explores the extraordinary history of the Russian Empire, later the Soviet Union, and now Russia and fourteen other states, among them Ukraine, the "stans" of Central Asia, Armenia, Georgia, and the Baltic republics.

**HISTORY 333 / RUSSIAN 375. Literature and Empire: Nineteenth-Century Russian Prose**

(3). (HU). (R&E). May not be repeated for credit.

Nineteenth-century Russia is famous for its brutal imperialism and humanistic literature. This course explores the connection between these two aspects of Russian culture and probes the ways in which the imperial drive influenced - and was artistically mediated by - literature.

**HISTORY 334. Pax Americana: The History of U.S. Empire**

(4; 3 in the half-term). (SS). May not be repeated for credit.

This course surveys the history of U.S. imperialism in the world from 1800 to the present. It encourages students to think broadly about empire as constitutive of power relations that go beyond the acquisition of territorial possessions and administrative dependencies, to encompass hegemonic social, cultural, and economic influence in the world. The course aims to challenge the conventional view that the U.S. is not an empire, or that, if it is, it has been an exceptional and benevolent one.

**HISTORY 335 / AMCULT 385 / ISLAM 335 / LATINOAM 385. Immigration Law: Critical Approaches to Contemporary Issues**



(3 - 4; 3 in the half-term). (SS). May not be repeated for credit.

This course assists students to develop an informed analysis of current immigration debates through investigation of the legislative and social history of immigration since the late 1880s, with an emphasis on issues of race, gender, and sexuality. Students develop legal history research skills and become familiar with the kinds of arguments made in history, sociology, and law journals, as well as media, legislatures, and courts.

**HISTORY 336 / AAS 336 / WGS 336. Black Women in the United States, Part I: From the American Revolution through the Women's Era**  
AAS 201 (CAAS 201). (3). May not be repeated for credit. No credit granted to those who completed AAS 337 prior to Winter 2012.

This course explores the history of African-American women from the American Revolution through the passage of the nineteenth amendment in 1920. Through the secondary work of historians and readings of primary sources, students will examine a variety of topics including work, the family, the construction of race and gender, politics, the law and sexuality. The course will also consider the various ways in which historians have theorized about black women's pasts and ask how those theories may help to inform our approaches to the telling of history.

**HISTORY 340 / ASIAN 340 / MENAS 340 / MIDEAST 340 / REEES 340. From Genghis Khan to the Taliban: Modern Central Asia**  
(4; 3 - 4 in the half-term). (SS). (R&E). May not be repeated for credit.

This course provides an overview of modern Central Asian history. It focuses on

the empires of the last 300 years: especially in Russian and Soviet Central Asia, but also the neighboring areas dominated by Britain and China (Afghanistan, Pakistan, Xinjiang).

**HISTORY 343 / AMCULT 341. Rise of the Corporation**  
(3). (SS). May not be repeated for credit.

This course examines the historical development of the American corporation, from its origins in the sole proprietorship, firm and chartered company of the 17th and 18th centuries through the rise of corporation America in the 19th century to challenges to corporate dominance towards the end of the 20th century. It highlights major themes in the development of corporate America: evolving entrepreneurship, emergent capitalism, economic growth, technological change, capital/labor relations, and consumer responsiveness.

**HISTORY 345 / RCSSCI 357. History and Theory of Punishment**  
(4). May not be repeated for credit.

This course traces and analyzes the changing theories and practices of punishment in Europe and the United States. It focuses in particular on the evolution of the penitentiary and the changing conceptions of crime and criminals that informed penal practices in the 19th and 20th centuries. Through the use of selective comparisons, it seeks to develop a theoretical and historical context for understanding the strategies of punishment at work in the U.S. today.

**HISTORY 346 / AMCULT 348. History of American Radicalism**  
(4; 3 in the half-term). (SS). May not be repeated for credit.

Starting with abolitionism and early women's rights, this course examines 150

years in the development of a modern Left in the U.S., highlighting labor-based radicalism as well as militant protest by people of color, feminists, antiwar activists, disaffected youth, and other liberation advocates of the latter 20th century, culminating with recent "anti-globalization" activism.

**HISTORY 347 / ANTHRCUL 346. Latin America: The Colonial Period**

(4). (SS). *May not be repeated for credit.*

This course examines Latin America from the initial encounters between Europeans and Native Americans to the early nineteenth-century wars of independence. It focuses on interactions among Native Americans, Africans, and Europeans, and on the emergence of a durable colonial system.

**HISTORY 348. Latin America: The National Period**

(4; 3 in the half-term). (SS). (R&E). *May not be repeated for credit.*

National development with stress upon present-day conditions.

**HISTORY 349 / LACS 349. Revolutionary Movements in Modern Latin America**

(4; 3 in the half-term). (ID). *May not be repeated for credit.*

This course examines numerous Latin American revolutionary movements, from the major social upheavals of the Mexican, Cuban and Nicaraguan Revolutions to the small but influential revolutionary groups of South America that emerged in the 1960s and 70s. We will seek to define what makes a movement revolutionary by asking how they emerged and developed over time, why people participated in or against them, and what consequences they have had. We will also pay close attention to the ways in which revolutions have been interpreted and

re-interpreted over time, especially through media such as film and art.

**HISTORY 352. Imperial China: Ideas, Men, and Society**

(3). *May not be repeated for credit.*

Major trends and problem areas in the social and intellectual history of premodern China, with particular emphasis on the evolution of main intellectual currents that influenced the development of social institutions. Special attention is given to subjects generally neglected in Western-language sources.

**HISTORY 353 / AMCULT 366 / WGS 366. Sex and Sexuality in U.S. Popular Culture**

(3). (HU). *May not be repeated for credit.*

We will explore how changing ideas about sex, sexuality, and gender appeared in certain types of twentieth-century popular culture. As a group, we will learn to interpret media, such as movies or television, as historical texts that provide insight into past notions about sex in the United States.

**HISTORY 354 / ASIAN 354. War, Rebellion and Revolution in China Through Two Centuries**

(4; 3 in the half-term). (SS). *May not be repeated for credit.*

This course explores rebellions and revolutions in China, from the White Lotus rebellion in the late 18th century through social protests during the last decades of the 20th century. Although the social matter is arranged chronologically, different time periods are used to highlight different themes in the Chinese "revolutionary tradition".

**HISTORY 355 / AAS 355 / ANTHRCUL 355. Health and Illness in African Worlds**

*(4; 3 in the half-term). (R&E). May not be repeated for credit.*

Changes in disease, epidemiology, and health and healing practices in African continental and Atlantic worlds from the fifteenth century, as Africans encountered new forms of medicine, slavery, colonialism, epidemic, famine, and war. Designed for concentrators in History and Afroamerican and African Studies and/or students seeking careers in medicine, public health, and medical anthropology.

**HISTORY 357. Topics in African History**

*(3). May be elected three times for credit.*

This course is meant to examine an aspect, to be designated in the section title, of topics in African history.

**HISTORY 359. Visions of the Past**

*(3). May not be repeated for credit.*

The various arts have long been used to create historical understanding; indeed, historians. They not only tell us what to think about the past, but create our sense of how the past itself is structured. This course examines these issues.

**HISTORY 360. September 11**

*(3). May not be repeated for credit.*

This course examines a shaping national event to assess how and why the nation has reacted to it as it has. By involving students who have their own experience of the events and their consequences, September 11 offers an excellent and timely learning opportunity.

**HISTORY 362 / AAS 346 / ENGLISH 389. Literature in African History**

*(3). (HU). (R&E). May not be repeated for credit.*

This course explores the intersection of African history and literature, of imagination and politics. We study how African writers participated in the political and moral arguments of their time. In epic dramas, in novels, in poetry and in autobiographies, African composers conjured up audiences, offered a shared vision of the past and the future, and set them on a forward path together.

**HISTORY 363. The U.S. and the World Since 1945: Politics, Culture, and War in the American Century**

*(4; 3 in the half-term). May not be repeated for credit.*

This course will examine U.S. history from a global perspective, zooming in on the political, cultural, and economic dimensions of American intersections with nations, movements, and peoples across the globe. From Hollywood, jazz, and consumer culture, to wars and interventions in Vietnam, Iraq, the Congo, and Latin America, we will examine the role of U.S. power in global affairs as well as how global engagements have reshaped the United States.

**HISTORY 365. New York Modern: The Cultures of the Great Metropolis, 1800-Present**

*(4; 3 in the half-term). (HU). May not be repeated for credit.*

An intensive historical examination of the many cultural lives of New York City. The approach is deliberately comparative, cutting across a diverse spectrum of social groups, art forms, eras, and models of urban development. We begin with the "grid plan" of the 1810s and follow the epic story of New York City through the aftermath of 9/11.

**HISTORY 366. Crime and Drugs in Modern America**

*(4; 3 in the half-term). (SS). May not be repeated for credit.*

This course explores the various government wars on crime and drugs in the United States during the twentieth century, from alcohol prohibition through the crack cocaine and opioid "epidemics," from anti-vice crusades in the Progressive Era through the recent rise of mass incarceration under what critics label the American prison-industrial complex. The U.S. currently incarcerates around 2.3 million people, a higher percentage than any other nation in the world; counting probation and parole, more than 7 million Americans live under the supervision of the criminal justice system. At least 24 million Americans violate drug prohibition laws each month, primarily by smoking marijuana or the illicit use of pharmaceuticals; of the half million people imprisoned for nonviolent drug offenses, two-thirds are African American or Latino. This course will examine the deep historical roots of this contemporary landscape, especially the fuzzy and shifting boundaries between legality and illegality and the ways in which race, class, gender, and urban/suburban space have shaped policing practices, criminal justice enforcement, and media representations of criminality. Topics range from Mafia syndicates and Mexican cartels to the FBI and Big Pharma, from "stop and frisk" policing to the "just say no" campaign against teenage pot smoking, from immigration controls to the criminalization of political dissent, from crusades against juvenile delinquency to panics over kidnappers and sex offenders, from Attica and the prisoners' rights movement to racial controversies such as the Rockefeller Drug Laws, Central Park Five, and Michael Brown shooting in Ferguson.

**HISTORY 367 / AMCULT 367 / NATIVEAM 367. American Indian History**

*(4; 3 in the half-term). (SS). (R&E). May not be repeated for credit.*

This course will survey the social, cultural and political history of American Indians. The course explores the dynamics of Native American history from conquest to the present mostly within the boundaries of the United States.

**HISTORY 368 / AMCULT 342 / WGS 360. History of the Family in the U.S.**

*(4; 3 in the half-term). (ID). (R&E). May not be repeated for credit.*

An interdisciplinary course providing perspective on the contemporary family by studying its historical development. The course includes consideration of changing gender roles; sexuality; childrearing; work patterns; race, ethnicity and class; the changing role of state in family relations.

**HISTORY 369 / AMCULT 369. The History of U.S. Mass Culture From Minstrelsy to Hip Hop**

*(4; 3 in the half-term). (HU). May not be repeated for credit.*

This course is an intensive historical examination of U.S. mass culture over the past two centuries. We begin with the very first "culture industries" of the 1820s followed by the expansion and evolution of U.S. commercial entertainment through the dawn of electronic media and globalization. The approach is deliberately comparative, cutting across many different eras and media, from museum exhibitions, theater, dance, and circuses to radio, television, film, and the Internet.

**HISTORY 370 / AMCULT 375 / WGS 370. Queer Histories of the United States, 1850 to the Present**

*(4; 3 in the half-term). (SS). May not be repeated for credit.*

To teach queer history or to queer the teaching of history? This question- posed by historian John Howard- reflects the central teaching objectives of Queer Histories of the United States, 1850 to the Present. Course participants will survey the diverse social, political, cultural and economic histories of lesbian, gay, bisexual, transgender and queer (LGBTQ) communities in the United States from the middle of the nineteenth century through the early twenty-first century. Moreover, the instructor and students will collectively interrogate the historical production of categories of "deviancy" and "normalcy" within American life as it relates to certain acts, desires, identities and bodies. Course topics include but are not limited to the historical development of queer communities, homophile organizations, gay liberation politics, the histories of queer communities of color, the AIDS Crisis and related activism, transgender political communities, the role of federal and state law/policy in the production of heteronormativity and the movement for marriage equality. This course utilizes lectures, discussions and writing assignments alongside interdisciplinary scholarship and primary source materials (including photographs, art, newspapers, memoirs, film and political ephemera).

**HISTORY 371 / AMCULT 371 / WGS 371. Gender and Sexuality in the US**

*Students will not receive credit for this course if they've taken HISTORY 328 with the title " Sex and Gender in U.S. History, 1600-2000" (topic ID #48). (Prerequisites enforced at registration.) (3 - 4). (HU). (R&E). May not be repeated for credit. W.*

This course will focus upon the experiences of American women, examining how constructions of gender, race, class, and sexuality have shaped women's lives. We will explore family structure, gender expectations, and cultural practices, and will look closely at intersections of gender, race, sexuality, and class and the role they play in the development of self-identity. The changing concepts of equality and difference, as employed by women and men in articulating gender relations, will serve as a theoretical framework for our examination. We will emphasize the diversity women's historical experiences by region as well as by social category, and will situate those experiences in the larger contexts of social, economic, and political change on local, national, and even global levels.

**HISTORY 372 / WGS 372.**

**Women and Gender in European History**  
*(3). May not be repeated for credit.*

This course explores the history of women and gender relations in European society and culture. Topics to be covered will vary, but might include: women and gender in politics, society, economy, culture, and family; the historical construction of femininity and masculinity; gender and power.

**HISTORY 373 / AMCULT 373 / NATIVEAM 373. History of the U.S. West**

*(4; 3 in the half-term). (HU). May not be repeated for credit.*

This course examines both the "place" and the "process" of the history of the U.S. West, a shifting region of the Native North America that was the object first of Spanish, French, and English imperial designs, then of U.S. expansionism, and finally a region with peculiarities to the

federal government, distinctive patterns of race relations, and a unique place in American cultural memory.

**HISTORY 374 / AMCULT 374. The Politics and Culture of the "Sixties"**  
(4; 3 in the half-term). (SS). (R&E). May not be repeated for credit.

The current debate over the Sixties and the history of that decade mirror the very essence of American Culture. This course will explore the era of the Sixties using a variety of methodologies and disciplinary approaches.

**HISTORY 375 / WGS 375. A History of Witchcraft: The 1692 Salem Trials in Historical and Cross-Cultural Perspective**  
(4). (HU). May not be repeated for credit.

In 1692, the notorious witchcraft trials took place in Salem, Massachusetts. While this case would become America's most famous witchcraft episode, it drew on a long history of witchcraft belief, accusation, and prosecution in Europe and the New World. In order to understand Salem and the phenomenon of witchcraft more generally, this course explores the long context of European witchcraft belief through the present day.

**HISTORY 376. Epidemics: Plagues and Cultures from the Black Death to the Present**  
(4; 3 in the half-term). (SS). May not be repeated for credit.

From the Black Death of 1348 to emergent infections today, dramatic disease outbreaks both affected and reflected history. This course explores how medicine and culture intersected to influence the causes of and responses to epidemics; and it uses specific epidemics to illuminate global history from medieval societies to the present.

**HISTORY 377 / AMCULT 315 / LATINOAM 315. History of Latina/os in the U.S.**

(3 - 4). (R&E). May not be repeated for credit. No credit granted to those who have completed or are enrolled in AMCULT 312 or HISTORY 312.

This course is an exploration of the history and culture of Latina/os in the U.S. from the colonial era to the present. The diversity among groups that make up the Latina/o population of the U.S. will be examined.

**HISTORY 379 / FTVM 379 / HISTART 379 / JUDAIC 379. Jewish Photographers Picture the Modern World**

(3). (HU). May not be repeated for credit. Rackham credit requires additional work.

This course traces a history of image making by Jews in twentieth-century Europe and the U.S. While Jewish photographers participated in many different aspects of photography, particular attention will be given to documentary photography.

**HISTORY 381 / CLCIV 380 / JUDAIC 380 / RELIGION 382. The Beginnings of Judaism: From Ethnicity to Religion**  
(3). (ID). May not be repeated for credit. No credit granted for students who have taken both ACABS 322 and ACABS 326.

This is an introduction to Jewish history and culture as it emerged in the sixth century B.C.E. until the Persian and Islamic conquests in the seventh century. We will try to understand how the "varieties of Judaism" emerged from the religion and culture of Israelite origins in the context of Near Eastern and Mediterranean imperial and cultural history.

**HISTORY 384 / JUDAIC 388. Antisemitism and Philosemitism: Jews in Myth and Thought**

(3). (HU). (R&E). May not be repeated for credit.

Whether it is out of admiration for their contributions to modern civilization or as a warning about imagined Jewish conspiracies, many influential modern thinkers have written about the nature of "the Jew." Through close readings of these works, this course analyzes some of the patterns and prejudices in popular myths and ideas about Jews.

**HISTORY 385 / ENVIRON 385. The Environmental History of China**  
(4; 3 in the half-term). (SS). May not be repeated for credit.

This course will introduce students to the environmental history of China through a chronological survey of Chinese history and through a series of case studies.

**HISTORY 386 / GERMAN 391 / JUDAIC 386. The Holocaust**  
(4). (SS). (R&E). May not be repeated for credit.

This course examines the destruction of European Jewry (1933-1945), its causes and effects. Major themes include the resurgence of political and racial and anti-Semitism in the nineteenth century, European Jewry in the period before World War II, the rise of the Nazis to power and the response of European society and European Jewry, the "final solution," and the literature of the Holocaust.

**HISTORY 387 / AMCULT 387 / JUDAIC 387. History of American Jews**  
(4; 3 in the half-term). (HU). May not be repeated for credit.

This course explores the history of American Jews from the colonial era to the 21st century, focusing on immigration, politics, cultural creativity, religious innovation, and the establishment of a

diasporic community with ties to Jews throughout the world. The course asks how Jews resolved the tensions between being Jewish and American.

**HISTORY 389 / ARMENIAN 389 / MIDEAST 389. From Natives to Foreigners: Armenians in Turkey and the Diaspora**

(3). (SS). (R&E). May not be repeated for credit.

With the establishment of the Republic of Turkey in 1923, the Armenian genocide 'survivors' became citizens of an ethno-religious nation-state that once sought their annihilation. We read the history of the Republic of Turkey parallel with the Armenian experience to look at the ambiguous relationship Armenians continue to have with the Turkish state following the Lausanne Treaty of 1923, the Armenian Patriarchate of Istanbul, as well as the Armenian diaspora institutions. The readings will contrast official and critical historiographical accounts of republican Turkey and modern Armenians, as well as silenced chapters, absences, and misrepresentation of Armenians in such accounts by looking at ethnographies and social historical accounts.

**HISTORY 390. Topics Mini-Course**  
(1 - 2). May be elected three times for credit.

This one- or two-credit mini-course examines a topic designated by the section title.

**HISTORY 391. Topics in European History**  
(3). May be repeated for a maximum of 6 credits.

**HISTORY 392. Topics in Asian History**  
(3). May be elected twice for credit.

This course is meant to examine an aspect of topics in Asian history to be designated in the section title.

**HISTORY 393. Topics in U.S. History**  
(3). *May be repeated for a maximum of 6 credits.*

This course is meant to examine an aspect, to be designated in the section title, of topics in U.S. history.

**HISTORY 394 / ISLAM 394 / MIDEAST 376. History of the Turkish Republic**  
(3). (HU). *May not be repeated for credit.*

Commencing with an overview of the 19th-century reform movements within the Ottoman Empire, this course traces the political, social, and economic history of Turkey from the establishment of the Turkish Republic in 1923 until today.

**HISTORY 395. Reading Course**  
*Consent of department required. Open only to History concentrators. (1 - 4; 1 - 3 in the half-term). (INDEPENDENT). May be repeated for a maximum of 8 credits. A maximum of eight credits can be elected through HISTORY 394 and 395. For the purposes of history concentration credit, no more than eight credits may be elected from HISTORY 395 (Independent Study).*

Individual reading program under the direction of a staff member.

**HISTORY 396 / AAS 395 / GERMAN 396. Germany and the Black Diaspora**  
(3). (HU). (R&E). *May not be repeated for credit.*

This course explores German-speaking Europe's historical relationship to the Black Diaspora. How have Germans and people of African descent come into contact with each other throughout history? What have been some of the outcomes of this contact?

In asking these questions, we will explore how definitions of identity and race have changed over time.

**HISTORY 397 / MIDEAST 387 / WGS 397. Religion and Politics in Contemporary Iran**  
(3). (ID). *May not be repeated for credit.*

The Iranian Revolution of 1979 transformed Iran into a theocracy, put an end to American colonial rule and made political Islam a force to be reckoned with globally. Thirty years later, the custodians of the Islamic Republic have had to contend with a civil rights movement (the Green Movement of 2009) that demanded a government characterized by voting rights, gender equality, and freedom of assembly and of expression. This course will explore 40 years of revolutionary change in Iran through public spaces where popular social and political visions were articulated and shaped. In this course we will employ ethnographic studies of daily life in the capital city of Tehran to explore piety, sexuality, the occult and politics in modern Iran. Using the media of cinema, blogs, painting, and photography, we will investigate both the challenges Iranians have faced in a radically changed society as well as the language of resistance with which they have experimented.

**HISTORY 398 / MEMS 398. The Black Death**  
(3). (ID). *May not be repeated for credit.*

In the fourteenth century, a massive epidemic hit East Asia, the Middle East, and finally Western Europe. Known conventionally as the Black Death, in two years, it killed a third to a half of the European population. How did it come to kill so many people? How did Europe cope with such a loss? Did it change medieval society or just accelerate changes already underway? This course will look primarily



at the impact of the Black Death on late medieval European society and culture. We will start with medieval attitudes towards disease, and the role of modern science in studying this epidemic, then move to discussion of its short- and long-term impact on such issues such as politics, economics, religion, and social structure.

**HISTORY 399. Topics in History**

*(3 - 4; 3 in the half-term). May be elected five times for credit.*

This course is meant to examine an aspect, to be designated in the section title of select topics in history not covered under a specific country or time period. It is designed to be taught in a lecture/discussion format.

**HISTORY 407. Advanced Study in Comparative and Transnational History**

*(3 - 4; 3 in the half-term). May be elected three times for credit. May be elected more than once in the same term.*

This advanced seminar covers a particular historical topic through an interdisciplinary perspective and emphasizes themes and connections across national boundaries. It serves as a capstone course for International Studies majors.

**HISTORY 408. The Byzantine Empire, 284-1453**

*(3; 2 in the half-term). May not be repeated for credit.*

History of the Byzantine empire from Constantine the Great to the end of the Palaeologan dynasty. Political, cultural, religious and economic relations with the civilizations of Rome, medieval Europe, the Slavs, and West Asia receive emphasis.

**HISTORY 411 / POLSCI 319. The Politics of Civil Liberties and Civil Rights**

*POLSCI 111. (4). (R&E). May not be repeated for credit.*

This course examines a number of Supreme Court decisions in the field of civil liberties and civil rights. In addition to delineating the political significance of the decisions, some emphasis is also placed on the dynamics of compliance with the Court's stated policy.

**HISTORY 412 / MEMS 412 / MIDEAST 412. City of Empires: Byzantium, Constantinople, Istanbul**

*(3). May not be repeated for credit.*

Using a wide range of textual and visual material, from archaeological, architectural, archival evidence, to literature, arts, and cinema, this course offers new insights into the history and cultural significance of Constantinople/Istanbul, one of the most magnificent and mythical cities of the old world.

**HISTORY 415 / ASIAN 415. Law and Society in Late Imperial and Modern China**

*Junior or senior standing. No prior knowledge of China or Chinese required.*

*(3). May not be repeated for credit.*

*Rackham credit requires additional work.*

The Chinese legal order is one of the great legal traditions that has not only exercised a tremendous influence on other legal systems in East Asia for centuries, but still exerts a considerable influence in China today. In recent years, new research methods and improved access to archival materials have shed new light on many aspects of Chinese legal history. This course explores major topics in Chinese legal history through selected readings of secondary and primary sources, as well as through audiovisual materials and fiction.

**HISTORY 416 / GERMAN 401. Nineteenth-Century German and**

### **European Intellectual History**

*(3). May not be repeated for credit. Taught in English.*

Between the upheavals of the French Revolution and the First World War, the European nations witnessed an utter transformation of their world. The relations of person to the nation, to the state, to history, and the physical world were rethought from top to bottom. Our exploration of modern ideas will take us from rationalism to racism, and from utopian ideologies to the birth of psychoanalysis.

### **HISTORY 417 / GERMAN 402.**

#### **Twentieth-Century German and European Thought**

*(3). May not be repeated for credit. Taught in English. German concentrators must be concurrently enrolled in GERMAN 404.*

This course will present a survey of the principal European intellectual movements of the twentieth century. We shall examine the interplay of political and cultural movements, and pay consistent attention to the difficulty of self-definition of the intellectual within rapidly changing social and cultural contexts. Socialism, Liberalism, Fascism, Surrealism, Existentialism, Cultural Marxism, Structuralism, Feminism, and Post-structuralism.

### **HISTORY 421 / AAS 421 / LACS 421 / RELIGION 421. Religions of the African Diaspora**

*(3). (R&E). May not be repeated for credit. Rackham credit requires additional work.*

Conceptualizes "diaspora" and introduces Brazilian Candomble, Cuban Santeria and Palo Monte, Haitian Vodou, Jamaican and globalized Rastafari, the ancestor religion of the Garifuna of Central America, and Afro-Indian practices in Trinidad. Studies

of historical development as well as contemporary practice will be used.

### **HISTORY 424 / ASIAN 424. Topics in Modern South Asian History**

*(3 - 4; 3 in the half-term). May be elected three times for credit. May be elected more than once in the same term. Rackham credit requires additional work.*

This topics course explores themes in modern South Asian history, allowing for a deeper engagement at a thematic level rather than chronological. Students are asked to examine modern South Asian history through an analysis of both primary and secondary sources.

### **HISTORY 427 / ISLAM 422 / MIDEAST 422 / RELIGION 467. The History of Shi'ism: Drama, Ritual, and Memory**

*Junior standing or permission of instructor. (3). May not be repeated for credit.*

The course will survey the history of diverse Alid movements from the assassination of Ali (d.661) to the crystallization of shi'ism into distinct political, legal and theological schools (Twelver, Isma'ili, Zaydi), and ends with the establishment of Twelver Shi'ism as an imperial religion in Safvi Iran (1501-1722). Emphasis on the debate over authority.

### **HISTORY 428 / MIDEAST 413. The Rise of Islam**

*Junior standing or permission of instructor. Taught in English. (3). May not be repeated for credit.*

The Near East and eastern Mediterranean world in late antiquity; Muhammad and the formation of Islam; the early Islamic empire at its heights.

### **HISTORY 429 / MIDEAST 432 / RELIGION 496 / WGS 471.**

#### **Gender and Sexuality in Pre-Modern Islam**

*Students should preferably have had one course in Islamic Studies. (3). May not be repeated for credit.*

An introduction to Muslim understanding of gender and gender relations, first through a study of those sacred texts (Qur'an and Hadith) that came to define the ideal woman and man, as well as their roles and relationships. Then, gender participation in the political and cultural life of the Safavi, Ottoman and Mughal Courts shall be explored to view the interplay between theory and practice.

**HISTORY 430 / ANTHRCUL 430 / MIDEAST 480. History, Memory, and Silence in the Middle East**

*(3). May not be repeated for credit.*

This senior/graduate seminar is an exploration in the anthropological approaches to the study of history and memory. It introduces and problematizes the concept of 'silence' in the ethnographic practices of history such as the silences of the empty archives, the ruptured oral historical accounts, and the fragments left behind by past events. Taking the demise of the Ottoman Empire as a starting point, the readings focus on minorities, refugees, and genocide survivors to probe into the history, historiography, and historicity that trace the lived experiences, mundane lives, and emotions of such marginal populations, underrepresented groups, undocumented individuals, and in-archived events. We take the creation of ethno-religious nation-states in the Middle East and the Balkans to navigate the following questions: How do we trace and represent the past in the aftermath of violence and destruction? How do historians and anthropologists conduct their research when the evidence is destroyed? Ultimately, what constitutes an 'evidence' for history, and how could we entertain material and immaterial remnants

of the past to rethink our understanding of the 'archive'? Overall, the seminar invites participants to think of the role of historians and anthropologists as storytellers who are perpetually struggling with the politics of representation of the past. Second, we read ethnographies as genre of writing history with an eye on texts, research methods, and theories employed. The readings are anchored on the ethnography of Middle East and North Africa, with a comparative reference to the post-Ottoman Balkans. We take the Armenian genocide and the politics of its historiography, commemoration, and denial as a case study.

**HISTORY 432. Medieval and Early Modern Russia**

*(3). May not be repeated for credit.*

History of Russia from prehistoric origins to the beginning of the 18th century.

**HISTORY 433. Russia Under the Tsars: From Peter the Great to the Revolutions of 1917**

*(3). May not be repeated for credit.*

History of Imperial Russia, from the beginning of the 18th century to the Revolution, with emphasis on the problems of modernization, political institutions, economic development, and the revolutionary movement.

**HISTORY 434 / POLSCI 434. Russia/USSR in the 20th and 21st Centuries: War, Revolution, and Reform**

*(4). May not be repeated for credit. W.*

History of the political, social, economic and intellectual forms of Bolshevism, as they developed in pre-revolutionary Russian society, and as they applied in domestic and foreign policies after 1917.

**HISTORY 437 / ASIAN 407. Drug Lords, Prophets, and Adventurers: East Asia in the Age of Global Empire**

*(3). May not be repeated for credit.  
Rackham credit requires additional work.*

Following China's defeat in the Opium war 1839-42, the Sino-British Treaty of Nanjing opened the first "treaty ports" in East Asia, which have left a complex and contentious legacy. On one hand, the treaty ports in many ways defined the urban experience and most of the ports developed into islands of prosperity. On the other hand, the treaty ports were bastions of foreign privilege and influence. This course will explore the treaty ports by reading both "classical" and more recent scholarship as well as selected primary sources in English. While the primary focus will be on China, Japanese and Korean treaty ports will also be discussed where applicable. The course will be both thematically and chronologically organized, and it will mainly cover the years 1790-1950.

**HISTORY 440 / AMCULT 440.  
American Thought and Culture Since  
1940**

*(3). May not be repeated for credit.  
Rackham credit requires additional work.*

This course explores some of the most significant trends of intellectual life in the United States (and to an extent, trends in the "high" and "popular" arts as well) from around 1940 to the present. We begin as the Second World War had commenced in Europe and debate within the U.S. dwelled on whether this nation would enter that struggle. Two key sets of ideas accompanied that political debate: the meaning of democracy in relation to the newly "discovered" phenomenon of "totalitarianism," and the nature of U.S. power in the world at large in the context and anticipated aftermath of war (or, the character of an "American Century").

**HISTORY 441. Topics in History:  
HistoryLabs 1**

*(3). May not be repeated for credit.*

This course examines an aspect or topic in history through project-based explorations of primary and secondary materials, often done collaboratively in teams.

**HISTORY 443 / ISLAM 443 / MIDEAST  
487. Modern Middle East History**

*(4). May not be repeated for credit.*

Impact of the West on the Islamic Near East in the nineteenth and twentieth centuries. Emphasis is on the modernization of the Ottoman Empire and Republican Turkey and Egypt, the rise of the Arab and Zionist nationalisms and the subsequent Arab-Israeli dispute, and inter-Arab and international rivalries to the present.

**HISTORY 445. Topics in History**

*(3). May be elected three times for credit.*

This course is meant to examine an aspect, to be designated in the section title, of select topics in history not covered under a specific country or time period.

**HISTORY 446. Social and Intellectual  
History of Modern China**

*(3). May not be repeated for credit.*

Analysis of such topics as: the agrarian basis of Chinese society, the formation of elites, political integration, impact of imperialism, emergence of nationalism, the new intelligentsia and the problem of identity, the role of military power, Marxism-Leninism in China, peasant revolution, problems of economic development.

**HISTORY 449. Topics in Middle Eastern  
History**

*(3). May not be repeated for credit.*

**HISTORY 450 / ASIAN 450. Japan to  
1700: Origin Myth to Shogun Dynasty**

*(3). May not be repeated for credit.  
Rackham credit requires additional work.*

This course discusses the history of Japan from prehistoric times to the final, unified Samurai polity. Topics include the rise of the imperial family, changing gender relations, multi-belief system, economic developments, samurai's legal culture and violence.

**HISTORY 451 / ASIAN 451. Japan's Modern Transformations**

*(3). May not be repeated for credit.*

An exploration of the transformation of Japan from a semi-feudal state to a world economic power, with emphasis on the diversity and conflict that has shaped Japan's modern history.

**HISTORY 454 / AMCULT 353 / ASIANPAM 353. Asians in American Film and Television**

*(4; 3 in the half-term). (ID). (R&E). May not be repeated for credit.*

This course will examine how film and television have reflected and shaped Asian culture and identity in American history. Through screenings of feature films and documentaries produced by Asian Americans and non-Asians, we will study the shifting representations of Asians across historical periods from the 19th century to the present.

**HISTORY 457. The History of Colonial India**

*(3). May not be repeated for credit.  
Rackham credit requires additional work.*

This course covers the decline of Mughal power, the warfare and negotiations that produced diverse and vibrant regional states, and ultimately the establishment of the world's longest and deepest example of modern European colonialism, the British Indian Empire. Topics include the cultural

transformations of the 18th century, the structure and ideology of British rule, transformations in Indian society and culture through the high colonial period, and the emergence of a new public life, including movements for social and religious reform, as well as the beginnings of the nationalist movement.

**HISTORY 460. Colonial America**

*(3). May not be repeated for credit.*

**HISTORY 461 / AMCULT 462. The American Revolution**

*(4; 3 in the half-term). May not be repeated for credit. Rackham credit requires additional work.*

An analysis of the causes, consequences and nature of the American Revolution.

**HISTORY 463. Antebellum Society and the Civil War**

*(3). May not be repeated for credit. W.*

This course focuses on antebellum society and the American Civil War from roughly 1830-1860(65). Issues such as antebellum political changes, social developments, economic trends, and the impact of the Civil War are considered.

**HISTORY 466. Building American Empire: War, Politics, and Social Reform in the US, 1901-1950**

*(4). May not be repeated for credit.  
Rackham credit requires additional work.*

This course provides an in-depth look at the period from 1901, when Theodore Roosevelt, a bold proponent of the United States taking its place among the great empires of his time, assumed the presidency, to 1950, when the cold war was in full gear. It concerns the rise of the United States from industrial powerhouse to an unparalleled world power managing a limited welfare state at home. How did the combination of two world wars and two

waves of social reform (Progressivism and the New Deal) lead to that result?

**HISTORY 469. Precolonial Southeast Asia**

*(3). May not be repeated for credit.*

This course examines the history of Southeast Asia from the early first millennium to the early 19th century. It covers both mainland and island Southeast Asia and explores the interconnection between political, institutional, cultural and economic developments.

**HISTORY 470 / ASIAN 464 / RELIGION 464. From Mystic Saints to Holy Warriors: Islam in Southeast Asia**

*(3). May not be repeated for credit.  
Rackham credit requires additional work.*

Islam has taken many forms in Southeast Asia: from the sometimes otherworldly mysticism of Sufi saints to the hard-liner Islamist agendas of some contemporary jihadists. This course is an interdisciplinary exploration of these various forms of Islamic expression, viewing them through the lenses of history, culture, politics, and film.

**HISTORY 472. Topics in Asian History**

*(3). May be elected three times for credit.*

This course is meant to examine an aspect, to be designated in the section title, of topics in Asian history.

**HISTORY 473 / AAS 473 / LACS 483. Brazil: History and Culture**

*(3). May not be repeated for credit.  
Rackham credit requires additional work.*

This course examines the history of Brazil, focusing on literature and performance as expressions of the national or regional cultural identities, with particular attention to racial categories and African heritage. Topics include: indigenous societies and

responses to European invasion; slavery and paternalism; religious expression; and the ways that racial and ethnic identification has inspired much of Brazil's unique cultural production. When possible, we will include various ways of learning about cultural expression, incorporating interdisciplinary sources such as fiction, archival documents, testimony, ethnography, recorded music, and dance/movement.

**HISTORY 474. From Colonial Saint-Domingue to Independent Haiti: History and Culture of an Exceptional Colonial and Post-Colonial Territory**

*(3). May not be repeated for credit.*

Haiti is a country in the midst of a political and human crisis, the sheer extent of which became visible to the world in the aftermath of the tragic earthquake in 2010. This is quite a contrast with the country whose independence was the result of the first and only successful slave revolution in the New World. The stark disconnect between the hope of two centuries ago and the contemporary situation can only be understood by revisiting Haiti's long history. Throughout its history, Haiti strove for democracy, but was blocked at every turn, either undermined by internal conflicts, a lengthy occupation by the United States, or dependence on international intervention. And yet this nation has given rise to a wonderful culture and extraordinarily dynamic diaspora. In this class we will try and understand this long and complicated history and discover some of the many intellectual and artistic achievements that mark it.

**HISTORY 476 / BA 476. American Business History**

*Junior, senior, or graduate standing. (3).  
May not be repeated for credit.*

In this course, the origins, the development, and the growth of businesses are studied.

The course traces the beginnings of American business enterprise from Europe and describes business activities during the American colonial, revolutionary, and pre-Civil War periods. It then discusses economic aspects of the Civil War, post-civil War industrial growth, business consolidation and the antitrust movement, economic aspects of World War I, business conditions during the 1920s, effects of the 1929 depression and the New Deal upon business, economic aspects of World War II, post-war business developments, the crash of 2007-2008 and some current business trends. The topics are enlivened by discussions of business personalities.

**HISTORY 477. Law, History, and the Dynamics of Social Change**

*(2 - 3). May not be repeated for credit.*

This is a topics course to cover different emphases on the interplay of juridical activity with the domain of social action. In some instances the focus will be on the roots of litigation and the evidence generated by it. In other cases, the course may explore practices of courts and key Supreme Court decisions, or various aspects of the links between ideology and jurisprudence.

**HISTORY 478. Topics in Latin American History**

*(3). May not be repeated for credit.*

**HISTORY 481. Topics in European History**

*(3). May be elected three times for credit.*

This course is meant to examine an aspect, to be designated in the section title, of topics in European history.

**HISTORY 487. Conversions and Christianities in the Early Modern**

**World and Beyond**

*(3). May not be repeated for credit.*

This seminar investigates change, especially religious transformations and the ways in which people's allegiances and identities are and remain dynamic.

**HISTORY 489. Roman Catholicism and the Modern World**

*(4; 3 in the half-term). May not be repeated for credit.*

This course explores the history of the Roman Catholic Church from the late 18th century to the present day, encompassing everything from the twists and turns of vatican politics to developments in Catholic theology and doctrine.

**HISTORY 490. The Left in Europe: Democracy and its Horizons, 1789-2014**

*(3). May not be repeated for credit.*

*Rackham credit requires additional work.*

This course explores the character, boundaries, potentials, and limitations of the Left as a distinct set of political traditions, approaching these not just as a history of doctrines, programs, movements, and parties, but as a shifting political space of thought and action between the great French Revolution of 1789-94 and the present.

**HISTORY 491. Topics in History: HistoryLabs 2**

*(3). May not be repeated for credit.*

This course examines an aspect or topic in history through project-based explorations of primary and secondary materials, often done collaboratively in teams. This course can be used to satisfy the History colloquium requirement for History majors. See the Course Guide for specific term offerings.

**HISTORY 495. The World the Mongols Made**

*(3). May not be repeated for credit. Rackham credit requires additional work.*

This course is about the rise of the Mongol enterprise and the global history that the Mongols created. Coverage includes the nature of nomadic society, the creation of Chinggis Khan's empire, the spread of that empire from China to Hungary, and the long-term impact of the Mongols on religion, politics, medicine, cuisine, neighboring societies, and a new notion of the world.

**HISTORY 496. History Colloquium**

*Consent of department required. HISTORY 202. (4; 3 in the half-term). May be repeated for a maximum of 8 credits.*

Intensive examination of historical problems of limited scope either as delimited historical events (e.g., the French Revolution) as single analytical themes developed over time (e.g., urbanization in America), or as problems in the philosophy of history (e.g., objectivity, determinism). Classes of twenty students or less are designed to exploit an educational setting unlike that of the large lecture course. Major stress on critical reading and class discussion. Designed to meet the Upper-Level-Writing Requirement.

**HISTORY 497. History Colloquium**

*Consent of department required. HISTORY 202. (4; 3 in the half-term). May be repeated for a maximum of 8 credits.*

Intensive examination of historical problems of limited scope either as delimited historical events (e.g., the French Revolution) as single analytical themes developed over time (e.g., urbanization in America), or as problems in the philosophy of history (e.g., objectivity, determinism). Classes of twenty students or less are

designed to exploit an educational setting unlike that of the large lecture course. Major stress on critical reading and class discussion.

**HISTORY 498. Junior Honors Colloquium**

*Consent of instructor required. Honors students; junior standing, and permission of instructor. (4; 3 in the half-term). May not be repeated for credit.*

Studies in historical philosophy, and the studies of historical writing. Readings, reports, and discussions related to the senior thesis project. Provides a rigorous introduction to historical research in general and Honors thesis topics and research in particular.

**HISTORY 499. Senior Honors Colloquium**

*Consent of instructor required. Honors students, HISTORY 498, senior standing. (1 - 6). (INDEPENDENT). May be repeated for a maximum of 6 credits.*

This year-long course is a writing workshop for all seniors writing a History Honors thesis. It concentrates on practical and theoretical problems of research and writing with special reference to methodological questions.

**Honors Program (HONORS)****HONORS 135. Ideas in Honors**

*First-year standing in the Honors Program. (1). May be elected twice for credit. May be elected more than once in the same term. Offered mandatory credit/no credit.*

HONORS 135 will be seminar-style course with multiple sections of 15 first-year students each. Senior Honors students will engage the class in discussions on issues



that have arisen from research and reading in the concentration.

**HONORS 170. Navigating Honors: Honors First-year Experience**

*Consent of department required. (1). May not be repeated for credit. No credit granted to those who have completed or enrolled in ALA 171. Offered mandatory credit/no credit.*

This minicourse helps incoming Honors students make the most of opportunities available through the U-M LSA Honors Program. Topics range from skill development (e.g., time management) to educational and personal growth (e.g., embracing diversity in all settings). Students reflect on their own perspectives, contribute to the exchange of ideas in person and across communication platforms, and develop strategies for growth and well-being in LSA Honors.

**HONORS 210. Honors Core Quantitative (QR/1) SS**

*Consent of department required. (4). (SS). (BS). (QR/1). May be elected twice for credit. May be elected more than once in the same term.*

As part of the Honors Core Curriculum, this course introduces Honors students to the fields, questions, meta-questions, and methodologies of the Social Sciences. The course uses contemporary technology and time-honored methodologies to examine theoretical concepts, problems, and case studies; the course focuses on quantitative methods pursued in the Social Sciences.

**HONORS 212. Honors Core Quantitative (QR/1) NS**

*Consent of department required. (4). (NS). (BS). (QR/1). May be elected twice for credit. May be elected more than once in the same term.*

As part of the Honors Core Curriculum, this course introduces Honors students to the fields, questions, meta-questions, and methodologies of the Natural Sciences. The course uses contemporary technology and time-honored methodologies to examine theoretical concepts, problems, and case studies; the course focuses on quantitative methods pursued in the Natural Sciences.

**HONORS 220. Honors Core Quantitative (QR/2) SS**

*Consent of department required. (4). (SS). (QR/2). May be elected twice for credit. May be elected more than once in the same term.*

As part of the Honors Core Curriculum, this course introduces Honors students to the fields, questions, meta-questions, and methodologies of the Social Sciences. The course uses contemporary technology and time-honored methodologies to examine theoretical concepts, problems, and case studies; the course focuses on quantitative methods pursued in the Social Sciences.

**HONORS 222. Honors Core Quantitative (QR/2) NS**

*Consent of department required. (4). (NS). (BS). (QR/2). May be elected twice for credit. May be elected more than once in the same term.*

As part of the Honors Core Curriculum, this course introduces Honors students to the fields, questions, meta-questions, and methodologies of the Natural Sciences. The course uses contemporary technology and time-honored methodologies to examine theoretical concepts, problems, and case studies; the course focuses on quantitative methods pursued in the Natural Sciences.

**HONORS 230. Honors Core in Social Science**

*Consent of department required. (4). (SS).*

*May be elected twice for credit. May be elected more than once in the same term.*

As part of the Honors Core Curriculum, this course introduces Honors students to the fields, questions and meta-questions, and methodologies of the Social Sciences. The course uses both contemporary technology and time-honored methodologies to examine theoretical concepts, problems, and case studies; the course uses a variety of formats and strategies.

**HONORS 231. Honors Core in Humanities**

*Consent of department required. (4). (HU). May be elected twice for credit. May be elected more than once in the same term.*

As part of the Honors Core Curriculum, this course introduces Honors students to the fields, questions and meta-questions, and methodologies of the Humanities. The topics vary, but all are extra-disciplinary in approach, providing a broad but rigorous investigation of the humanities.

**HONORS 232. Honors Core in Natural Science**

*Consent of department required. (4). (NS). (BS). May be elected twice for credit. May be elected more than once in the same term.*

As part of the Honors Core Curriculum, this course introduces Honors students to the fields, questions and meta-questions, and methodologies of the Natural Sciences. The topics vary, but all are extra-disciplinary in approach, providing a broad but rigorous investigation of the natural sciences.

**HONORS 233. Honors Core in Interdisciplinary Studies**

*Consent of department required. (4). (ID). May be elected twice for credit.*

As part of the Honors Core Curriculum, this course introduces students to questions, meta-questions, and methodologies of

multiple disciplines across divisions. This course uses contemporary technology and time-honored methodologies to examine theoretical concepts, problems, and case studies. It emphasizes critical thinking, team-based intellectual work, and the analytic skills characteristic of each discipline.

**HONORS 240. Honors Core Writing in Social Science**

*Consent of department required. (4). (SS). (FYWR). May be elected twice for credit. May be elected more than once in the same term.*

As part of the Honors Core Curriculum, this course introduces Honors students to academic writing while engaging with the fields, questions and meta-questions, and methodologies of the Social Sciences. The topics vary, but all are extra-disciplinary in approach, providing a broad but rigorous investigation of the social sciences.

**HONORS 241. Honors Core Writing in Humanities**

*Consent of department required. (4). (HU). (FYWR). May be elected twice for credit. May be elected more than once in the same term.*

As part of the Honors Core Curriculum, this course introduces Honors students to academic writing while engaging with the fields, questions and meta-questions, and methodologies of the Humanities. The topics vary, but all are extra-disciplinary in approach, providing a broad but rigorous investigation of the humanities.

**HONORS 242. Honors Core Writing in Natural Science**

*Consent of department required. (4). (NS). (FYWR). (BS). May be elected twice for credit.*

As part of the Honors Core Curriculum, this course introduces Honors students to

academic writing while engaging with the fields, questions and meta-questions, and methodologies of the Natural Sciences. The topics vary, but all are extra-disciplinary in approach, providing a broad but rigorous investigation of the natural sciences.

**HONORS 250. Honors Social Sciences Seminar**

*Open to all Honors students. (3). (SS). May be elected twice for credit.*

Honors seminars put students in close contact with faculty members while they jointly explore a topic of substantial intellectual importance. They are not meant to serve as full introductions to their fields, but rather as windows or lenses through which to view a subject or area of inquiry. These seminars also include explicit discussion and study of methodology, theory, and critical perspectives.

**HONORS 251. Honors Humanities Seminar**

*Open to Honors students. May be repeated for credit with permission of department. (3). (HU). May be elected twice for credit. May be elected more than once in the same term.*

Honors seminars put students in close contact with faculty members while they jointly explore a topic of substantial intellectual importance. They are not meant to serve as full introductions to their fields, but rather as windows or lenses through which to view a subject or area of inquiry. These seminars also include explicit discussion and study of methodology, theory, and critical perspectives.

**HONORS 252. Honors Natural Sciences Seminar**

*Open to Honors students. (3). (NS). (BS). May be elected twice for credit.*

Honors seminars put students in close contact with faculty members while they

jointly explore a topic of substantial intellectual importance. They are not meant to serve as full introductions to their fields, but rather as windows or lenses through which to view a subject or area of inquiry. These seminars also include explicit discussion and study of methodology, theory, and critical perspectives.

**HONORS 290. Honors Introduction to Research**

*Consent of instructor required. Junior or Senior honors program. (1 - 4). (INDEPENDENT). May be repeated for a maximum of 8 credits. F, W, Sp, SS, Su.*

The opportunity is created to enable highly qualified underclassmen to elect a course for independent guided study under the direction of a professor.

**HONORS 291. Honors Introduction to Scientific Research**

*Consent of instructor required. Open to Honors students. Permission of instructor. (1 - 4). (INDEPENDENT). May be repeated for a maximum of 8 credits. F, W, Sp, SS, Su.*

**HONORS 292. Honors Introduction to Scientific Research**

*Consent of instructor required. Permission of the Honors Program. (1 - 4). (INDEPENDENT). May be repeated for a maximum of 8 credits.*

Students, working under close supervision of a faculty member either on their own or in a laboratory group, learn basic research and lab techniques.

**HONORS 309 / GERMAN 309 / JAZZ 309 / RCHUMS 307. Imagination**

*(3). (HU). May not be repeated for credit.*

The Romantics made major claims for imagination: that it was both an artistic and cognitive faculty. This seminar will begin by considering both the structure of the

Romantic literary imagination and the Romantic theory of knowledge and will conclude by investigating Freud's Interpretation of Dreams as a philosophy of aesthetic imagination. Taught in English.

**HONORS 354 / AAS 354 / RCHUMS 354 / WGS 354. Race and Identity in Music** (3). (HU). (R&E). May not be repeated for credit.

This course explores the parameters of racial and ethnic identities in music; primarily but not exclusively in Western art music (commonly known as "classical music"). The focus is on understanding how racial and ethnic differences can be portrayed musically. Case studies are drawn from the late eighteenth century through the present with a strong emphasis on the nineteenth century and opera.

**HONORS 365 / PHYSICS 365 / SI 365. Cyberscience: Computational Science and the Rise of the Fourth Paradigm** Computing language course (e.g., EECS 183, 280, ENGR 101), Introductory statistics (e.g., Stats 250). (3). (NS). (BS). (QR/2). May not be repeated for credit.

This course invites students to understand the ways in which data-rich, compute-intensive, collaborative research drives discovery in the natural and social sciences. Through readings, activities, and discussion with invited guests, students will gain an appreciation of the opportunities and challenges posed by the fast-growing, interdisciplinary subject of data science.

**HONORS 390. Junior Honors Research** Consent of instructor required. Permission of the Honors Director. (1 - 4). (INDEPENDENT). May be repeated for a maximum of 8 credits. Continuing Course. Y grade can be reported at end of the first-term to indicate work in progress. At the end of the second term of HONORS 490, the

final grade is posted for both term's elections. F, W, Sp/Su, Sp, Su.

Supervised reading and research for Honors Juniors.

**HONORS 490. Senior Honors Research** Consent of instructor required. Open to upperclass Honors concentrators. Permission of instructor. (1 - 4). (INDEPENDENT). May be repeated for a maximum of 8 credits. Continuing Course. Y grade can be reported at end of the first-term to indicate work in progress. At the end of the second term, the final grade is posted for both term's elections. F, W, Sp/Su, Sp, Su.

Independent research under supervision of faculty. Includes preparation of undergraduate thesis.

**HONORS 493. College Honors Seminar** Consent of instructor required. Permission of instructor or of the Honors Director. (1 - 4). May be repeated for a maximum of 8 credits. W.

## Health Sciences (HS)

**HS 404 / WGS 404. Gender Based Violence: From Theory to Action** (2 - 3). May not be repeated for credit.

In this course we will examine gender based violence and the skills necessary to provide advocacy services to survivors. This course will introduce students to the roots of gender based violence, the social and cultural context in which it occurs, the mental and physical health impacts, justice and restitution frameworks, and will explore approaches to changing those structures in order to reduce or end it.

Students will develop the skills to think critically about the local and global impact of gender based violence, how it intersects with other forms of oppression, and to develop an understanding of these issues that will be useful intellectually, personally, and professionally.

## **Institute for the Humanities (INSTHUM)**

### **INSTHUM 211. Second-Year Seminar in Interdisciplinary Studies**

*(1 - 3). (HU). May not be repeated for credit.*

Seminar for second-year students in interdisciplinary field; to be taught by one of the Institute's resident Fellows or Visiting Fellows and will cross at least two fields of study.

### **INSTHUM 311. Topics in Interdisciplinary Studies**

*(1 - 4). (HU). May be repeated for a maximum of 10 credits. May be elected more than once in the same term.*

Seminar for advanced undergraduates in interdisciplinary studies; to be taught by one of the Institute's resident Fellows and will cross at least two fields of study.

### **INSTHUM 411. Topics in Interdisciplinary Studies**

*Advanced undergraduate standing. (1 - 4). May be repeated for credit.*

Seminar for advanced undergraduates in interdisciplinary field; to be taught by one of the Institute's resident Fellows and will cross at least two fields of study.

## **International Studies (INTLSTD)**

### **INTLSTD 101 / GEOG 145. Introduction to International Studies**

*(3). (SS). May not be repeated for credit.*

The purpose of this course is to explore the ways in which ideas, people, goods, services, diseases, and natural resources have flowed across political and cultural borders during human history, to examine the consequences of those flows, and to understand how an interest in these topics can be the basis of a professional career.

### **INTLSTD 170. International Studies Special Topics**

*(1 - 3). May be elected twice for credit. Offered mandatory credit/no credit.*

This course is intended to house interdisciplinary courses suitable for International Studies majors or courses with international content taught by non-LSA faculty from various units across the university.

### **INTLSTD 205 / HISTORY 101. What is History?**

*(4; 3 in the half-term). (HU). (R&E). May not be repeated for credit.*

This course provides an overview of the various approaches scholars take when studying the past. Students learn that "The Past" is not just lying there waiting to be uncovered, but must be interpreted and analyzed in ways that give meaning to our lives today.

### **INTLSTD 209 / HISTORY 209 / RELIGION 209. Death, Immortality, and Afterlife**

*(3). (ID). May not be repeated for credit.*

This course aims to answer this big question "What makes us human" by exploring the 'deep history' of humanity from prehistory to the present by exploring death as a universal phenomenon. It employs a multidisciplinary and multi-species approach by bringing history and the four sub-fields of anthropology in a conversation.

**INTLSTD 270. International Studies Special Topics**

*Students with a declared major/minor in International Studies. (Prerequisites enforced at registration.) (1 - 4). May be elected twice for credit.*

This course is intended to house interdisciplinary courses suitable for International Studies majors or courses with international content taught by non-LSA faculty from various units across the university.

**INTLSTD 301. Topics in International Studies**

*INTLSTD 101. (3 - 4). May be elected twice for credit. May be elected more than once in the same term.*

This course is a focused and in-depth investigation of global phenomena, with attention to human rights, human security (civil conflict, economic development, social welfare, and health care), and sustainable economic and ecological systems. Readings rely on multiple methods and disciplinary approaches. In the process of studying these global phenomena, students discuss the strengths of specific methods and disciplinary approaches in improving their understanding of issues and problems that cut across nation-state boundaries.

**INTLSTD 308 / MENAS 308 / MIDEAST 308. Conflict and Comics: Reframing the**

**Middle East**

*(3). (HU). May not be repeated for credit.*

How do comics--both as journalistic medium and as an autobiographical genre--portray politics, war, and revolution in the Middle East? Explore famous examples (Palestine and Persepolis) alongside lesser-known print and online comics.

**INTLSTD 351 / ASIAN 351 / ENVIRON 351. Chinese Food in Crisis: Health, Ecology, and Identity in an Age of Globalization**

*ASIAN 258, ASIAN 366, or coursework in Chinese Studies or Sustainability. (3). (ID). May not be repeated for credit.*

This course looks at the role that culinary globalization has played in reshaping the Chinese diet, along with its implications for health, the environment, and political identity.

**INTLSTD 370. International Studies: Special Topics**

*Consent of department required. (1 - 4). May be elected twice for credit. May be elected more than once in the same term.*

This course is intended to house interdisciplinary courses suitable for International Studies majors or courses with international content taught by non-LSA faculty from various units across the university.

**INTLSTD 384. International and/or Comparative Topics in the Humanities**

*INTLSTD 101. (1 - 4). (HU). May be repeated for a maximum of 10 credits. May be elected more than once in the same term.*

International and/or comparative topics in the Humanities; content and number of credits varies by term and instructor.

**INTLSTD 385. International and/or Comparative Topics in the Social**

## **Sciences**

*INTLSTD 101. (1 - 4). (SS). May be repeated for a maximum of 10 credits. May be elected more than once in the same term.*

International and/or comparative topics in the Social Sciences.

### **INTLSTD 386. Topics in International Security, Norms and Cooperation**

*CICS 101 or INTLSTD 101. (Prerequisites enforced at registration.) CICS 301 or INTLSTD 301. (3 - 4). May be elected twice for credit. May be elected more than once in the same term.*

This course will focus on topics in international security, norms and cooperation.

### **INTLSTD 387. Topics in Global Environment and Health**

*CICS 101 or INTLSTD 101. (Prerequisites enforced at registration.) CICS 301 or INTLSTD 301. (3 - 4). May be elected twice for credit. May be elected more than once in the same term.*

This course will cover topics in global environment and health.

### **INTLSTD 388. Topics in Political Economy and Development**

*CICS 101 or INTLSTD 101. (Prerequisites enforced at registration.) CICS 301 or INTLSTD 301. (3 - 4). May be elected twice for credit. May be elected more than once in the same term.*

This course will focus on topics in political economy and development.

### **INTLSTD 389. Topics in Comparative Culture and Identity**

*CICS 101 or INTLSTD 101. (Prerequisites enforced at registration.) CICS 301 or INTLSTD 301. (3 - 4). May be elected twice for credit. May be elected more than once in the same term.*

This course will focus on topics in comparative culture and identity.

### **INTLSTD 390. Designing Research in International Studies**

*Consent of instructor required. Completion of INTLSTD 101 and the ISNC, PED, CCI, or GEH Methods Requirement. (3). May not be repeated for credit.*

This course aims to (1) expose students to conducting academic research in the social sciences and humanities and (2) provide students with the tools for identifying a problem, formulating an appropriate methodological approach to the problem, and proposing an outline for an argument. This course is recommended for students applying to the International Studies Honors Plan.

### **INTLSTD 391. Directed Studies**

*Consent of department required. (1 - 4). (INDEPENDENT). May be elected three times for credit.*

This course will allow students to pursue independent study and/or gain research experience under the direction of a faculty member.

### **INTLSTD 399. International Studies Undergraduate Internship**

*Consent of department required. INTLSTD 170. (1 - 4). (EXPERIENTIAL). (INDEPENDENT). May be elected twice for credit. Offered mandatory credit/no credit.*

An international internship experience provides International Studies students with the opportunity to explore career interests while integrating practical experience gained in their field with classroom knowledge.

### **INTLSTD 401. International Studies Advanced Seminar**

*Junior standing or above. (Prerequisites enforced at registration.) (3 - 4). May be elected twice for credit.*

This course is an advanced seminar designed to bring an interdisciplinary perspective to the study of a topic of international significance.

**INTLSTD 470. International Studies: Special Topics**

*Consent of department required. (1 - 4). May be elected twice for credit. May be elected more than once in the same term.*

This course is intended to house interdisciplinary courses suitable for International Studies majors or courses with international content taught by non-LSA faculty from various units across the university.

**INTLSTD 486. Advanced Topics in International Security, Norms and Cooperation**

*CICS 101 or INTLSTD 101. (Prerequisites enforced at registration.) CICS 301 or INTLSTD 301. (3 - 4). May be elected twice for credit.*

This course will focus on advanced topics in international security, norms and cooperation.

**INTLSTD 488. Advanced Topics in Political Economy and Development**

*CICS 101 or INTLSTD 101. (Prerequisites enforced at registration.) CICS 301 or INTLSTD 301. (3 - 4). May be elected twice for credit.*

This course will focus on advanced topics in Political Economy and Development.

**INTLSTD 489. Advanced topics in Comparative Culture and Identity**

*CICS 101 or INTLSTD 101. (Prerequisites enforced at registration.) CICS 301 or*

*INTLSTD 301. (3 - 4). May be elected twice for credit.*

This course will focus on advanced topics in comparative culture and identity.

**INTLSTD 491. Directed Studies**

*INTLSTD 101 and Permission of Instructor and the Director. (Prerequisites enforced at registration.) CICS 301 or INTLSTD 301. (2 - 4). (INDEPENDENT). May be elected twice for credit.*

This course will allow students to pursue independent study and/or gain research experience under the direction of a faculty member.

**INTLSTD 498. Senior Honors Proseminar**

*International Studies Senior Honors Majors only. (Prerequisites enforced at registration.) (3). May not be repeated for credit.*

Students develop a substantial portion of their honor's thesis taking this course.

**INTLSTD 499. Senior Honors Proseminar**

*International Studies Senior Honors majors who have completed CICS 498 or INTLSTD 498. (Prerequisites enforced at registration.) (3). May not be repeated for credit.*

After taking CICS 498 in Fall term, students complete their honor's thesis in Winter term.

## **Internal Medicine (INTMED)**

**INTMED 409 / MCDB 409 / MICRBIOL 409. Investigational and Experimental**



## **Bacteriology**

*Biology 207 AND concurrent enrollment in or previous completion of ONE of the following courses: Micrbiol 405, Micrbiol 430, Intmed460/Micrbiol 460; or instructor permission. (Prerequisites enforced at registration.) (4). (BS). May not be repeated for credit.*

This course will study bacteriology at multiple levels. Topics include microbial ecology, biochemistry, genomics, epidemiology, applications and pathogenesis. The course will use an active learning approach for individual and group projects that encompasses didactic, discussion, primary literature review, data analysis and problem-solving formats.

### **INTMED 460 / MICRBIOL 460.**

#### **Eukaryotic Microbiology**

*BIOLOGY 172. (3). (BS). May not be repeated for credit. Rackham credit requires additional work.*

This upper level undergraduate course will cover the biology of eukaryotic microbes and the environments in which they live. Eukaryotic microbes include single-celled protozoa, multi-cellular helminths (worms), and fungi. This course will cover the complex life cycles (intermediate hosts, insect vectors) required for survival of many protozoa and helminths. Eukaryotic microbes are also a significant cause of human disease throughout the world (e.g. Malaria, Leishmaniasis, Trypanosomiasis, Giardiasis, Histoplasmosis, Blastomycosis). We will examine the evolutionary relationship between eukaryotic pathogens and their mammalian hosts, including the complex relationship between host immunity and pathogen immunoevasion. We will also discuss the renewed interest in Neglected Tropical Diseases (NTDs). NTDs are a group of diseases causing substantial illness in more than one billion people

globally. The most common NTDs include Lymphatic Filariasis (Elephantiasis), Onchocerciasis (River Blindness), Schistosomiasis, Soil-Transmitted Helminths, and Dracunculiasis (Guinea Worm Disease).

## **Industrial and Operations Engineering (IOE)**

### **IOE 265. Probability and Statistics for Engineers**

*MATH 116 and ENGR 101 with a grade of at least a C-. (Prerequisites enforced at registration.) (4). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in STATS 250, 280, 400, 405, or 412, or ECON 404 or 405.*

Graphical representation of data; Axioms of Probability; Conditioning, Bayes Theorem; Discrete Distributions (Geometric, Binomial, Poisson); Continuous Distributions (Normal, Exponential, Weibull); Covariance and Correlation; Point and Interval Estimation, Likelihood Functions, Test of Hypotheses for Means, Variances, and Proportions for One and Two Populations.

### **IOE 466 / MFG 466. Statistical Quality Control**

*STATS 401 or IOE 366, (completed with a minimum grade of C- or better); or graduate standing. (Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit.*

Quality Improvement Philosophies; Modeling Process Quality, Statistical Process Control, Control Charts for Variables and Attributes, CUSUM and

EWMQ, Short Production Runs, Multivariate Quality Control, Auto Correlation, Engineering Process Control, Economic Design of Charts, Fill Control, Precontrol, Adoptive Schemes, Process Capability, Specifications and Tolerances, Gage Capability Studies, Acceptance Sampling by Attributes and Variables, International Quality Standards.

**IOE 510 / MATH 561 / TO 518. Linear Programming I**

*MATH 217, 417, or 419. (3). (BS). May not be repeated for credit. F, W, Sp.*

Formulation of problems from the private and public sectors using the mathematical model of linear programming. Development of the simplex algorithm; duality theory and economic interpretations. Postoptimality (sensitivity) analysis application and interpretations. Introduction to transportation and assignment problems; special purpose algorithms and advanced computational techniques. Students have opportunities to formulate and solve models developed from more complex case studies and to use various computer programs.

**IOE 511 / MATH 562. Continuous Optimization Methods**

*MATH 217, 417, or 419. (3). (BS). May not be repeated for credit. F.*

Survey of continuous optimization problems. Unconstrained optimization problems: unidirectional search techniques; gradient, conjugate direction, quasi-Newton methods. Introduction to constrained optimization using techniques of unconstrained optimization through penalty transformations, augmented Lagrangians, and others. Discussion of computer programs for various algorithms.

## Islamic Studies (ISLAM)

**ISLAM 216 / MIDEAST 216 / RELIGION 204. Introduction to Islam**  
*(4; 3 in the half-term). (HU). May not be repeated for credit.*

This course provides a comprehensive introduction to Islam as a religious tradition. After examining the fundamental sources of Islam, particularly the Qur'an and the reports about the activities and sayings of the Prophet Muhammad, we will discuss how these foundations gave rise to the beliefs and practices of Muslims and to an Islamic civilization with spectacular achievements in such areas as law, theology, science, philosophy, and mysticism. Our emphasis will be on the first thousand years of Islam, but modern and recent developments will be covered as well.

**ISLAM 219 / GTBOOKS 246 / MIDEAST 219. Great Books of the Middle East**

*(3). (HU). May not be repeated for credit.*

This course explores the classics of Islamic literature, including scripture, poetry, theology, novels, and historical works written in Arabic, Persian and Turkish. The readings focus on two themes: justice, governance and the Islamic polity; and love, both mystical love for God and romantic love. We will study works that approach these themes from different historical, geographical and cultural perspectives, and that have proved to have global resonance - for a Muslim readership and beyond. All works read in English.

**ISLAM 241 / HISTORY 241. America and Middle Eastern Wars**

*(4). (SS). May not be repeated for credit.*

Briefly covers the 19th century background to the Great Power conflicts that erupted in

the early twentieth-century, including French, British, and Russian imperialism. The course then examines the way in which wars have shaped the emergence of modern nation-states in the Middle East. It treats World War I, the Arab Revolt, the Turkish War in Independence, World War II, the Arab-Israeli Wars of 1948, 1956, 1967, 1973, and 1982, the Algerian Revolution, the Lebanese Civil War, the Afghanistan War, the Iran Iraq War, the Gulf War, and the War with Iraq.

**ISLAM 243 / HISTORY 243 / MENAS 243. The Dawn of Islamic History**  
(4; 3 in the half-term). (HU). May not be repeated for credit.

This course offers neither a conspectus of Muslim religious beliefs and practices nor a comprehensive survey of the political expansion of Islamic states. Rather, by examining the role of Islam in world history through the five themes outlined below, it moves away from viewing Islam as a monolithic, timeless entity and instead explores its diverse pathways without privileging any single narrative or viewpoint. Ultimately, the course asks how useful the category of "Islam" is to understanding the global past. This course examines the history of Islam in its global dimensions and contexts through five key themes: 1. Islam as Religion; 2. Islam as Polity; 3. Islam as Cosmopolis; 4. Islam as Ideology; 5. Islam and Modernity.

**ISLAM 245 / AAS 245 / HISTORY 245. Islam in Africa**

*Students will receive no credit if previously taken as HISTORY 357, Topic 3 "Islam in Africa". (Prerequisites enforced at registration.) (3 - 4; 3 in the half-term). (HU). May not be repeated for credit.*

It is well known that Islam is the majority religion in Africa north of the Sahara. It is much less well known that today Islam may

be the most widely professed faith south of the desert, in what westerners have often called 'Black Africa', as well. Roughly 1/6th of the world's Muslim population can be found in sub Saharan Africa. This course will examine African Islamic history beginning with the earliest Muslim migrants from Arabia to Ethiopia in the early 7th century CE until the dawn of the 21st century.

**ISLAM 246 / ANTHRCUL 246 / RELIGION 246. Anthropology of Religion**

(4). May not be repeated for credit.

An introduction to basic problems faced by religions and by the study of religion. Draws on case studies from around the world to examine how people confront questions of life, death, evil, misfortune, and power. Also asks how the study of religion wrestles with relations between tolerance and faith.

**ISLAM 285 / HISTART 285 / MIDEAST 285. Visual Culture Islam**

(4). (HU). May not be repeated for credit.

We survey the arts in the Islamic world from Spain to India, 7th-19th centuries. Students study a limited selection of architectural monuments and luxury arts (books, paintings, objects) in light of the art historical and socio-economic parameters of their production and consumption. The visual culture also anchors our study of the spiritual and intellectual values of Islam and the formation and development of its distinctive culture idioms.

**ISLAM 290. Topics in Islamic Studies**

(1 - 4). May be elected three times for credit. May be elected more than once in the same term.

This course is intended for undergraduate students interested in global Islamic culture and Muslim societies worldwide.

**ISLAM 291. Social Science Topics in Islamic Studies**

*(1 - 4). (SS). May be elected three times for credit. May be elected more than once in the same term.*

This course is intended for undergraduate students interested in global Islamic culture and Muslim societies worldwide. Social Science topics will vary but may incorporate history, anthropology, communication or political science.

**ISLAM 292. Humanities Topics in Islamic Studies**

*(1 - 4). (HU). May be elected three times for credit. May be elected more than once in the same term.*

This course is intended for undergraduate students interested in global Islamic culture and Muslim societies worldwide. Humanities topics will vary but may incorporate history, literature, film or cultural studies.

**ISLAM 315 / MIDEAST 315. Introduction to Arab Culture**

*(4). (HU). (R&E). May not be repeated for credit.*

This course offers a broad mosaic survey of the cultural, historical, social, religious, political and ethnic diversity in the Arab world.

**ISLAM 317 / MIDEAST 317. Turkey in the 20th century: Modernity and the Politics of Culture**

*(3). (ID). May not be repeated for credit.*

Introduction to the culture, language, and society of modern Turkey with a special emphasis on the Turkish position between Europe and the middle East, and the Turkish project of modernity.

**ISLAM 318 / MEMS 318 / MIDEAST 318 / REES 318 / RELIGION 318. The**

**Church of Armenia: Profile of a National Institution**

*Upper-class undergraduates or graduate students. (3). (HU). May not be repeated for credit.*

This course highlights the introduction of Christianity to Armenia and rise of the Armenian Church as an independent institution, with Armenia's political, cultural, and social history as its background. Focal topics include the following: the Christian Armenian self-image as fashioned by the Church; the Church's relations with other churches and Islam; and the religious, cultural, social, and political administrative role, whether formal or informal, the Church played in Armenian realities.

**ISLAM 319 / HISTORY 306 / MIDEAST 319. History of the Ottoman Empire: The "Classical Age", (ca. 1300-1600)**

*Not available to students who have completed AAPTIS 291 (#16) or HISTORY 303 (# 10) when taught with the topic "Ten Sultans, One Empire: The Ottoman Classical Age". (Prerequisites enforced at registration.) (3). (HU). May not be repeated for credit.*

Using the reigns of the first ten Ottoman sultans as its structural/chronological basis, this course traces the history of the Ottoman Empire from its humble beginnings in the beginning of the 14th century to its grandeur under Suleyman "the Magnificent."

**ISLAM 320 / HISTORY 307 / MIDEAST 320. History of the Ottoman Empire: The "Post-Classical Age", (ca. 1600-1922)**

*Not available to students who have completed AAPTIS 291 (#17) or HISTORY 303 (# 13) when taught with the topic "The Ottoman Empire in the 'Post Classical Age'". (Prerequisites enforced at*

registration.) (3). (HU). May not be repeated for credit.

Commencing with an overview of the Ottoman "Classical Age" (ca. 1300-1600), this course will "trace the history of the Ottoman Empire from its grandeur under Suleyman the Magnificent" to its collapse in the first quarter of the 20th century.

**ISLAM 323 / MIDEAST 323. The Prophet Muhammad in Islam**

(3). (HU). May not be repeated for credit.

This course introduces students to the Islamic traditions about the life of the Prophet Muhammad, the basic historical and historiographical problems, the veneration of the prophet as a fundamental if non-cannonical part of Islam, and modern Muslim and western interpretation of his life and role in history.

**ISLAM 325 / ASIAN 324 / HISTORY 325 / MEMS 325 / MIDEAST 375 / RELIGION 325. The History of Islam in South Asia**

(4). (HU). (R&E). May not be repeated for credit.

This course examines the history of Muslim communities and institutions in South Asia. It will consider Muslim political expansion and sovereignty, conversion, the interaction between religious communities, Islamic aesthetics, the impact of colonial rule, India's partition and the creation of Pakistan, and the contemporary concerns of South Asia's Muslims.

**ISLAM 327 / MEMS 327 / MIDEAST 327. Shahnameh: Iranian Myth, Epic, and History**

(3). (HU). May not be repeated for credit.

This course is an introduction to Iranian myth, epic, and history through a close reading of the Shahnameh (Book of Kings), the foundational text of Persian classical

poetry and one of the major achievements in world literature.

**ISLAM 328 / MIDEAST 328. Peace and Nonviolence in Islamic Cultures**

MIDEAST 200. (3). (HU). May not be repeated for credit.

It's often assumed that Muslims today had no traditions of peace, and those assumptions in turn become the basis for misunderstanding and war against Muslims. This course questions that paradigm by exploring a spectrum of cultural ideas and practices that address conflict.

**ISLAM 330 / MIDEAST 330 / RCHUMS 330 / RELIGION 330. The Arabian Nights**

(3). (HU). May not be repeated for credit.

This course introduces students to the Arabian Nights in translation. Students have an opportunity to discuss the structures and the functions of narratives in society. We also focus on attitudes toward death, madness, and love. The course ends with the reception of the Nights in Euro-American contexts.

**ISLAM 335 / AMCULT 385 / HISTORY 335 / LATINOAM 385. Immigration Law: Critical Approaches to Contemporary Issues**

(3 - 4; 3 in the half-term). (SS). May not be repeated for credit.

This course assists students to develop an informed analysis of current immigration debates through investigation of the legislative and social history of immigration since the late 1880s, with an emphasis on issues of race, gender, and sexuality. Students develop legal history research skills and become familiar with the kinds of arguments made in history, sociology, and law journals, as well as media, legislatures, and courts.

**ISLAM 390. Topics in Islamic Studies**

*(1 - 4). May be elected three times for credit. May be elected more than once in the same term.*

This course is for undergraduate students interested in furthering their understanding of global Islamic culture and Muslim societies worldwide.

**ISLAM 391. Social Science Topics in Islamic Studies**

*(1 - 4). (SS). May be elected three times for credit. May be elected more than once in the same term.*

This course is intended for undergraduate students interested in furthering their understanding of global Islamic culture and Muslim societies worldwide. Social Science topics will vary but may incorporate history, anthropology, communication or political science.

**ISLAM 392. Humanities Topics in Islamic Studies**

*(1 - 4). (HU). May be elected three times for credit. May be elected more than once in the same term.*

This course is intended for undergraduate students interested in global Islamic culture and Muslim societies worldwide.

Humanities topics will vary but may incorporate history, literature, film or cultural studies.

**ISLAM 394 / HISTORY 394 / MIDEAST 376. History of the Turkish Republic**

*(3). (HU). May not be repeated for credit.*

Commencing with an overview of the 19th-century reform movements within the Ottoman Empire, this course traces the political, social, and economic history of Turkey from the establishment of the Turkish Republic in 1923 until today.

**ISLAM 418 / MIDEAST 418 / REEES 418 / RUSSIAN 418. Islam in/and Russia: Russia's Encounters with Islam and Muslims**

*(3). May not be repeated for credit.*

This course covers the complex history of Russia's encounters with Muslim communities and states within and outside its geographical and political borders. The topics include: Ivan the Terrible, recent wars in Chechnya and Dagestan, and attempts of the Russian government to manage, accommodate and integrate Muslim communities into new Russia.

**ISLAM 422 / HISTORY 427 / MIDEAST 422 / RELIGION 467. The History of Shi'ism: Drama, Ritual, and Memory**

*Junior standing or permission of instructor. (3). May not be repeated for credit.*

The course will survey the history of diverse Alid movements from the assassination of Ali (d.661) to the crystallization of shi'ism into distinct political, legal and theological schools (Twelver, Isma'ili, Zaydi), and ends with the establishment of Twelver Shi'ism as an imperial religion in Safvi Iran (1501-1722). Emphasis on the debate over authority.

**ISLAM 423 / MIDEAST 423 / RELIGION 423. Islamic Law/Shariah NEAREAST 216. (3). May not be repeated for credit.**

This course will introduce students to classical Islamic legal theory and some applications of positive law in the Sunni tradition. This will include an examination of such key issues as ijihad versus taqlid, the madhhab (or school of law), the legal responsum (fatwa), legal eclecticism, and the issue of legal change, stasis and borrowing.

**ISLAM 424 / MIDEAST 424 / RELIGION 461. Islamic Intellectual**

## **History**

*Taught in English. (3). May not be repeated for credit.*

A comparative study of Islamic Sufism, theosophy, philosophy, and dialectical theology, focusing on how these diverse fields - varying in methodology and purpose - have conceived of God and the relationship between him and the created world, especially the world of human beings.

### **ISLAM 428 / MIDEAST 428. Theology and Political Thought in Islam**

*MIDEAST 200 (NEAREAST 200).*

*(Prerequisites enforced at registration.)*

*MIDEAST 413, MIDEAST 417, or its equivalent. (3). May not be repeated for credit.*

This course is an in-depth survey of political ideology, statecraft, and political thought in the Islamic world, together with the intellectual discipline of theology. The course covers all of Islamic history, with focus on the first 4 or 5 centuries and the modern and contemporary eras.

### **ISLAM 430 / MIDEAST 430. History of Arabic Literature in English**

*(3). May not be repeated for credit.*

An introduction to the literary history of Arabic, from the earliest to modern times. Works in English translation will exemplify this literature which is drawn from poetry and prose. Lectures and class discussion will relate these writings to the societies, historical circumstances, and cultural values to which they give expression.

### **ISLAM 433 / MIDEAST 433 /**

### **WGS 496. Gender and**

### **Representation in the Modern Middle East**

*(3). May not be repeated for credit.*

An examination of the construction of gender as pertains to the contemporary Middle East (predominately but not exclusively the Arab Middle East) as found in a wide array of literary and cultural representations (fiction, travel accounts, photographs, painting, film) produced both in the Middle East and outside of it.

### **ISLAM 443 / HISTORY 443 / MIDEAST 487. Modern Middle East History**

*(4). May not be repeated for credit.*

Impact of the West on the Islamic Near East in the nineteenth and twentieth centuries. Emphasis is on the modernization of the Ottoman Empire and Republican Turkey and Egypt, the rise of the Arab and Zionist nationalisms and the subsequent Arab-Israeli dispute, and inter-Arab and international rivalries to the present.

### **ISLAM 490. Advanced Topics in Islam**

*(1 - 4). May be elected three times for credit. May be elected more than once in the same term.*

This course is intended for students interested in furthering their understanding of global Islamic culture and Muslim societies worldwide through advanced topics and current issues.

### **ISLAM 492 / HISTART 492. Modern Islamic Art and Visual Culture**

*(3). May not be repeated for credit.*

*Rackham credit requires additional work.*

This seminar explores the function and power of the image in practices of cultural, religious, and political expression in the modern and contemporary Islamic world. Various aspects of the visual are addressed through a study of paintings, art installations, posters, photographs, murals, graffiti, graphic novels, animated movies, and digital media.

## **Italian (ITALIAN)**

### **ITALIAN 101. Elementary Italian**

*No prior instruction in Italian language OR placement of ITALIAN 101. [No previous ITALIAN coursework, excluding ITALIAN 240, 250, 310, 311, 312, 313, 314, 315, 316, 317, 333, 358, 359, 415, 419] OR [By assignment of ITALIAN 100 or 101 by Placement Exam (Student Group IT01 or Placement score 01)]. (Prerequisites enforced at registration.) Students with any prior study of Italian must take the Placement Test. (4). May not be repeated for credit. No credit granted to those who are enrolled in have completed or are enrolled in ITALIAN 100, 103, or 113.*

This course is an introductory-level course designed to provide students with a basis to communicate effectively in Italian in everyday, realistic situations while practicing reading and writing skills.

### **ITALIAN 102. Elementary Italian**

*ITALIAN 101 (completed with a minimum grade of C- or better). College or university transfer students with any prior study of Italian must take the Placement Test. Only the placement score and not language coursework completed at a previous school will determine placement. (Prerequisites enforced at registration.) ITALIAN 102 is NOT open to students who have begun instruction at the high school level. College or university transfer students who have received credit for one term must take the placement test to determine the appropriate course for their needs. (4). May not be repeated for credit. No credit granted to those who have completed or are enrolled in ITALIAN 100 or 103.*

Introductory course presenting basic constructions and vocabulary. Oral drill and practice. Reading material based on contemporary Italian culture. Regular use of Language Laboratory

### **ITALIAN 113. Accelerated Reading in Italian**

*(4). May not be repeated for credit. No credit granted to those who have completed ITALIAN 100, 101, 102, or 103.*

Accelerated course designed to develop reading and translation competence in Italian.

### **ITALIAN 230. Second-Year Italian**

*ITALIAN 100 or 102 or 103 (completed with a minimum grade of C- or better); or assignment of ITALIAN 231 on placement test. College or university transfer students with any prior study of Italian must take the Placement Test. Only the placement score and not language coursework completed at a previous school will determine placement. (Prerequisites enforced at registration.) (8). (Lang Req). May not be repeated for credit. No credit granted to those who are enrolled in or have completed ITALIAN 113, 231, 232 or 233.*

The course is designed to provide insight into the culture of Italian-speaking peoples. Content-based themes develop cultural awareness and encourage students to formulate opinions on a variety of contemporary issues through reading, video, discussion, and writing.

### **ITALIAN 231. Second-Year Italian**

*ITALIAN 100 or 102 or 103, (completed with a minimum grade of C- or better); or assignment by placement test. College or university transfer students with any prior study of Italian must take the Placement Test. Only the placement score and not language coursework completed at a previous school will determine placement.*



*(Prerequisites enforced at registration.) (4). May not be repeated for credit. No credit granted to those who are enrolled or have completed ITALIAN 113, 230 or 233.*

This course is designed to further improve students' speaking, listening, reading, and writing skills. It also provides insight into Italian literature and culture through the reading of literary and journalistic prose.

**ITALIAN 232. Second-Year Italian, Continued**

*ITALIAN 231 (completed with a minimum grade of C- or better); or assignment by placement test. College or university transfer students with any prior study of Italian must take the Placement Test. Only the placement score and not language coursework completed at a previous school will determine placement. (Prerequisites enforced at registration.) (4). (Lang Req). May not be repeated for credit. No credit granted to those who are enrolled in or have completed ITALIAN 113, 230 or 233.*

This course aims at further development of each student's speaking, reading, and writing knowledge of Italian, including increased facility in both conversation and oral comprehension.

**ITALIAN 240. Italian Mafia**

*(3). (HU). May not be repeated for credit. Taught in English.*

This course, taught wholly in English, incorporates historical, cinematic, and literary representations in its analysis of a "typically Italian" social phenomenon, the mafia. It traces the historical development of the mafia in Sicily in modern times and investigates the cultural repercussions that the mafia's success created in film and literature.

**ITALIAN 250. Undergraduate Seminar in Italian Studies**

*Enrollment restricted to first- and second-*

*year students. No knowledge of Italian language required. (3). (HU). May not be repeated for credit.*

Intensive study of a selected topic in Italian Studies, providing an introduction to the literature, art, thought, and culture of a period of Italian history. Text will be taught in translation.

**ITALIAN 270. Language in Action I**

*ITALIAN 230, 232, 233, or 410. (3). (HU). May be elected three times for credit. May be elected more than once in the same term.*

A bridge course involving review and practice of the four language skills employed in the study of a topic in Italian literature and culture.

**ITALIAN 271. Language in Action II**

*ITALIAN 230, 232, 233, or 410. (3). May be elected three times for credit. May be elected more than once in the same term.*

Intermediate bridge course emphasizing consolidation of language skills focused on a variety of topics using a variety of media in the Italian language.

**ITALIAN 275. Multimedia Language and Culture I**

*ITALIAN 230, 232, 233, or 410. (3). May be elected twice for credit. Taught in Italian.*

ITALIAN 275 is a content-based course with the goal of deepening students' understanding and knowledge of Italian language and culture through readings, discussion, independent research and writing.

**ITALIAN 305. Introduction to Italian Studies**

*ITALIAN 230, 232, 233, or 410. (3). May not be repeated for credit.*

This course moves beyond grammar practice and review to the more complex challenges of analysis and interpretation.

**ITALIAN 310. Italian Cities**

*A knowledge of Italian is not required. (3). (HU). May not be repeated for credit. Taught in English.*

This course, taught in English, will concentrate on the history, literature, and culture of a chosen Italian city as well as the life of that city in the European imagination over time, as reflected in fiction, travel literature, and art.

**ITALIAN 314 / HISTORY 326. Modern Italy: 1815 to Present**

*(3). May not be repeated for credit.*

This course examines the history of Italy from 1815 to the present. Modern Italy has been a laboratory for the social and political change of western Europe. Nationalism, fascism, and social democracy have found Italy an ideal terrain for their conceptual and historical development. We will focus on national unification post-unification strategies and contradictory nature of Italian democracy in post W.W.II decades.

**ITALIAN 315. Italian Cinema and Society Since 1945**

*A knowledge of Italian is not required. (3). (HU). May be elected twice for credit. Taught in English.*

The course, taught in English, traces the historical development of Italian cinema from the postwar advent of neorealism to the present. In its political, economic, and cultural contexts .

**ITALIAN 316 / FTVM 316. Screening Italian-Americans**

*(3). (R&E). May not be repeated for credit.*

This course examines the history of Italian Americans' representation from gangster films to *The Jersey Shore*. It also explores how the American film and television industries have historically translated stereotypes about Italians' national, racial, and ethnic difference into a wide range of appealing representations to achieve popular and political consensus.

**ITALIAN 320. Modern Italian Studies**

*ITALIAN 230, 232, 233, or 410. (3). May be elected twice for credit.*

Students read and discuss the works of various Italian writers important to twentieth and twenty-first century Italian culture.

**ITALIAN 333 / MEMS 333. Dante's Divine Comedy**

*A knowledge of Italian is not required. (3). (HU). May not be repeated for credit. Taught in English.*

Study of *Inferno*, *Purgatorio*, and *Paradiso* in context of medieval culture and history, with focus on the encounter between Dante and the classical past as a model for a present-day encounter with the Middle Ages. The course is taught in English, but uses bi-lingual editions of the text for readers with some knowledge of Italian.

**ITALIAN 340. Contemporary Italian Culture**

*ITALIAN 230, 232, 233, or 410. (3). (HU). May not be repeated for credit.*

Readings, screenings, and topical studies relating to contemporary Italian culture in a wide variety of contexts. Possible themes include political life in Italy after electoral reform, the role of mass media in Italian society, and the changing role of women.

**ITALIAN 387. Italian Renaissance Studies**

*ITALIAN 230, 232, 233, or 410. (3; 2 in the half-term). (HU). May not be repeated for credit.*

Topics related to Italian Renaissance literature and culture.

**ITALIAN 410. Italian for Spanish Speakers**

*SPANISH 275 and 276; or SPANISH 277. (3). May not be repeated for credit. No credit granted for students who have completed ITALIAN 100, 101, 102, 103, 113, 230, 231, 232, or 233. Conducted in Italian. Students who have completed or are enrolled in a second-year Italian course (ITALIAN 231, 232 or 233) should not take this course, because it is not an appropriate match to the skills they have already mastered. ITALIAN 410 does not count toward the Italian major or minor requirements. ITALIAN 410 counts as a 400-level elective toward the Spanish major or minor. Students may count only one of ITALIAN 410 or PORTUG 280 toward the Spanish major or minor.*

Designed for students with competency in Spanish who wish to learn the essential elements of the Italian grammar at an accelerated pace, as well as acquire listening, speaking, reading and writing skills. Due to the linguistic similarities between Spanish and Italian, students will quickly master the four skills, and at the same time get acquainted with the selected topics from the Italian culture.

**ITALIAN 415. Topics in Italian Studies**  
*(3). May be repeated for a maximum of 9 credits. May be elected more than once in the same term. Taught in English. Rackham credit requires additional work.*

This course, taught in English, covers a range of topics in Italian Studies for upper level undergraduates and graduate students.

May include literature, cinema, and cultural studies.

**ITALIAN 422. Politics and Literature**

*(3). May not be repeated for credit.*

This course explores the relation between politics and literature in the history of Italian culture. Italian intellectuals and writers have been involved in political thought and action since Dante.

Machiavelli, who was also a poet and playwright, is synonymous with the birth of political science. Twentieth-century writers, such as Pavese, provide others models for the role of the intellectual in society. The chronological focus of the course may vary year to year.

**ITALIAN 425. Italian Romanticism**

*ITALIAN 230, 232, or 233. (3). May not be repeated for credit.*

An investigation of the main currents and tendencies of Italian culture of the nineteenth century through a selection of key narrative texts (Manzoni, Nievo, Tommaseo, Matilde Serao, Fogazzaro, among others). Readings in literary and critical theory will complement the analyses of the novels. All work done in Italian.

**ITALIAN 430. Twentieth Century Italy**

*ITALIAN 230, 232, or 233. (3). May be elected twice for credit. Students may not repeat ITALIAN 430 with the same topic ID for credit.*

Narrative fiction of the 10th century to 1980, reflecting cultural change, social realities. Major writers representing different styles and subject matter are covered. All work done in Italian.

**ITALIAN 475. Dante, Petrarca, Boccaccio**

*ITALIAN 230, 232, or 233. (3; 2 - 3 in the half-term). May be elected twice for credit.*

*May be elected more than once in the same term. F, W: Ann Arbor; Sp: Florence.*

This course focuses on the so-called "Three Crowns" of Florence, the three Tuscan writers who would have unrivaled influence not only on the Italian language and its subsequent literature, but on European literature and thought in general. Attention will be paid to the literary background of their works, as well as to the immediate social context.

**ITALIAN 492. Senior Honors Course**  
*Consent of department required. ITALIAN 491. (3). (INDEPENDENT). May not be repeated for credit.*

Second semester of supervised independent study for the purpose of completing an honors thesis in Italian.

**ITALIAN 499. Advanced Independent Study**  
*ITALIAN 230, 232, or 233. (1 - 3). (INDEPENDENT). May be repeated for a maximum of 9 credits.*

Open only exceptionally to concentrators and graduate students whose program requires training in areas not covered in regular departmental offerings.

## **Jazz & Improvisational Studies (JAZZ)**

**JAZZ 466. Jazz Improvisation I**  
*Consent of instructor required. Music major or permission of instructor. (3). May be repeated for credit.*

**JAZZ 467. Jazz Improvisation II**  
*JAZZ 466. Consent of instructor required.*

*(Prerequisites enforced at registration.) (3). May be repeated for credit.*

## **Judaic Studies (JUDAIC)**

**JUDAIC 101 / GERMAN 127 / YIDDISH 101. First Year Yiddish I**

*(4). May not be repeated for credit. No credit granted to those who have completed or are enrolled in JUDAIC 431 or YIDDISH 431. Graduate students elect JUDAIC 431 or YIDDISH 431. F.*

This is the first of a two-term sequence designed to develop basic skills in speaking, understanding, reading, and writing Yiddish. Active class participation is required as are periodic quizzes, exams, a midterm, and a final.

**JUDAIC 102 / GERMAN 128 / YIDDISH 102. First Year Yiddish II**

*JUDAIC/YIDDISH 101. (4). May not be repeated for credit. No credit granted to those who have completed or are enrolled in JUDAIC 432 or YIDDISH 432. Graduate students elect JUDAIC 432 or YIDDISH 432. W.*

This is the second of a two-term sequence designed to develop basic skills in speaking, understanding, reading, and writing Yiddish. Active class participation is required as are periodic quizzes, exams, a midterm and final.

**JUDAIC 120 / MELANG 101 / RELIGION 110. Elementary Classical Hebrew I**

*(3). May not be repeated for credit.*

An introduction to the language and style of the Hebrew Bible and other ancient texts written in Hebrew. Regular instruction on grammar and vocabulary with drills.

**JUDAIC 121 / MELANG 102 /  
RELIGION 111. Elementary Classical  
Hebrew II**

*MELANG 101 (NESLANG 101). (3). May  
not be repeated for credit.*

Lessons and exercises on the language of  
the Hebrew Bible and other ancient texts  
written in Hebrew. Presentation of grammar  
and vocabulary.

**JUDAIC 150. First Year Seminar in  
Judaic Studies**

*Enrollment restricted to first-year students,  
including those with sophomore standing.  
(3). (HU). May be repeated for a maximum  
of 6 credits. May be elected more than once  
in the same term.*

This course will serve as a first-year  
seminar in the Humanities to be offered on  
special topics in Judaic Studies. Each  
section will serve as an introduction to  
various cultural aspects of Judaic Studies,  
such as diversity, history, ethnicity,  
religions, languages, art.

**JUDAIC 201 / GERMAN 227 / YIDDISH  
201. Second Year Yiddish I**

*JUDAIC/YIDDISH 102. (4). May not be  
repeated for credit. No credit granted to  
those who have completed or are enrolled  
in JUDAIC 531 or YIDDISH 531. Graduate  
students elect JUDAIC 531 or YIDDISH  
531. F.*

This is the third term of a language  
sequence in Yiddish. The course is designed  
to develop fluency in oral and written  
comprehension, and to offer a further  
understanding of the culture within which  
Yiddish has developed. Special emphasis  
will be devoted to reading material.

**JUDAIC 202 / GERMAN 228 / YIDDISH  
202. Second Year Yiddish II**

*JUDAIC/YIDDISH 201. (4). (Lang Req).  
May not be repeated for credit. No credit  
granted to those who have completed or are*

*enrolled in JUDAIC 532 or YIDDISH 532.  
Graduate students elect JUDAIC 532 or  
YIDDISH 532. W.*

This is the fourth term of a language  
sequence in Yiddish. The course is designed  
to develop fluency in oral and written  
comprehension, and to offer a further  
understanding of the culture within which  
Yiddish has developed. Special emphasis  
will be devoted to reading material.

**JUDAIC 205 / MIDEAST 276. What is  
Judaism?**

*(3). (HU). May not be repeated for credit.  
No credit granted to those who have  
completed or are enrolled in JUDAIC 505  
or HJCS 576.*

An interdisciplinary, introductory survey of  
Jewish civilization and culture from  
Biblical times to the present in many  
countries. Jewish culture and civilization,  
among the oldest extant, have been enriched  
by their development in different cultural  
contexts. The course includes history,  
rabbinics, Jewish thought, Hebrew and  
Yiddish literatures, sociology, political  
science.

**JUDAIC 210 / HISTORY 258. Sources of  
Jewish History**

*(3). (HU). May not be repeated for credit.*

This course samples diverse sources of  
Jewish history that reveal remarkable  
continuities across centuries despite  
significant ruptures and impressive  
innovations. Students encounter distinctive  
and representative materials of Jewish  
culture that provide window into the past as  
well as a powerful lens on today's world.

**JUDAIC 216. Social Sciences Topics in  
Judaism**

*(1 - 4). (SS). May be repeated for a  
maximum of 9 credits. May be elected more  
than once in the same term.*

This interdisciplinary course for undergraduate students, designated by the section title and taught by a Judaic Studies regular or visiting faculty member, may include fields such as culture, literature, history, political science, etc., as they pertain to Judaic Studies.

**JUDAIC 217. Topics in the Hebrew Bible**  
(3). (HU). *May be elected twice for credit.*

Course in interdisciplinary field for undergraduate students, to be designated by the section title and taught by a member of the Judaic Studies regular or visiting faculty. Topics focus on The Bible.

**JUDAIC 218. Humanities Topics in Judaism**  
(1 - 4). (HU). *May be elected eight times for credit. May be elected more than once in the same term.*

Intended for lower-level undergraduate students, designated by the section title and taught by a Judaic Studies regular or visiting faculty member, may include fields such as philosophy, film and video, literature, history, political science, etc., as they pertain to Judaic Studies.

**JUDAIC 220 / MELANG 201 / RELIGION 210. Intermediate Classical Hebrew I**  
*MELANG 102 (NESLANG 102). (3). May not be repeated for credit.*

Introduction to the Hebrew language and literature of Ancient Israel which includes, but is not limited to, the biblical traditions. Special emphasis is placed on refining the student's knowledge of Classical Hebrew through the study of Hebrew syntax.

**JUDAIC 221 / MELANG 202 / RELIGION 211. Intermediate Classical Hebrew II**

*MELANG 201 (NESLANG 201). (3). (Lang Req). May not be repeated for credit.*

Introduction to Classical Hebrew language and literature through the reading and analysis of Biblical and extra-Biblical texts from the time of Ancient Israel. Special emphasis placed on the study of Classical Hebrew syntax.

**JUDAIC 223. The Problem with the Bible**  
(3). (HU). *May not be repeated for credit.*

"It ain't the parts of the Bible that I can't understand that bother me, it's the parts that I do understand" (Mark Twain). For the last 2000 years, Jewish Bible readers have expressed similar sentiments. This course is about the problems that different historical readers have raised concerning the Bible.

**JUDAIC 224 / HISTORY 222 / WGS 224. Sex and Sexuality in Jewish History and Culture**  
(3). (HU). *May not be repeated for credit.*

Jewish approaches to gender/sexuality questions in historical, religious, legal, ethical, and imaginative dimensions; Studying historical and received traditions (Bible, Talmud, Kabbalah), their transformations in early modern Jewish communities, contemporary Jewish movements, medieval Jewish practices, imaginaries in Christian and Islamic worlds, the complexities of modern Jewish formations in US and Israel/Palestine.

**JUDAIC 235 / MIDEAST 235 / RELIGION 235. Introduction to the Tanakh/Old Testament**  
(3). (HU). *May not be repeated for credit.*

This course is designed to introduce to the student to the modern study of the Tanakh or Old Testament within the context of a contemporary public university liberal arts curriculum. This collection of texts will be

studied both as cultural vestige of the ancient Near East and as a foundational document to Western thought. Lectures and readings will focus on the development of ancient Israel's literature, religion and history as well as on the roles of those central to the formation and maintenance of early Israelite traditions, the priest, king, prophet, and sage.

**JUDAIC 244 / HISTORY 244 / MENAS 244 / MIDEAST 284. The History of the Arab-Israeli Conflict**

(4; 3 in the half-term). (SS). (R&E). May not be repeated for credit.

This course assesses the origins, dynamics, and the amazing, chameleon-like persistence of Arab-Jewish conflict for over a hundred years, from the late 1800s to the present. How did the rivalry begin? Why is no end in sight? And what does the conflict say about truth and morality in international relations?

**JUDAIC 245 / AMCULT 245. Jews and Other Others**

Not available to students who have completed AMCULT 211 or JUDAIC 218 when taught with the topic "Jews and Other Others" (Topic #1). (Prerequisites enforced at registration.) (3 - 4). (HU). May not be repeated for credit.

In this class, we'll look at the ways in which Jewish-Americans have shaped and been shaped by their contacts with other marginalized social groups: Latinos, African-Americans, Asian-Americans, gays and lesbians, among others. Classes will consider some historical backgrounds, but will mainly be focused on the films, photographs, music and especially literature in which these interactions took place.

**JUDAIC 250 / FTVM 250 / MIDEAST 280. Screening Jewish Cultures**

(3). (HU). (R&E). May not be repeated for credit.

An exploration of Jewish Diversity through films about and by Jews from how Jews fit in the black/white scheme, to propaganda, race, and antisemitism in Nazi and post-Holocaust films to Israel's diversity as an immigrant society reflecting on casting, language use, subtitling, cross-dressing, and genre choices that affect the cinematic construction of Jewishness in relationship to other social groups.

**JUDAIC 253. The Mediterranean: Jewish Studies**

(3). (HU). May not be repeated for credit. No credit granted to those who have completed or are enrolled in either HISTART 253 or ROMLANG 253.

This course explores the modern Jewish Mediterranean, highlighting the interconnectedness of the region across geographical, national, linguistic, ethnic, and religious divides. Topics covered include commercial and philanthropic networks, Jewish intermediaries, the fall of empires, colonialism and nationalism, and emancipation and migration. The course is part of the cross-disciplinary team-taught "The Mediterranean."

**JUDAIC 255 / MIDEAST 279. Tel Aviv and Jerusalem in Israeli Culture**

(3). (HU). May not be repeated for credit.

Tel Aviv and Jerusalem are perceived as two polar opposites in the cultural geography of Israel. Through the years, both cities went through massive changes-geographical, cultural and social -and their images have developed in complex ways. This course examines prose, poetry, art and film which portray the two cities from the first half of the 20th century to present day, alongside historical and theoretical studies.

**JUDAIC 256 / MIDEAST 256. Israeli Literature and Culture**

(3). (HU). May not be repeated for credit.

This course introduces students to the main works of Israeli literature and primary concerns of Israeli culture. It covers the pre-state period from the late 19th century to contemporary Israel.

**JUDAIC 257 / CLCIV 257 / HISTORY 257. Ancient Law**

(4; 3 in the half-term). (HU). *May not be repeated for credit.*

This course is an historical and comparative introduction to the study of law, thus exposing students to a variety of ancient and medieval legal cultures across the globe. Besides grappling with the basic question of what law actually is, we investigate how law was made and justified, how laws were involved in governing and regulating human relations and transactions, and shifting notions of justice. We examine a range of famous and lesser-known legal sources and materials (codes, narratives, documents, trial records, cases, rituals, performances and ceremonies) as well as literature drawn from history, anthropology, and political theory.

**JUDAIC 258 / ENGLISH 258 / RELIGION 258. The Bible as Literature**  
(3). (HU). *May not be repeated for credit.*

Literary genres of the Old and New Testaments and the formation of the Canonical Book.

**JUDAIC 259. The Book of Genesis**  
(3). (HU). *May not be repeated for credit.*

This is an in-depth exploration of Genesis, the first book of the Bible. We approach this foundational text as we would any literary work: we analyze the literary style, descriptions of character, patterns of imagery, and recurrent themes. Students also learn some of the ways the text has been traditionally interpreted by Jews, Christians, and Muslims.

**JUDAIC 260 / HISTORY 269 / RELIGION 260. Introduction to the Talmud and the Rabbis**

(3). (HU). *May not be repeated for credit.*

Come learn about that great classic of Jewish culture, the Talmud. The Talmud is an idiosyncratic, complex, profound and humorous meditation on many aspects of life including law, ritual, desire and God. This course provides the historical and literary tools necessary to analyze this ancient text produced by the rabbis in the first few centuries CE.

**JUDAIC 271 / SLAVIC 270. Contact and Conflict: Jewish Experience in Eastern Europe through Art, Film and Literature**  
(3). (R&E). *May not be repeated for credit.*

The class surveys Jewish experience in Central and Eastern Europe, primarily in the nineteenth and twentieth centuries, focusing on contact and coexistence in the multiethnic environments characteristic of the area. This experience will mainly be studied through literature and film, making the course primarily an investigation of cultural history.

**JUDAIC 280 / MIDEAST 238 / RELIGION 280. The Historical Jesus in Christianity, Judaism, and Islam**  
(4; 3 in the half-term). (HU). *May not be repeated for credit.*

The course focuses on the founder of Christianity, Jesus son of Joseph (Joshua bar-Yosef), as an historical character. By examining all extant historical sources (Jewish, Christian, and Pagan), the course offers a critical reconstruction of the major stages of the life and deeds of the prophet from Nazareth, from his birth under Herod the Great to his death and crucifixion under Pontius Pilate, within the diverse world of Second Temple Judaism. The course also explores the way in which the figure of



Jesus has been reinterpreted over the centuries within the Christian, Jewish, and Muslim traditions, as well as his numerous portraits in the arts, involving the students in a multimedia experience of theater, fine arts, and music (Gospel music, and operas like Amahl and the Night Vision by Menotti as well as musicals like Jesus Christ Superstar and Godspell). Particular emphasis is placed on a detailed analysis of the many movies on Jesus, from Zecca-Noguet (1905) to DeMille (1927), Ray (1961), Pasolini (1966), Scorsese (1988), and Gibson (2004).

**JUDAIC 281 / MIDEAST 281 / SLAVIC 281. Jews in the Modern World: Texts, Images, Ideas**

(4). (HU). (R&E). May not be repeated for credit.

In this course we examine the multiple ways in which Jews in Europe, America, Israel, and the Middle East have responded to the cultural, political, economic, and social forces of modernity. By focusing on a variety of textual and visual material from the late 18th century to the present (including literary texts, fine arts, film, architecture), students have an opportunity to explore the processes by which Jewish culture has been shaped and reshaped in the face of unprecedented new freedoms and persecutions.

**JUDAIC 290 / HISTORY 290 / MIDEAST 287. Jews and Muslims**

(3). (HU). May not be repeated for credit.

Despite negative portrayals of Jewish-Muslim relations in the media, Jews and Muslims have been in intimate contact since the rise of Islam. This course examines how Jews and Muslims interacted, competed, and coexisted from the Middle Ages to the present, and how the ethnic, religious, and racial categories of "Jew" and "Muslim" have been constructed.

**JUDAIC 296 / MIDEAST 255 / RELIGION 296. Perspectives on the Holocaust**

(4; 3 in the half-term). (HU). (R&E). May not be repeated for credit.

This course is a study of the Holocaust as an historical event and its impact on Jewish thought and culture.

**JUDAIC 301 / GERMAN 327 / YIDDISH 301. Advanced Yiddish I**

JUDAIC 102 or YIDDISH 202. (3). May not be repeated for credit. No credit granted to those who have completed or are enrolled in JUDAIC 631 or YIDDISH 631. Graduate students elect JUDAIC 631 or YIDDISH 631. F.

This is the third year of the language sequence, focusing on reading and speaking Yiddish. Literary, historical and other texts will be considered, along with film, folklore, and music. Students will also learn how to approach handwritten documents.

**JUDAIC 302 / GERMAN 328 / YIDDISH 302. Advanced Yiddish II**

JUDAIC/YIDDISH 301. (3). May not be repeated for credit. No credit granted to those who have completed or are enrolled in JUDAIC 632 or YIDDISH 632. Graduate students elect JUDAIC 632 or YIDDISH 632. W.

This is the third year of the language sequence, focusing on reading and speaking Yiddish. Literary, historical and other texts will be considered, along with film, folklore, and music. Students will also learn how to approach handwritten documents.

**JUDAIC 310. Experiential Learning in Judaic Studies**

Consent of department required. (3). (EXPERIENTIAL). May not be repeated for credit.

This course integrates academic and experiential learning through a content oriented field placement. Students complete assigned readings and the weekly seminar covers relevant topics in Judaic Studies and nonprofit organizations and discussion of the field placement experience. Students gain useful contacts and skills they can apply in the workplace environment.

**JUDAIC 317. Topics in Judaic Studies**

*(1 - 4). May be repeated for a maximum of 8 credits. May be elected more than once in the same term.*

Course in interdisciplinary field for undergraduate students, to be designated by the section title and taught by a member of the Judaic Studies regular or visiting faculty. May include fields such as philosophy, film and video, literature, history, political science, etc., as they pertain to Judaic Studies.

**JUDAIC 318. Humanities Topics in Judaism**

*(1 - 4). (HU). May be repeated for a maximum of 8 credits. May be elected more than once in the same term.*

This interdisciplinary course for undergraduate students, designated by the section title and taught by a Judaic Studies regular or visiting faculty member, may include fields such as philosophy, film and video, literature, history, political science, etc., as they pertain to Judaic Studies.

**JUDAIC 319. Judaic Studies Abroad**

*Consent of department required. (1 - 3). (EXPERIENTIAL). May be repeated for a maximum of 16 credits.*

An off-campus study course under the supervision of a Judaic Studies faculty member. Students will be in engaged in on-site deep exploration of Tel Aviv and Jerusalem, the two main urban centers of

Israel. Tel Aviv and Jerusalem are perceived as two polar opposites in the cultural geography of Israel. Jerusalem is a historical city in the Judean Mountains with a rich and sacred past, while Tel Aviv - "the first Hebrew City" - seemed to emerge from the sand dunes of the Mediterranean Sea 100 years ago. Through the years, both cities went through massive changes-geographical, cultural and social -and their images have developed in complex ways. Students will explore key sites in the history of two cities. They will be meeting for a conversation with writers, filmmakers and artists living and working in the two cities. Students will also explore the ethnic, racial and cultural diversity of the population in Tel Aviv and Jerusalem, including Ashkenazi and Mizrahi Jews (Jews from Arab countries), religious and secular Jews, Arabs (Moslem and Christians) and migrant workers.

**JUDAIC 320 / AMCULT 320 / MIDEAST 380. The Jewish Graphic Novel**

*(3). (HU). May not be repeated for credit.*

Are the Jews the people of the graphic book? Can the Bible be rendered as comics? Did Jewish immigrants invent American superheroes? This seminar explores the poignant and oftentimes subversive ways in which American, European, and Israeli graphic narratives reconfigure canonical Jewish texts and address pivotal events in twentieth-century Jewish history.

**JUDAIC 335 / MIDEAST 335 / RELIGION 359. History and Religion of Second Temple Judaism**

*(3). (HU). May not be repeated for credit.*

The course covers the history and religion of Ancient Judaism from the Babylonian exile (6th century BCE) to the emergence of Rabbinic Judaism (3rd century CE).

**JUDAIC 339 / HISTORY 259 /  
MIDEAST 339 / RELIGION 358. Israel  
Before the Exile (587 BCE): Its History  
& Religion**

*(4; 3 in the half-term). (HU). May not be repeated for credit.*

This course encompasses a series of studies in the cultural and political histories of ancient Israel. Early Israelite history and religion from their beginnings to the aftermath of the 6th century CE Babylonian exile will be examined within their respective biblical and ancient Near Eastern contexts (i.e., Palestine-Israel, Mesopotamia, Egypt, Syria, Persia, and Anatolia).

**JUDAIC 340. Jewish Life in Colonial  
North Africa**

*(3). (HU). May not be repeated for credit.*

Since the Roman conquest of Carthage, North Africa has been a major center of Jewish life. As a Diasporic community connecting Afro-Arab and European cultures, Jews have complicated how we perceive the colonized subject. Students examine how Jewish history helps to deconstruct divisions between the Orient and Occident and North/South.

**JUDAIC 350 / BCS 350 / REEES 350.  
Legacy of the Holocaust in Yugoslav  
Culture: How and Why We Need to  
Narrate the Holocaust**

*(3). (HU). (R&E). May not be repeated for credit.*

The course explores new texts about the Holocaust written in response to the resurrection of racist ideologies in the context of post-Communist Eastern Europe, the EU enlargement, as well as a persistent global economic and social crisis. Readings include fictional and testimonial narratives, theoretical and documentary material.

**JUDAIC 351 / DUTCH 351. Anne Frank  
in Context**

*(3). (HU). (R&E). May not be repeated for credit.*

This course examines the Holocaust in The Netherlands and beyond through the analysis of the Diary of Anne Frank, its film, stage and television adaptations, and related materials. It aims to increase your understanding of anti-Semitism and other forms of hatred and discrimination. Topics include Jewish immigration, Jewish Amsterdam, bystanders, resistance movement, and controversial issues like the fictionalization of Anne Frank and alleged Holocaust exploitation. Taught in English

**JUDAIC 360 / MIDEAST 386. A Global  
History of the Jews of Spain**

*JUDAIC 205. (3). (HU). May not be repeated for credit.*

1492 marked the expulsion of Jews from Spain, but Iberian Jews retained a distinct identity long after leaving their peninsula. This course examines how Sephardic Jews maintained ties of commerce, language, and identity across the globe and uses the story of Spanish Jewry as case study in world history.

**JUDAIC 376 / WGS 376.  
Women and the Bible**

*(3). (HU). May not be repeated for credit.*

There are many ways to read the Bible and ways of reading the Bible, and modes of interpretation have led to radically different constructions of women among various religious and ethnic groups and in diverse historical and geographical settings. Through names, languages, fiction, poetry, ritual objects, folklore, music, and other cultural expressions, this course considers the burgeoning feminist literature and cultural productions about women in

monotheistic traditions, such as Eve, Sara, Hagar, Miriam, and Ruth.

**JUDAIC 379 / FTVM 379 / HISTART 379 / HISTORY 379. Jewish Photographers Picture the Modern World**

(3). (HU). *May not be repeated for credit. Rackham credit requires additional work.*

This course traces a history of image making by Jews in twentieth-century Europe and the U.S. While Jewish photographers participated in many different aspects of photography, particular attention will be given to documentary photography.

**JUDAIC 380 / CLCIV 380 / HISTORY 381 / RELIGION 382. The Beginnings of Judaism: From Ethnicity to Religion**  
(3). (ID). *May not be repeated for credit. No credit granted for students who have taken both ACABS 322 and ACABS 326.*

This is an introduction to Jewish history and culture as it emerged in the sixth century B.C.E. until the Persian and Islamic conquests in the seventh century. We will try to understand how the "varieties of Judaism" emerged from the religion and culture of Israelite origins in the context of Near Eastern and Mediterranean imperial and cultural history.

**JUDAIC 386 / GERMAN 391 / HISTORY 386. The Holocaust**  
(4). (SS). (R&E). *May not be repeated for credit.*

This course examines the destruction of European Jewry (1933-1945), its causes and effects. Major themes include the resurgence of political and racial and anti-Semitism in the nineteenth century, European Jewry in the period before World War II, the rise of the Nazis to power and the response of European society and

European Jewry, the "final solution," and the literature of the Holocaust.

**JUDAIC 387 / AMCULT 387 / HISTORY 387. History of American Jews**

(4; 3 in the half-term). (HU). *May not be repeated for credit.*

This course explores the history of American Jews from the colonial era to the 21st century, focusing on immigration, politics, cultural creativity, religious innovation, and the establishment of a diasporic community with ties to Jews throughout the world. The course asks how Jews resolved the tensions between being Jewish and American.

**JUDAIC 388 / HISTORY 384. Antisemitism and Philosemitism: Jews in Myth and Thought**  
(3). (HU). (R&E). *May not be repeated for credit.*

Whether it is out of admiration for their contributions to modern civilization or as a warning about imagined Jewish conspiracies, many influential modern thinkers have written about the nature of "the Jew." Through close readings of these works, this course analyzes some of the patterns and prejudices in popular myths and ideas about Jews.

**JUDAIC 389 / ENGLISH 383. Jewish Literature**  
(3). (HU). *May not be repeated for credit.*

This course considers a range of topics in the study of Jewish literature. It raises questions concerning the canon of texts studied, the cultural construction of Jewish literature, race and ethnicity.

**JUDAIC 405 / HEBREW 405. The Holocaust in Israeli Culture**  
*HEBREW 301, or third-year proficiency in*

*Hebrew. (3). May not be repeated for credit.*

This is an advanced course in Hebrew, which stresses reading comprehension of texts, as well as writing and oral communication skills. The course examines how the Holocaust has been represented and reckoned within stories, poems, artwork, plays and films, from World War II until recent years.

**JUDAIC 417. Topics in Judaic Studies**  
*(3). May be elected three times for credit. May be elected more than once in the same term. Rackham credit requires additional work.*

Intended for advanced undergraduates interested in the interdisciplinary field of Judaic Studies, this course examines selected topics in areas such as literature, history, philosophy, film, political science and law. Although taught in English by regular faculty in Judaic Studies or visiting faculty, some topics may require students to interpret various texts and to situate them in relation to historical traditional contexts.

**JUDAIC 425. Reading Modern Jewish Literatures**  
*Lower level course in Jewish literature and culture. (3). May not be repeated for credit.*

Jewish literature has been written in various genres, styles, languages, and places, constituting a vast field that challenges traditional notions of national literature. Using comparative framework, this course examines historic, cultural, and thematic developments of literature in Jewish and non-Jewish languages. All texts are in English translation.

**JUDAIC 437 / AMCULT 437. Yiddish Culture in America**  
*(3). (R&E). May not be repeated for credit. Rackham credit requires additional work.*

Course examines the rich and diverse creativity of immigrants from Eastern Europe which made New York the world center of Yiddish culture. It explores prose, poetry, theater, film, photography and visual arts, as well as politics and journalism, focusing on the ways of representing modernity through urban space.

**JUDAIC 441. The History of Jews at the University of Michigan: Exclusion and Inclusion in American Higher Education**  
*(3). May not be repeated for credit. Rackham credit requires additional work.*

As elite private universities began imposing quotas on their percentage of Jewish students, the University of Michigan became an important site for the education of American Jews. This seminar explores the history of Jews in American higher education and provides the research tools necessary to excavate that story at U-M.

**JUDAIC 451 / POLSCI 350. The Politics and Culture of Modern East European Jewry**  
*A course in East European and/or Jewish history, and Comparative Politics is recommended. (3). May not be repeated for credit. Sp/Su in Poland.*

The course emphasizes the inter-relationships between the communal institutions of East European Jews and the ways in which this ethnic and religious minority developed the means of dealing with states and the larger societies.

**JUDAIC 460. Protests and Conflict in Israel**  
*(3). May not be repeated for credit.*

This course looks to collective action as a means of exploring the history of Israel/Palestine. From the 1929 Palestine Riots to the Ethiopian Black Lives Matter

protests, students examine how acts of resistance, from the mundane to violent uprisings, are used to fulfill the aspirations of Israeli citizens.

**JUDAIC 467 / MIDEAST 476 /  
RELIGION 471. Seminar: Topics in the  
Study of Judaism**

*(3). May be repeated for a maximum of 9 credits. May be elected more than once in the same term.*

Topics within history of modern Judaism such as reform and tradition in modern Judaism, theological responses to the Holocaust, modern Jewish philosophy. Topics will change.

**JUDAIC 468 / MIDEAST 456 /  
RELIGION 469. Jewish Mysticism**

*(3). May not be repeated for credit. Taught in English.*

A critical study of the historical development of Jewish mysticism, its symbolic universe and its social ramifications. While the course will survey mystical traditions from the early rabbinic period through the modern, the focus will be on the variegated medieval stream known as kabbalah.

**JUDAIC 470 / MIDEAST 442. Reading  
the Rabbis**

*MELANG 202 (NESLANG 202) or  
HEBREW 202. (4). May not be repeated for credit. No credit granted to those who have completed or are enrolled in MIDEAST 242 (NEAREAST 242/JUDAIC 270).*

Students will study rabbinic sugyot in the original language and discuss modern scholarship and theory on rabbinic literature.

**JUDAIC 478 / MIDEAST 455 /  
RELIGION 478. Modern Jewish  
Thought**

*(3). May not be repeated for credit. Taught in English.*

An exploration of selected 20th-century Jewish thinkers and their responses to the crisis of modernity (and post-modernity): the breakdown of traditional Jewish culture and its system of meaning; the encounter with, and assimilation of, Western culture; the impact of the traumas of World War I and the Holocaust; and the contemporary quest for intimacy and tikkun, or "healing."

**JUDAIC 495. Independent Studies**

*Consent of instructor required. (1 - 3).*

*(INDEPENDENT). May not be repeated for credit. F.*

**JUDAIC 496. Independent Studies**

*Consent of instructor required. (1 - 3).*

*(INDEPENDENT). May not be repeated for credit.*

An independent studies course under the supervision of one of the Judaic Studies faculty members.

**JUDAIC 497. Senior Thesis**

*Consent of instructor required. (3).*

*(INDEPENDENT). May not be repeated for credit. Continuing Course. Y grade can be reported at end of the first-term to indicate work in progress. At the end of the second term of JUDAIC 498, the final grade is posted for both term's elections. F.*

**JUDAIC 498. Senior Thesis**

*Consent of instructor required. (3).*

*(INDEPENDENT). May not be repeated for credit.*

## **Korean Studies (KRSTD)**

**KRSTD 170. Nam Center Undergraduate  
Fellows Pro-Seminar**

*Consent of department required. (1). May*

*be elected four times for credit. Offered mandatory credit/no credit.*

Korean studies is rapidly gaining strength as a geographic area of interest in various scholarly disciplines, and scholars interested in the Korean case bring Korean data to bear on various research questions. This seminar is designed to provide a forum for students to discuss topics about Korea.

**KRSTD 290. Topics in Korean Studies**  
*(1 - 4). May be elected three times for credit. May be elected more than once in the same term.*

This course is intended for undergraduate students interested in Korean culture and society.

**KRSTD 390. Special Topics in Korean Studies**

*(1 - 4). May be elected three times for credit. May be elected more than once in the same term.*

This course is intended for undergraduate students interested in special topics related to Korean culture and society.

**KRSTD 391. Social Science Topics in Korean Studies**

*(1 - 4). (SS). May be elected three times for credit. May be elected more than once in the same term.*

This course is intended for undergraduate students interested in furthering their understanding of Korean culture and society. Social Science topics will vary but may incorporate history, anthropology, sociology, communication or political science.

**KRSTD 392. Humanities Topics in Korean Studies**

*(1 - 4). (HU). May be elected three times for credit. May be elected more than once in the same term.*

This course is intended for undergraduate students interested in furthering their understanding of Korean culture and society. Humanities topics will vary but may incorporate history, literature, film or cultural studies.

**KRSTD 471. Nam Center Undergraduate Fellows Research Seminar, I**

*Consent of department required. (2). May be elected twice for credit.*

Korean studies is rapidly gaining strength as a geographic area of interest in various scholarly disciplines, and scholars interested in the Korean case bring Korean data to bear on various research questions. This seminar is designed to provide a forum for students to discuss topics about Korea.

**KRSTD 472. Nam Center Undergraduate Fellows Research Seminar, II**

*Consent of department required. KRSTD 471. (1 - 2). May be elected twice for credit.*

Korean studies is rapidly gaining strength as a geographic area of interest in various scholarly disciplines, and scholars interested in the Korean case bring Korean data to bear on various research questions. This seminar is designed to provide a forum for students to discuss topics about Korea.

**KRSTD 490. Advanced Topics in Korean Studies**

*(1 - 4). May be elected three times for credit. May be elected more than once in the same term.*

This course is intended for undergraduate students interested in advanced study related to Korean culture and society.

**Latin American and Caribbean Studies (LACS)**

**LACS 226 / AAS 236 / AMCULT 226 / HISTORY 226 / LATINOAM 226. The Latin Tinge: Latin Music in Social Context in Latin America and the U.S.** (4; 3 in the half-term). (HU). (R&E). May not be repeated for credit.

This course introduces key Latin musical styles, recordings, and musicians. It requires extensive listening and musical analysis, and develops these historical themes: 1) the origins and development of Afro-diasporic musical styles; 2) the interplay between nationalism and popular music; and 3) international musical flows shaped by Atlantic colonialism, commercial markets, and labor migration.

**LACS 321. Social Science Topics in LACS**

(3 - 4). (SS). May be elected five times for credit. May be elected more than once in the same term.

This course examines an aspect or topic in LACS not covered in a specific country or time period. Topics are taught from a Social Science perspective.

**LACS 349 / HISTORY 349. Revolutionary Movements in Modern Latin America**

(4; 3 in the half-term). (ID). May not be repeated for credit.

This course examines numerous Latin American revolutionary movements, from the major social upheavals of the Mexican, Cuban and Nicaraguan Revolutions to the small but influential revolutionary groups of South America that emerged in the 1960s and 70s. We will seek to define what makes a movement revolutionary by asking how they emerged and developed over time, why people participated in or against them, and what consequences they have had. We will also pay close attention to the ways in which revolutions have been interpreted and

re-interpreted over time, especially through media such as film and art.

**LACS 355. Topics in Latin American and Caribbean Studies**

(3). May be elected twice for credit. May be elected more than once in the same term.

This course addresses current issues in Latin American and Caribbean societies and cultures. Content varies from semester to semester.

**LACS 391. Latin American and Caribbean Studies Mini-Course in Social Science**

(1 - 2). (SS). May be elected five times for credit. May be elected more than once in the same term.

This course is meant to examine various Social Science topics, designated by the section title, and offered as a seven-week mini-course.

**LACS 421 / AAS 421 / HISTORY 421 / RELIGION 421. Religions of the African Diaspora**

(3). (R&E). May not be repeated for credit. Rackham credit requires additional work.

Conceptualizes "diaspora" and introduces Brazilian Candomble, Cuban Santeria and Palo Monte, Haitian Vodou, Jamaican and globalized Rastafari, the ancestor religion of the Garifuna of Central America, and Afro-Indian practices in Trinidad. Studies of historical development as well as contemporary practice will be used.

**LACS 425. Field Study**

Consent of instructor required. (1 - 4). (EXPERIENTIAL). (INDEPENDENT). May be repeated for a maximum of 8 credits. Offered mandatory credit/no credit.

A field study is available to students who are interested in exploring new areas in the field of Latin American and Caribbean



Studies beyond the Michigan campus. These include internship and service learning opportunities. Each student makes individual arrangements with the instructor in the Center for Latin American and Caribbean Studies.

**LACS 446 / LING 446. Comparative Linguistics**

*At least one course in Linguistics/language analysis. (3). May not be repeated for credit. Rackham credit requires additional work.*

This course introduces students to research on comparative linguistics. It is directed to students interested in the study of different language, or to anyone interested in a more thorough understanding of the common properties among human languages and of the possible variation across the structure.

**LACS 455. Topics in Latin American Studies**

*Consent of instructor required. (3). May be repeated for a maximum of 6 credits.*

This course addresses current issues in Latin American society and culture. Content varies from semester to semester.

**LACS 461. Elementary Nahuatl I**  
*(4). May not be repeated for credit.*

Course designed to introduce students with little or no Nahuatl proficiency to conversational and cultural skills needed to use the language in real life situations. Covers both written and spoken Nahuatl; emphasis is on developing conversational ability. Evaluations based on homework, weekly quizzes, reading aloud, interviews.

**LACS 462. Elementary Nahuatl II**  
*LACS 461. (Prerequisites enforced at registration.) (4). May not be repeated for credit.*

Second-semester continuation of Elementary Nahuatl I; course introduces basic structures of Nahuatl while focusing on the development of speaking and reading skills. Those who successfully finish this course will gain sustained control of basic conversation.

**LACS 463. Intermediate Nahuatl I**  
*LACS 462. (Prerequisites enforced at registration.) (4). May not be repeated for credit.*

In this intermediate course in Nahuatl emphasis is on conversation, but attention is also given to grammatical structure. Students learn complex structural patterns, build up vocabulary, get acquainted with Nahuatl culture and society, and develop conversation skills.

**LACS 464. Intermediate Nahuatl II**  
*LACS 463. (Prerequisites enforced at registration.) (4). (Lang Req). May not be repeated for credit.*

This continuation of the intermediate course in spoken and written Nahuatl emphasizes conversational skills and grammatical structure. Students learn complex structural patterns, build up vocabulary, get acquainted with Nahuatl culture and society, and develop conversation skills.

**LACS 465. Advanced Nahuatl I**  
*LACS 464. (Prerequisites enforced at registration.) (4). May not be repeated for credit.*

Advanced Nahuatl is to improve conversation skills, build up vocabulary, and heighten reading ability in Nahuatl. Reading materials inform students of Nahuatl culture, history, and literature. Students learn more accurate syntax, pragmatic ways of expression, and ways of thinking in Nahuatl.

**LACS 466. Advanced Nahuatl II**

*LACS 465. (Prerequisites enforced at registration.) (4). May not be repeated for credit.*

This continuation of the advanced Nahuatl course is to improve conversation skills, build up vocabulary, and heighten reading ability. Strengthened aural/oral training is given. Students work with original, unedited texts as well as with edited, re-transcribed materials in Nahuatl literature.

**LACS 471. Elementary Quechua, I**

*Permission of instructor. (4). May not be repeated for credit.*

Course designed to introduce students with little or no Quechua proficiency to conversational and cultural skills needed to use the language in real life situations. Covers both written and spoken Quechua; emphasis is on developing conversational ability. Evaluations based on homework, weekly quizzes, reading aloud, interviews.

**LACS 472. Elementary Quechua, II**

*LACS 471. (Prerequisites enforced at registration.) (4). May not be repeated for credit.*

Second-semester continuation of Elementary Quechua I; course introduces basic structures of Quechua while focusing on the development of speaking and reading skills. Those who successfully finish this course will gain sustained control of basic conversation.

**LACS 473. Intermediate Quechua, I**

*LACS 472. (Prerequisites enforced at registration.) Permission of instructor. (4). May not be repeated for credit.*

In this intermediate course in Quechua emphasis is on conversation, but attention is also given to grammatical structure. Students learn complex structural patterns, build up vocabulary, get acquainted with

Andean culture and society, and develop conversation skills.

**LACS 474. Intermediate Quechua, II**

*LACS 473. (Prerequisites enforced at registration.) (4). (Lang Req). May not be repeated for credit.*

This continuation of the intermediate course in spoken and written Quechua emphasizes conversational skills and grammatical structure. Students learn complex structural patterns, build up vocabulary, get acquainted with Andean culture and society, and develop conversation skills.

**LACS 475. Advanced Quechua, I**

*LACS 474. (Prerequisites enforced at registration.) Permission of instructor. (4). May not be repeated for credit.*

Advanced Quechua is to improve conversation skills, build up vocabulary, and heighten reading ability in Quechua. Reading materials inform students of Andean culture, history, and literature. Students learn more accurate syntax, pragmatic ways of expression, and ways of thinking in Quechua.

**LACS 476. Advanced Quechua, II**

*LACS 475. (Prerequisites enforced at registration.) (4). May not be repeated for credit.*

This continuation of the advanced Quechua course is to improve conversation skills, build up vocabulary, and heighten reading ability. Strengthened aural/oral training is given. Students work with original, unedited texts as well as with edited, re-transcribed materials in Quechua literature.

**LACS 483 / AAS 473 / HISTORY 473.****Brazil: History and Culture**

*(3). May not be repeated for credit.*

*Rackham credit requires additional work.*

This course examines the history of Brazil, focusing on literature and performance as expressions of the national or regional cultural identities, with particular attention to racial categories and African heritage. Topics include: indigenous societies and responses to European invasion; slavery and paternalism; religious expression; and the ways that racial and ethnic identification has inspired much of Brazil's unique cultural production. When possible, we will include various ways of learning about cultural expression, incorporating interdisciplinary sources such as fiction, archival documents, testimony, ethnography, recorded music, and dance/movement.

**LACS 490. Topics in Latin American and Caribbean Studies Mini-course**  
*(1 - 2). May be repeated for a maximum of 4 credits. May be elected more than once in the same term.*

This course is meant to examine various topics, designated by the section title, and offered as a seven-week mini-course.

**LACS 499. Reading and Research in Latin American and Caribbean Studies**  
*Consent of instructor required. (1 - 3). (INDEPENDENT). May be repeated for a maximum of 6 credits.*

Independent reading and research in Latin American and Caribbean Studies under the direction of a faculty member. Ordinarily available only to students with background in Latin American and Caribbean Studies.

## **Latin (LATIN)**

The skills taught in Latin and Greek are useful in many ways. The critical thinking and analytical skills (gleaned from a thorough knowledge of Latin and Greek) will benefit you in any class you take at the university. Students interested in subjects in the sciences and engineering will find the development of these skills invaluable. All students can benefit from improved English skills, particularly those students interested in Communications, Journalism, Law, and all the Humanities. Many students find Latin and Greek so helpful and fascinating that they choose these languages as a concentration or academic minor. Learning Latin and Greek is no more difficult than learning Spanish or French. We teach time-saving language learning strategies and skills in a highly structure format. Because these are ancient languages, we focus primarily only on reading texts. Our department provides free “drop-in” tutoring available to all students in the Elementary Latin and Greek courses.

**LATIN 101. Elementary Latin**  
*(4). May not be repeated for credit. Credit is granted for no more than two courses among LATIN 101, 102 and 103. No credit granted to those who have completed or are enrolled in LATIN 504.*

The primary goals of this course are fundamental understanding of basic Latin grammar and the development of basic reading skills. All of the assignments are directed toward the reading and translation of Classical Latin rather than writing or conversation.

**LATIN 102. Elementary Latin**  
*LATIN 101. (Prerequisites enforced at registration.) Restricted by placement exam or permission of Elementary Latin Program coordinator. (4). May not be repeated for credit. Credit is granted for no more than two courses among LATIN 101, 102 and*

*103. No credit granted to those who have completed or are enrolled in LATIN 504.*

The primary goals of this course are fundamental understanding of basic Latin grammar and the development of basic reading skills. All of the assignments are directed toward the reading and translation of Classical Latin rather than writing or conversation.

**LATIN 103. Review Latin**

*Restricted by placement exam or permission of Elementary Latin Program coordinator. (4). May not be repeated for credit. Credit is granted for no more than two courses among LATIN 101, 102 and 103. No credit granted to those who have completed or are enrolled in LATIN 504.*

All of the assigned tasks and exercises in LATIN 103 are directed toward the reading and translation of Classical Latin and not toward writing or conversation. A more rapid pace is maintained as LATIN 103 covers the material of LATIN 101 and 102.

**LATIN 195. Intensive Latin I**

*(8). May not be repeated for credit. No credit granted to those who have completed or are enrolled in LATIN 101, 102, 103, or RCLANG 195.*

This course meets two hours per day and covers in one semester the equivalent of two semesters in a non-intensive course. Students learn morphological, grammatical, and syntactical structures of Latin, and become acquainted with significant aspects of Roman culture. Skills are enhanced through writing, listening and speaking.

**LATIN 231. Roman Kings and Emperors**

*LATIN 102, 103, or 195. (Prerequisites enforced at registration.) Restricted by placement exam or permission of Elementary Latin Program coordinator. (4). May not be repeated for credit. No*

*credit granted to those who have completed or are enrolled in LATIN 295.*

A review of grammar as students are introduced to extended passages of Classical Latin prose through selections from such authors of the first centuries BC and AD as Cicero, Caesar, Sallust, Livy, and Tacitus.

**LATIN 232. Vergil, Aeneid**

*LATIN 231. (Prerequisites enforced at registration.) Restricted by placement exam or permission of Elementary Latin Program coordinator. (4). (Lang Req). May not be repeated for credit. No credit granted to those who have completed or are enrolled in LATIN 295.*

This course asks students to build on their current knowledge and skills in Latin as they learn to read extensive passages of the greatest work of Latin literature, Vergil's Aeneid. Some grammar review is necessary. Students also study Vergil's epic poem in English translation. By term's end, they should not only be able to comprehend a Latin passage, but also to understand and appreciate the Aeneid as a work of poetry.

**LATIN 233. Late Latin**

*LATIN 231. (Prerequisites enforced at registration.) Restricted by placement exam or permission of Elementary Latin Program coordinator. (4). (Lang Req). May not be repeated for credit.*

The purpose of the course is to read a selection of post-classical texts (200 AD and later) and to prepare students to appreciate the language, style, and rhetorical technique of Late Latin authors. While solidifying student's control over the essentials of Classical Latin grammar, the course highlights the differences between Classical and Late Latin. Along with early Christian texts (Augustine, Jerome, Ambrose), the course includes a sampling

of mediaeval authors such as Hrotsvitha of Gandersheim, Abelart, Heloise and Hildegard of Bingen).

**LATIN 295. Intensive Latin II**

*LATIN 102, 103, or 193/504, or RCLANG 195. (8). (Lang Req). May not be repeated for credit.*

Through the study texts from a variety of authors and genres, students will develop skills and strategies for reading increasingly complex Latin, and will expand their understanding of the Roman world.

**LATIN 301. Intermediate Latin I**

*LATIN 194 or 232. (3; 2 in the half-term). (HU). May not be repeated for credit.*

Selections from Latin poetry and prose, with grammar review and discussion of cultural context.

**LATIN 325 / RCLANG 325. Readings in Latin Drama: From Text to Performance**

*One of RCLANG 295, LATIN 194, 195, 232, or 233, or permission of instructor. (4). May be elected twice for credit.*

Students study selected Latin dramas from a variety of perspectives: literary, linguistic, historical, cultural, performative, etc. The course culminates in a public performance.

**LATIN 401. Republican Prose**

*LATIN 301 or 302 or permission of instructor. (3; 2 in the half-term). May be repeated for a maximum of 9 credits. F.*

**LATIN 402. Imperial Prose**

*LATIN 301 or 302 or permission of instructor. (3; 2 in the half-term). May be repeated for a maximum of 9 credits. W.*

**LATIN 403. Elementary Latin Composition**

*LATIN 301. (3). May not be repeated for credit.*

Systematic reviews in Latin grammar with daily written exercises. Emphasis on

correctness of expression and a feeling of idiom.

**LATIN 409. Augustan Poetry**

*LATIN 301 or 302 or permission of instructor. (3; 2 in the half-term). May be repeated for a maximum of 9 credits.*

Vergil or Horace or the Elegists.

**LATIN 410. Poetry of the Republic or Later Empire**

*LATIN 301 or 302 or permission of instructor. (3; 2 in the half-term). May be repeated for a maximum of 9 credits. W.*

**LATIN 421 / EDCURINS 421. Teaching of Latin**

*Junior standing in Latin and permission of instructor. (3; 2 in the half-term). May not be repeated for credit. F, W, Sp.*

**LATIN 426. Practicum**

*Consent of instructor required. Junior or senior standing. (1). (EXPERIENTIAL). May be repeated for a maximum of 3 credits. F, W, Su. Offered mandatory credit/no credit.*

This practicum introduces students to the fundamentals of tutoring students at the elementary and intermediate levels of Latin, both in the Latin and Greek Study Center and one-on-one with individual students.

**LATIN 435 / MEMS 440. Postclassical Latin I**

*Two years of college Latin. (3; 2 in the half-term). May not be repeated for credit.*

**LATIN 436 / MEMS 441. Postclassical Latin II**

*Two years of college Latin. (3; 2 in the half-term). May not be repeated for credit.*

**LATIN 441. Vergil, Aeneid**

*(3; 2 in the half-term). May not be repeated for credit.*

**LATIN 442. Didactic Poetry**

*At least one intermediate LATIN course (LATIN 401, 402, 409, 410). (3). May not*

*be repeated for credit. Rackham credit requires additional work.*

Focusing on Lucretius' *de Rerum Natura*, this course explores the central tenets of Epicureanism, the poetic framework for philosophical discourse, and the author's didactic method.

**LATIN 443. Latin Elegy**

*At least one intermediate LATIN course (LATIN 401, 402, 409, 410). (3). May not be repeated for credit. No credit granted to those who have completed or are enrolled in LATIN 551. Rackham credit requires additional work.*

Selected poems of Propertius, Tibullus, and Ovid. The course traces the development of elegy as a genre and situates the poems in the political, social, and literary environment of Augustan Rome.

**LATIN 454. Roman Comedy**

*At least one intermediate LATIN course (LATIN 401, 402, 409, 410). (3). May not be repeated for credit. Rackham credit requires additional work.*

An introduction to Roman comic drama as exemplified by Plautus and/or Terence, whose plays represent the earliest complete surviving poetic works in Latin.

**LATIN 463. Cicero Orations**

*At least one intermediate LATIN course (LATIN 401, 402, 409, 410). (3). May not be repeated for credit. No credit granted to those who have completed or are enrolled in LATIN 562.*

Selections from Cicero's speeches read with an eye to rhetorical technique, judicial and/or political context, and broader socio-cultural import.

**LATIN 469. Augustine the Philosopher**  
*LATIN 402. (3). May not be repeated for*

*credit. Rackham credit requires additional work.*

In this class, we read texts from Augustine's vast oeuvre that show his importance as a philosopher. He is in a way the last of the ancient philosophers and perhaps the first of the moderns. Certainly many of his concerns, the nature of radical evil, the relationship between soul and body, the possibility of self-knowledge, the theory of the just war, arguments against Skepticism, are still vital questions for which we turn to Augustine as a still relevant interlocutor.

**LATIN 495. Senior Honors Research**

*Consent of instructor required. Upperclass standing. (1 - 3). (INDEPENDENT). May be repeated for a maximum of 6 credits.*

This course is intended for Honors concentrators writing a thesis in Latin.

**LATIN 499. Latin: Supervised Reading**

*Consent of instructor required. (1 - 4). (INDEPENDENT). May be repeated for credit. May not be included in a concentration plan in Greek Language and Literature or Classical Languages and Literatures. F, W, Sp, Su.*

**LATIN 504. Intensive Latin**

*Consent of instructor required. (6). May not be repeated for credit. No credit granted to those who have completed LATIN 102, 193, or 502. Sp.*

This course is designed to provide the student having little or no prior knowledge of Latin with the skills necessary for reading Classical and Mediaeval Latin. It covers the first two semesters of college Latin, using "Latin for Reading" by Knudsvig, Seligson, and Craig. We shall read both adapted texts and selections from various authors like Caesar, Plautus, Catullus, Martial and Eutropius. Students will also have an opportunity to read Latin

prose and poetry authors of their choice during the course.

**LATIN 506. Advanced Latin Composition**

*LATIN 403. (3). May not be repeated for credit. F.*

**LATIN 599. Supervised Reading in Latin Literature**

*Consent of instructor required. (1 - 4). (INDEPENDENT). May not be repeated for credit. F, W, Sp, Su.*

## **Latina/o American Studies (LATINOAM)**

**LATINOAM 103. First Year Seminar in Latina/o Studies**

*Enrollment restricted to first-year students, including those with sophomore standing. (3). (HU). May not be repeated for credit.*

This course is designed to introduce students to a wide variety of topics and issues in Latina/o Studies in a seminar format from a Humanities perspective. It will enable students to have contact with regular faculty in a small-class experience and to elicit their active participation in the topics under discussion.

**LATINOAM 204. Themes in Latina/o Studies**

*(3 - 4; 3 in the half-term). (HU). May be elected twice for credit. May be elected more than once in the same term.*

This course is intended for first year students, sophomores and juniors as specific illustrations of the issues raised and the approaches used by American Studies scholars. It is an interdisciplinary approach to a social, cultural, or literary theme in Latina/o Studies.

**LATINOAM 213 / AMCULT 213.**

**Introduction to Latina/o Studies**

*(3 - 4). (ID). (R&E). May not be repeated for credit.*

An interdisciplinary overview of the historical experiences, contemporary community issues, and cultural and artistic expressions of Latina/os in the United States.

**LATINOAM 226 / AAS 236 / AMCULT 226 / HISTORY 226 / LACS 226. The Latin Tinge: Latin Music in Social Context in Latin America and the U.S.**

*(4; 3 in the half-term). (HU). (R&E). May not be repeated for credit.*

This course introduces key Latin musical styles, recordings, and musicians. It requires extensive listening and musical analysis, and develops these historical themes: 1) the origins and development of Afro-diasporic musical styles; 2) the interplay between nationalism and popular music; and 3) international musical flows shaped by Atlantic colonialism, commercial markets, and labor migration.

**LATINOAM 243 / AMCULT 243 / WGS 243. Latina Women in the U.S.**

*(3). (HU). May not be repeated for credit.*

This course will serve to introduce the study of gender, culture, and identity among Latinas in the U.S. It will grapple with the cultural forces that have historically created and re-created Latina identities.

**LATINOAM 301. Topics in Latina/o Studies**

*(1 - 4). May be elected twice for credit. May be elected more than once in the same term.*

This course provides undergraduates the opportunity to explore a specific topic in ethnic life in depth using an interdisciplinary approach.

**LATINOAM 304 / AMCULT 304 / SOC 304. American Immigration**

*One introductory course in Sociology or American Culture. (4). (SS). (R&E). May not be repeated for credit.*

As America is a nation of immigrants, this course surveys the immigrant past of ethnic groups such as the Irish, Germans, Jews, Italians, Chinese, Japanese, Blacks, Puerto Ricans, Cubans, and Mexicans. Surveying these varied ethnic histories, we analyze them from contrasting theoretical perspectives on race and ethnic relations, theories of assimilation, internal colonialism, etc. We seek to understand what is unique to and shared among these experiences.

**LATINOAM 310. Latina/o Studies and the Social Sciences**

*(3). (SS). May be repeated for a maximum of 6 credits. May be elected more than once in the same term.*

This course serves as a 300-level social science course in Latina/o Studies the content of which varies from term to term.

**LATINOAM 311. Latina/o Studies and the Humanities**

*(1 - 4). (HU). May be elected twice for credit. May be elected more than once in the same term.*

This course serves as a 300-level humanities course in Latina/o studies the content of which varies from term to term.

**LATINOAM 313 / AMCULT 313 / ANTHRCUL 314. Cuba and its Diaspora**

*(3). (R&E). May not be repeated for credit.*

This course examines Cuban history, literature, and culture since the Revolution both on the island and in the United States Diaspora. Through political and cultural essays, personal narratives, fiction, poetry, drama, and visual art, we will seek a

comprehensive and diverse view of how Cubans and Cuban-Americans understand their situation as people of the same nation divided for thirty-five years by the Cold War, revolution, and exile.

**LATINOAM 315 / AMCULT 315 / HISTORY 377. History of Latina/os in the U.S.**

*(3 - 4). (R&E). May not be repeated for credit. No credit granted to those who have completed or are enrolled in AMCULT 312 or HISTORY 312.*

This course is an exploration of the history and culture of Latina/os in the U.S. from the colonial era to the present. The diversity among groups that make up the Latina/o population of the U.S. will be examined.

**LATINOAM 327 / AMCULT 327 / ENGLISH 387. Latina/Latino Literature of the U.S.**

*(3). (HU). May not be repeated for credit.*

This course, taught in English, considers the relationships between Latino/a literary productions and the social conditions and possibilities of its production. A variety of topics are addressed in the study of such Latino/a literatures of the US as Chicano/a, Puerto Rican, and Cuban American.

**LATINOAM 361 / AMCULT 361 / EDUC 395 / ELI 395 / LING 391 / RCSSCI 395. Principles and Practices of Teaching ESL in Migrant Communities**

*(3). (R&E). (EXPERIENTIAL). May be elected three times for credit.*

In this service-learning course students explore the language, educational, health, and legal issues facing migrant farmworkers in southeast Michigan. As students come to understand the needs of these communities, they learn and practice methods and techniques for teaching ESL to this mixed-proficiency, primarily Spanish-speaking population.



**LATINOAM 362 / AMCULT 362 / EDUC 396 / ELI 396 / LING 396 / RCSSCI 396. Migrant Community Outreach and ESL Teaching Practicum**  
*ELI 395; completed with a minimum grade of C or better. (Prerequisites enforced at registration.) (2 - 3). (EXPERIENTIAL). May be elected three times for credit.*

In this Summer half-term course students practice teaching English to migrant farm workers in southeast Michigan. Students also help provide outreach services to camp residents such as pesticide training, interpreting, and translating. Central to the course is extensive reflection on the teaching experience, both in discussions and written assignments.

**LATINOAM 380 / AMCULT 380 / DIGITAL 380 / FTVM 380. Studies in Transnational Media**  
*Prior coursework in Film Television, and Media, Communications (TV), or Latino Studies. Knowledge of Spanish is not required. (3). May not be repeated for credit.*

Drawing from writings in cultural theory and criticism in both English and Spanish. This course will examine national and transnational trends in Spanish and Portuguese language TV, alternative video and cinema since WW II.

**LATINOAM 381 / AMCULT 381 / FTVM 381. Latinas/Latinos and the Media**  
*Consent of department required. (3). (HU). May not be repeated for credit.*

This course examines the access and contributions of Latinas/os to the U.S. media from an historical perspective, with a culminating emphasis on the contemporary period. The cultural scope is pan-Latino, covering a range of genres and formats,

from documentary to experimental film and television.

**LATINOAM 385 / AMCULT 385 / HISTORY 335 / ISLAM 335.**  
**Immigration Law: Critical Approaches to Contemporary Issues**  
*(3 - 4; 3 in the half-term). (SS). May not be repeated for credit.*

This course assists students to develop an informed analysis of current immigration debates through investigation of the legislative and social history of immigration since the late 1880s, with an emphasis on issues of race, gender, and sexuality. Students develop legal history research skills and become familiar with the kinds of arguments made in history, sociology, and law journals, as well as media, legislatures, and courts.

**LATINOAM 388. Field Study**  
*Consent of instructor required. Sophomore standing. (1 - 4). (EXPERIENTIAL). (INDEPENDENT). May be repeated for a maximum of 8 credits. Offered mandatory credit/no credit.*

A field study is available to undergraduates who are interested in exploring new areas in the field of Latina/o Studies beyond the Michigan campus. These include internship opportunities. Each student makes individual arrangements with a faculty member in the student's area of interest.

**LATINOAM 389. Reading Course in Latina/o Studies**  
*Consent of instructor required. (1 - 4). (INDEPENDENT). May not be repeated for credit. No more than 6 credits of directed readings/internships may be counted toward the American Culture major.*

An independent study course available to undergraduates who are interested in designing a reading list for the purpose of exploring new areas in the field of Latina/o

Studies. Each student makes individual arrangements with a faculty member in the student's area of interest.

**LATINOAM 404 / AMCULT 404 / SOC 404. Latinas/os in the U. S.: Social Problems and Social Issues**

*Upperclass standing. (3). May not be repeated for credit.*

Latinas/os are now the largest minority group in the U. S. - around 18 % of the population. While the media and census data tend to depict them as homogeneous "Hispanics," they are really a very heterogeneous group. In this course we consider some of the major groups: Mexicans, Puerto Ricans, Cubans, Central Americans, Venezuelans, Colombians. We examine their contrasting social characteristics (social class of origin, race/ethnicity, gender, legal status) that are the result of their different reasons for migration; different processes of incorporation; and different social outcomes in the U. S. We particularly look at the various histories that led them to come to the U.S., the impact the legal system had on their processes of incorporation (as undocumented migrants vs. refugees vs. professional migrants), and the opportunities available to them in various regions of the country during the historical moment when they arrived in the U.S.

**LATINOAM 405. Topics in Latina/o Studies**

*(1 - 4). May be elected twice for credit. May be elected more than once in the same term.*

This course provides undergraduates the opportunity to explore a specific topic in Latina/o American life in depth using an interdisciplinary approach.

**LATINOAM 420 / AMCULT 420 / SPANISH 420. Latin American & Latino/a Film Studies**

*Nine credits chosen from: SPANISH 279*

*and 399 or two RCLANG 324; and six credits chosen from SPANISH 279 and 399. (Prerequisites enforced at registration.) (3). May not be repeated for credit. Rackham credit requires additional work.*

Comparative survey of historical and theoretical development in Latin American and Latino/a audio visual media, with an emphasis on the cinema.

**LATINOAM 440. Topics in Latina/o Studies - Spanish Language**

*Nine credits chosen between SPANISH 279 and 399; or two RCLANG 324 and six credits chosen between SPANISH 279 and 399. (Prerequisites enforced at registration.) (3). May be repeated for a maximum of 6 credits. May be elected more than once in the same term. Taught in Spanish.*

Topics on Latin American and U.S. Latina/o literature, culture and/or society. Course taught in Spanish.

**LATINOAM 498. Capstone Seminar in Latina/o Studies**

*(3 - 4; 3 in the half-term). May be elected twice for credit. May be elected more than once in the same term.*

## **Lloyd Hall Scholars Program (LHSP)**

**LHSP 125. College Writing**

*(4). (FYWR). May not be repeated for credit. A maximum of 20 Lloyd Hall Scholars Program credits may be counted toward a degree.*

This course emphasizes argumentative writing and related skills that are needed for success in college work. Various themes are

determined by the instructors who come from many different academic backgrounds. This course makes full use of the close living-learning environment of the Lloyd Scholars Program.

**LHSP 130. Writing and the Arts I**

*(3). (CE). May not be repeated for credit. A maximum of 20 Lloyd Hall Scholars Program credits may be counted toward a degree.*

In this introductory creative non-fiction course, students explore the intersections between writing and other art forms, such as the visual arts, music, film, dance, and theatre. The class helps students discover and develop their "voice" in writing as it asks them to examine more generally the relationship of writing to the arts. In addition, students reflect on their own role in the community as writers, artists, critics, or arts appreciators.

**LHSP 140. Arts and Humanities**

*(3). (CE). May be repeated for a maximum of 6 credits. May be elected more than once in the same term. A maximum of 20 Lloyd Hall Scholars Program credits may be counted toward a degree.*

A studio course in drawing and painting, combined with an introduction to the concepts and language of art criticism. Students will develop skills in drawing and painting, do research on topics in art history and theory, and write short essays on the whole process.

**LHSP 228. What is Writing?**

*Completion of the First-Year Writing Requirement. (3). (HU). (R&E). May not be repeated for credit. A maximum of 20 Lloyd Hall Scholars Program credits may be counted toward a degree.*

This interdisciplinary, faculty/alumni lecture series surveys the subject of writing as it is practiced in a variety of academic

and professional fields. It introduces students to differing models of critical reasoning and prepares them to make appropriate rhetorical choices when writing for disciplines in addition to English.

**LHSP 230. Writing and Arts II**

*Experience in writing or the arts. Non-LSA students welcome and may request permission to enroll. (3). (CE). May be elected twice for credit. A maximum of 20 Lloyd Hall Scholars Program credits may be counted toward a degree.*

This LHSP course integrates writing and the arts as students develop their creative talents and skills and work together on a culminating project/performance. The course focuses on creative skill-building and peer critiquing, requiring both individual and collaborative work.

**LHSP 299. Independent Study**

*Consent of instructor required. (1 - 4). (INDEPENDENT). May be repeated for a maximum of 8 credits. A maximum of 20 Lloyd Hall Scholars Program credits may be counted toward a degree.*

Lloyd Hall Scholars Independent study.

## **Linguistics (LING)**

Linguistics investigates all aspects of spoken and written human language. It is especially concerned with the general principles of language structure, its use and acquisition, with the structure and history of particular languages and groups of languages, with the role of language in human experience, and with the techniques employed in analyzing and describing language. The concentration in Linguistics is intended to provide an understanding of

human language and its systematic study, as well as provide the opportunity to explore the importance of language in all areas of human life.

The general field of linguistics includes several subfields. Phonetics and phonology are especially concerned with the sounds of speech. Phonetics emphasizes the physical characteristics of speech sounds, and phonology deals with the way in which speech sounds are organized in languages. Syntax examines the way in which smaller units of language, such as words, are organized into the complex structure of phrases and sentences. Semantics seeks to understand how the forms of language are used to express meaning. Historical and comparative linguistics is concerned with the ways in which languages change through time, with the variations in language from place to place, and with the possible relationship among languages. Historical linguistics also includes the study of the history of specific languages and language groups, and the reconstruction of pre-historic languages.

In addition to these subfields of linguistics, several other sub-disciplines relate linguistics to other fields of study. Psycholinguistics treats language in its psychological aspects and is especially concerned with the ways in which cultural patterns and values relate to language structure, use, and change. Sociolinguistics deals with the interrelationship of language and society and with the covariation of language and social form. Computational linguistics is concerned with the utilization of computational techniques in the analysis of language.

Some areas in which the findings of linguistics have found application include: translation, the design and documentation

of computer software, language and national policy, speech pathology and speech therapy, the development of writing systems for previously unwritten languages, the teaching of first language skills such as reading and writing, and the teaching of second languages.

#### [Pre-concentration courses in Linguistics.](#)

The Department of Linguistics offers a series of pre-concentration courses designed to meet the needs of students with broad interests in language-related issues as well as those of students with more focused interests in the study of language. The department has four general introductory courses: Introduction to Language (LING 111), Language and Human Mind (LING 209), Introduction to Linguistic Analysis (LING 210), and Introduction to Symbolic Analysis of Language (LING 212). LING 111 surveys the field of Linguistics, including the core areas and other major subfields as well; LING 209/PSYCH 242 introduces students to the “cognitive revolution” in connection with the study of language. LING 210 and 212 introduce students to the methods of linguistic analysis. These courses prepare students for upper-level linguistics courses.

#### **LING 102. First Year Seminar (Humanities)**

*Enrollment restricted to first-year students, including those with sophomore standing. (3). (HU). May not be repeated for credit.*

#### **LING 103. First Year Seminar (Social Science)**

*Enrollment restricted to first-year students, including those with sophomore standing. (3). (SS). May not be repeated for credit.*

#### **LING 106. Start Talking: Introduction to First Language Acquisition**

*(3). (SS). May not be repeated for credit.*

How children learn a complex linguistic system so early in life is a fundamental question in human cognition and Linguistics. In this course we approach the area as researchers and explore children's first language learning by analyzing empirical data and examining major theories of acquisition. We include unilingual and multilingual acquisition, and psycholinguistic and social interactional perspectives.

**LING 111. Introduction to Language**

(3). (SS). May not be repeated for credit.

Concerned with the results of linguistics research, this course covers the social, cultural, and communicative aspects of language use and development.

**LING 112. Languages of the World**

(3). (SS). May not be repeated for credit.

**LING 114. A World of Words**

(3). (HU). May not be repeated for credit.

This seminar will be devoted to the study of words: word histories, word meanings, children's first words, lawyers' words, dictionary-makers' words, the language police's words, teenagers' words, spelling written words, "spelling" spoken words in a phonetic alphabet, complex words, and words in sentences.

**LING 115. Language in a Multicultural World**

(3). (SS). May not be repeated for credit.

This course focuses on global multilingualism as an issue in language policy, language planning, and language contact in general, with all its social implications for large as well as small language communities. Some language contacts lead to bloody conflicts in which language is ostensibly the major bone of contention; other languages in contact have enjoyed a peaceful coexistence for hundreds

or thousands of years. The course offers no tidy prediction about hostile vs. friendly language contacts, but it does provide an extensive comparative view of both national and local interactions between language and society.

**LING 137. Epic Grammar Fails: The Linguistics of Language Peeves**

*No credit granted to those who have completed or are enrolled in LING 102: First Year Seminar (Humanities) with topic number #16: Epic Grammar Fails. (Prerequisites enforced at registration.)* (3). (HU). May not be repeated for credit.

An introductory-level course exploring peeves about grammar, spelling, and language in general.

**LING 192. Humanities Topics in Linguistics**

(1 - 4). (HU). May be elected twice for credit.

*May be elected more than once in the same term.*

Humanities-related topics in Linguistics.

**LING 193. Social Sciences Topics in Linguistics**

(1 - 4). (SS). May be elected twice for credit.

*May be elected more than once in the same term.*

Social Science-related topics in Linguistics.

**LING 209 / COGSCI 209 / PSYCH 242. Language and Human Mind**

*Not available to students who have completed LING 103 (courseID 020035), Topic: Language and Mind, (Topic #6). (Prerequisites enforced at registration.)* (4; 3 in the half-term). (ID). May not be repeated for credit. Does not count toward the requirements for the Psychology major.

This course introduces students to the fascinating "cognitive revolution" in contemporary language study, illuminating the Chomskyan shift away from speech

behavior or "languages" as the objects of inquiry to the experimental and theoretical study of the biological/cognitive and mechanisms underlying our unique human capacity for language.

**LING 210. Introduction to Linguistic Analysis**  
(4). (SS). *May not be repeated for credit.*

**LING 230. Honors Core in Linguistics**  
*Consent of department required. (4). (SS). May be elected twice for credit. May be elected more than once in the same term.*

As part of the Honors Core Curriculum, this course introduces Honors students to the fields, questions and meta-questions, and methodologies of the Social Sciences; in this case, through the discipline of Linguistics. The course uses both contemporary technology and time-honored methodologies to examine theoretical concepts, problems, and case studies; the course uses a variety of formats and strategies.

**LING 240. Honors Core Writing in Linguistics**  
*Consent of department required. (4). (SS). (FYWR). May be elected twice for credit. May be elected more than once in the same term.*

As part of the Honors Core Curriculum, this course introduces Honors students to the fields, questions and meta-questions, and methodologies of the Social Sciences; in this case, through the field of Linguistics. The course uses both contemporary technology and time-honored methodologies to examine theoretical concepts, problems, and case studies; the course uses a variety of formats and strategies.

**LING 272 / ANTHRCUL 272. Language in Society**  
*Primarily for first- and second-year students. (4). (SS). (R&E). May not be repeated for credit.*

An introduction to the systematic study of language and of the place of language in society. Origins of language in the species, child language, language and thought, meaning and language and social class.

**LING 313. Sound Patterns**  
*LING 111, 209, 210, or 212. (3; 2 in the half-term). (SS). May not be repeated for credit.*

This course explores two fundamental aspects of the sounds of human languages: speech sounds as physical entities (phonetics) and as part of a linguistic system (phonology).

**LING 315. Introduction to Syntax**  
*LING 111, 209, 210, or 212. (3; 2 in the half-term). May not be repeated for credit.*

This course focuses on recognizing linguistic data, organizing that data, and formulating all the logically possible analyses for that data within the framework of different syntactical areas.

**LING 316. Aspects of Meaning**  
*LING 111, 209, 210, or 212. (3). May not be repeated for credit.*

Introduction to various methods that linguistics use in the analysis of linguistic meaning. Topics covered may include formal semantics, lexical semantics, presupposition and entailment, speech acts, or other aspects of the study of meaning in natural language.

**LING 317. Language and History**  
*LING 111 or 210. (3; 2 in the half-term). (HU). May not be repeated for credit.*

Languages vary and change in order to accommodate the needs of their speakers; language histories overlap with and reflect the political, social and economic histories of speech communities.

**LING 340. Introduction to Sociolinguistics**  
*LING 111 or 210. (3). May not be repeated for credit.*

This course examines the varied relationships between language use and society along with the major methods and theories that have been devised to explore those relationships. Topics covered include the language contact and change, linguistic diversity and intercultural communication, and the relationship of identity to language use.

**LING 341. The Mathematics of Language**  
*One linguistics course. (3). May not be repeated for credit.*

Can language be described mathematically? Is there any fundamental difference between human languages (English, Swahili, Anishnaabemowin) and computer languages? Or between human languages and logical languages? What gives invented languages (like Sindarin or Klingon) the ring of real languages? Can we build a machine that genuinely speaks English?

**LING 342. Perspectives on Bilingualism**  
*LING 111, 210, or 272. (3). May not be repeated for credit.*

**LING 344. Cognitive Linguistics**  
*(3). May not be repeated for credit.*

Introduction to semantically based models of grammar and meaning that emphasize natural cognition (mental spaces, attention, perspective, metaphor/metonym). These models do not distinguish syntax from semantics, semantics from pragmatics, or linguistic meaning from general knowledge, and they allow phrases (constructions) to have forms and meanings beyond those of their parts.

**LING 347 / PSYCH 349. Talking Minds**  
*At least one of: LING 111 or 210, or PSYCH 111,*

*112, 114, or 115. (3). (BS). May not be repeated for credit.*

Human minds are unique in their capacity for language, yet other animals and computers also have communication systems. This course introduces students to theoretical issues in the cognitive processes of language and memory, conversation, and compare "primitive language" in young humans, non-human animals, and computers.

**LING 351 / ELI 351 / PSYCH 344. Second Language Acquisition**  
*LING 111 or 210. (3). (BS). May not be repeated for credit.*

This is an introductory course in Second Language Acquisition (SLA). How adults learn, or fail to learn, a second language is a fascinating question. It involves much of what we know about human cognition, psychology, and language. How best to help learners acquire a second language is an equally important educational issue. In addition to all of the factors which play a role in child language acquisition, SLA also involves effects of variation in second language educational, social and usage environments, ages of acquisition, levels of learner cognitive and brain development, motivation, and language transfer.

**LING 352 / PSYCH 352. Development of Language and Thought**  
*PSYCH 250. (3). (SS). May not be repeated for credit.*

A consideration of the main theoretical positions on the relationships between language and thought with an emphasis on the universal processes underlying language acquisition, environmental influences.

**LING 367 / ASIAN 367. Languages of Asia**  
*(3). (HU). May not be repeated for credit.*

This course provides students with an exploration of the history of language and Asian regions, including China, Japan, Korea, Mongolia, Indonesia, Vietnam, India, and Pakistan. It offers a broad perspective on the history and culture of the region, as well as a general introduction to linguistic analysis and methodology.

**LING 368 / ASIAN 368. How Different is Chinese?**

(3). (HU). May not be repeated for credit.

This course investigates and critically analyzes Western writings about the Chinese language from the 16th century to the present.

**LING 370 / ANTHRCUL 370. Language and Discrimination: Language as Social Statement**

(3). (SS). (R&E). May not be repeated for credit.

This course examines the role of language as social statement and social conflict, particularly with respect to questions of race and ethnicity. It looks at issues concerning language-based discrimination in various public and private contexts and at beliefs about language and language variation.

**LING 374 / ANTHRCUL 374. Language and Culture**

Sophomore standing. (4). (HU). May not be repeated for credit.

The study of the ways various cultural patterns and values are reflected in language.

**LING 375. Language in the Mass Media: Linguistics and Language Variation in the Public Sphere**

LING 111 or 210. (3). (ID). May not be repeated for credit.

This course examines language and the representation of linguistic variation across

a wide-spectrum of popular culture and mass media, including scripted television, film, music, reality programming, sportscasts, news (print and video), computer-mediated communication, science fiction, and science fiction-based fan communities. We also examine the ways in which language is used to construct and reflect social identities and social group boundaries.

**LING 385. Experiential Practice**

Permission of instructor. (1 - 6).

(EXPERIENTIAL). May be repeated for a maximum of 6 credits. Offered mandatory credit/no credit.

**LING 390 / EDUC 390 / ELI 390 / RCSSCI 390. Community-Engaged Learning in ESL Teaching Contexts**

(3). (EXPERIENTIAL). May be elected three times for credit.

This course focuses on communicative language teaching and learning in community contexts. It prepares participants to teach ESL in local communities and provides them with hands-on teaching practice experiences in local service organizations. Participants explore the overall theme of "Language and Community" as they learn ESL teaching methods & techniques.

**LING 391 / AMCULT 361 / EDUC 395 / ELI 395 / LATINOAM 361 / RCSSCI 395. Principles and Practices of Teaching ESL in Migrant Communities**

(3). (R&E). (EXPERIENTIAL). May be elected three times for credit.

In this service-learning course students explore the language, educational, health, and legal issues facing migrant farmworkers in southeast Michigan. As students come to understand the needs of these communities, they learn and practice methods and



techniques for teaching ESL to this mixed-proficiency, primarily Spanish-speaking population.

**LING 394. Topics in Linguistics**

*LING 111 or 210. (1 - 4). May be elected twice for credit. May be elected more than once in the same term.*

Faculty members offer courses related to their own research to students who have taken the introductory level courses in linguistics but are not advanced enough for 400 or 500 level courses. Topics are announced each term in the course guide.

**LING 395. Individual Research**

*Consent of instructor required. (1 - 4). (INDEPENDENT). May be repeated for a maximum of 6 credits. F, W, Sp, Su.*

Adequately prepared students can pursue individual research with a member of the faculty. Individual students should consult with faculty about ongoing projects in which they can participate.

**LING 396 / AMCULT 362 / EDUC 396 / ELI 396 / LATINOAM 362 / RCSSCI 396. Migrant Community Outreach and ESL Teaching Practicum**

*ELI 395; completed with a minimum grade of C or better. (Prerequisites enforced at registration.) (2 - 3). (EXPERIENTIAL). May be elected three times for credit.*

In this Summer half-term course students practice teaching English to migrant farm workers in southeast Michigan. Students also help provide outreach services to camp residents such as pesticide training, interpreting, and translating. Central to the course is extensive reflection on the teaching experience, both in discussions and written assignments.

**LING 408 / ENGLISH 408. Varieties of English**  
*(3). May not be repeated for credit.*

This course examines topics such as American English, English as a world language, and dialects in English. It also studies the ways speech reflects our personal views about national and regional origins, race, class, ethnicity, religion, age, gender, and sexual orientation.

**LING 412. Speech Perception**

*LING 313. (Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit.*

The course investigates the perceptual processes by which listeners systematically extract linguistic messages from highly variable input acoustic signals. Through hands-on work in the phonetics laboratory, students are also introduced to the relation between experimental design and theory/experimentation in the cross-disciplinary field of speech perception.

**LING 413. Speech Science**

*LING 313. (Prerequisites enforced at registration.) (3). May not be repeated for credit.*

The course introduces students to fundamental principles of the production, acoustics, and perception of speech. These principles are reinforced through work in the phonetics laboratory, which provides training in acoustic analysis and articulatory dynamics.

**LING 421. Morphology**

*LING 313. (Prerequisites enforced at registration.) LING 315 or LING 316. (3; 2 in the half-term). May not be repeated for credit.*

This course is an introduction to morphological theory, the goal of which is to provide a framework within which word structure in all languages can be described.

**LING 423. African Linguistics**

*Two previous 300-level courses in Linguistics. (3). May not be repeated for credit.*

Introduction to the languages of sub-Saharan Africa. Emphasis is on applying what students have learned in basic linguistics courses to concrete issues in African languages. Grammatical topics include clicks, tones, logophoric pronouns, ideophones, and serial verbs. Sociolinguistic and historical topics include linguistics-genetics collaborations, urban youth languages, and extreme language contact.

**LING 426 / PHIL 426. Philosophy and Linguistic Theory**

*One philosophy introduction, one logic introduction, or concentration in Linguistics. (3; 2 in the half-term). May not be repeated for credit.*

When people say things, they usually mean something. This course will concentrate on theories of meaning, with special emphasis on theories that bear on the role of meaning in conversation.

**LING 433 / ARABIC 507. Arabic Syntax and Semantics**

*ARABIC 202 (AAPTIS 202) or ARABIC 203 (AAPTIS 205) completed with a minimum grade of C- or better. (Prerequisites enforced at registration.) (3). May not be repeated for credit.*

The course examines generative syntactic theory, especially the notion of principles and parameters, as well as functional, cognitive, and lexical semantic approaches and their relevance of analysis to standard Arabic and at least one Arabic dialect, using as a reference point medieval Arabic grammar.

**LING 440. Language Learnability**

*LING 315. (Prerequisites enforced at*

*registration.) (3). May not be repeated for credit.*

This course examines various theory-related questions, goals, and assumptions within the scope of language acquisition. The course objectives are two-fold: (1) to develop familiarity with prominent aspects of language learnability; and (2) to promote discussions and perspectives that stimulate further investigation and insight into language learning theories.

**LING 441. Introduction to Computational Linguistics**

*EECS 183 or the equivalent. Students planning to take LING 315 and 316 (e.g., Linguistics majors) should take them before taking LING 441. (3). (BS). May not be repeated for credit. Rackham credit requires additional work.*

Computational linguistics, also known as natural language processing, encompasses three distinct areas of study: (1) human language technologies, such as machine translation, information extraction, or spoken language dialogue systems; (2) computational models of language users, either human (computational psycholinguistics) or artifactual (artificial intelligence); and (3) digital linguistics, which is the use of computation in support of language documentation and linguistic research. For all three areas of study, there is a common body of fundamentals. This class introduces those fundamentals. One focus is the processing pipeline involved in natural language understanding, particularly part of speech tagging, parsing, and semantic interpretation. A second focus is the extraction of linguistic information from text corpora; we will touch on collocations, language models, regular expressions, and text classification. The approach will be very hands-on. We will use the Natural Language Toolkit, in the Python programming language. The course does

not assume prior experience with Python, nor does it assume a computer science background. It is particularly intended for language, linguistics, psychology, and cognitive science students. However, prior programming experience is absolutely essential - this course is not an introduction to programming.

**LING 446 / LACS 446. Comparative Linguistics**

*At least one course in Linguistics/language analysis. (3). May not be repeated for credit. Rackham credit requires additional work.*

This course introduces students to research on comparative linguistics. It is directed to students interested in the study of different language, or to anyone interested in a more thorough understanding of the common properties among human languages and of the possible variation across the structure.

**LING 447 / PSYCH 445. Psychology of Language**

*PSYCH 240. (Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit.*

**LING 449 / AAS 439. Creole Languages and Caribbean Identities**

*AAS 202. (3; 2 in the half-term). May not be repeated for credit.*

**LING 461 / AMCULT 461 / ANTHRCUL 461 / NATIVEAM 461. Language, Culture, and Society in Native North America**

*(3). May not be repeated for credit.*

This course will explore how Native North American languages are used in relation to the historical circumstances, cultural practices and social settings of their speakers. Of particular concern is the interrelationship between linguistic practice and ideologies that can either promote or discourage the use (and maintenance) of these languages.

**LING 473 / ANTHRCUL 473. Oral Narrative and Poetics**

*Two courses in anthropology, linguistics, or literature or permission of instructor. (3; 2 in the half-term). May not be repeated for credit.*

This course explores relationships between language and social groupings such as "tribe", "ethnic group" and "nation". Are such groupings based on shared language? Through cross-cultural case studies and historical materials, we consider how linguistic similarities and differences unite or divide people, in practice and in ideology.

**LING 492. Topics in Linguistics**

*(1 - 4). May be repeated for a maximum of 18 credits. May be elected more than once in the same term.*

Faculty members offer courses related to their own research to students who have taken the introductory level courses in linguistics but are not advanced enough for the 500-level courses. Topics are announced each term in the course guide.

**LING 493. Undergraduate Reading**

*Consent of instructor required. Permission of the concentration advisor. (1 - 3). (INDEPENDENT). May not be repeated for credit.*

**LING 494. Undergraduate Reading**

*Consent of instructor required. Permission of the concentration advisor. (1 - 3). (INDEPENDENT). May not be repeated for credit.*

**LING 495. Senior Honors Reading Course**

*Consent of instructor required. Permission of concentration advisor. (1 - 3). (INDEPENDENT). May not be repeated for credit. Continuing Course. Y grade can be reported at end of the first-term to indicate work in progress. At the end of the second term (LING 496), the final*

*grade is posted for both term's elections. F, W, Sp/Su, Sp, Su.*

**LING 496. Senior Honors Reading Course**

*Consent of instructor required. LING 495. (1 - 3). (INDEPENDENT). May not be repeated for credit. F, W, Sp/Su, Sp, Su.*

Designed for linguists and others in humanities and social this course provides essential programming skills for language processing, including corpus processing (sociolinguistics, language preservation, authorship studies), and computational modeling of parsing (psycholinguistics, computational linguistics).

**LING 497. Capstone Seminar**

*LING 313, 315 and 316. (Prerequisites enforced at registration.) (3). (BS). May be elected twice for credit. May be elected more than once in the same term.*

This capstone course is designed to provide students with a unified experience that brings previous coursework, particularly those required, to bear on a specific topic. Individual topics vary by term, but all integrate the core areas of the discipline.

**LING 512. Phonetics**

*LING 313. (4). May not be repeated for credit. F.*

This is an introduction to phonetics (the study of the nature of speech sounds). The course will focus on the description of speech sounds in terms of their articulatory, acoustic and perceptual characteristics and the production and transcription of sounds that occur in languages of the world.

**LING 513. Phonology**

*LING 313. (3; 2 in the half-term). May not be repeated for credit. W.*

**LING 515. Generative Syntax**

*LING 315 or Permission of Instructor. (3; 2 in*

*the half-term). May not be repeated for credit. F.*

In the Generative (or Chomskyan) framework of syntax, sentence structure is viewed as being generated by a formal mathematical system of rules and constraints. Some of these rules and constraints are innate and universal across languages; others are learned or "parametrized".

**LING 516. Semantics and Pragmatics**

*Permission of instructor. (3; 2 in the half-term). May not be repeated for credit.*

This is an introduction to semantics (literal meaning) and pragmatics (contextual and inferred meaning) with emphasis on applications to grammatical analysis. Specific topics include: (1) ambiguities of structure and of meaning; (2) word meaning and compositionality; and (3) quantification and logical form.

**LING 517 / ANTHRCUL 519 / GERMAN 517.**

**Principles and Methods of Historical Linguistics**

*Graduate standing, or permission of instructor. (3; 2 in the half-term). May not be repeated for credit.*

**LING 522. Language Contact**

*At least one introductory course in Linguistics. (3). May not be repeated for credit.*

This course begins with a survey of historical, social, and political settings of language contact (when, where, and why do languages come into contact?) and with a consideration of this question: when two or more languages come into contact, what typically happens to them linguistically, cognitively, socially, and politically?

**LING 541 / EECS 595 / SI 561. Natural Language Processing**

*Senior standing. (3). (BS). May not be repeated for credit. F.*

Linguistics fundamentals of natural language processing (NLP), part of speech tagging, hidden Markov models, syntax and parsing, lexical semantics, compositional semantics, word sense disambiguation, machine translation. Additional topics such as sentiment analysis, text generation, and deep learning for NLP>

**LING 542 / ANTHRCUL 572. Introduction to Sociolinguistics**

*LING 411 or graduate standing. (3; 2 in the half-term). May not be repeated for credit.*

The class will discuss such relationships between language and society and how they might be studied objectively. We will focus on issues directly affecting a person's everyday life, such as attitudes towards different languages and dialects and historical and social reasons for these attitudes; questions about why different groups of speakers in the same society use language differently and how this difference is evaluated; use of minority languages whose survival seems to be threatened and governments' language policies.

## **Macromolecular Science (MACROMOL)**

**MACROMOL 410 / BIOMEDE 410 / MATSCIE 410. Design and Applications of Biomaterials**

*MATSCIE 220 or 250 with a grade of C- or better; or graduate standing. (Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit.*

Biomaterials and their physiological interactions. Materials used in

medicine/dentistry: metals, ceramics, polymers, composites, resorbable, smart, natural materials. Material response/degradation: mechanical breakdown, corrosion, dissolution, leaching, chemical degradation, wear. Host responses: foreign body reactions, inflammation, wound healing, carcinogenicity, immunogenicity, cytotoxicity, infection, local/systemic effects.

**MACROMOL 412 / CHE 412 / MATSCIE 412. Polymeric Materials**

*MATSCIE 220 or 250, and CHEM 210 with a grade of C- or better; or graduate standing. (Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit.*

The synthesis, characterization microstructure, rheology, and processing of polymeric materials. Polymers in solution and in the liquid, liquid-crystalline, crystalline, and glassy states. Engineering and design properties, including viscoelasticity, yielding, and fracture. Forming and processing methods. Recycling and environmental issues.

**MACROMOL 512 / CHE 512 / MATSCIE 512. Polymer Physics**

*Senior or graduate standing in engineering or physical science. (3). (BS). May not be repeated for credit.*

**MACROMOL 514 / MATSCIE 514 / MFG 514. Composite Materials**

*MATSCIE 350 or equivalent, or permission of instructor. (3). (BS). May not be repeated for credit. F.*

**MACROMOL 515 / MATSCIE 515. Mechanical Behavior of Solid Polymeric Materials**

*MECHENG 211 and CHE 412 or MATSCIE 412 or MACROMOL 412 or permission of instructor. (3). (BS). May not be repeated for credit.*

**MACROMOL 530 / MATSCIE 517.****Advanced Functional Polymers:****Molecular Design and Applications**

*MATSCIE 412 or CHE 412 or*

*MACROMOL 412; completed with a minimum grade of C- or better. Consent of instructor required. (Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit.*

Development of global perspective of interdisciplinary issues involved in functional polymers. Learn how to design, synthesize, evaluate, and analyze functional polymers.

**MACROMOL 538 / CHEM 538. Organic Chemistry of Macromolecules**

*CHEM 215/216, and CHEM 230 or 260.*

*(3). (BS). May not be repeated for credit. F.*

**MACROMOL 559 / CHE 559 /****MATSCIE 559. Foundations of Nanotechnology II**

*Senior or graduate standing. (3). (BS). May not be repeated for credit.*

This course will cover the synthesis and processing of nano-sized metal, metal oxide, and semiconductor powders. It will also include organic/inorganic and nanobiomaterials. Emphasis will be on particle properties and their use in making nanostructured materials with novel properties.

## **Mathematics (MATH)**

**MATH 103 / CSP 103. Intermediate Algebra**

*Only open to designated summer half-term Bridge students. (3 in the half-term). May not be repeated for credit. Su.*

Review of elementary algebra; rational and quadratic equations; properties of relations, functions, and their graphs; linear and quadratic functions; inequalities, logarithmic and exponential functions and equations.

**MATH 104 / CSP 104. Mathematical Thinking**

*Only open to designated Summer half-term Bridge and M Academy students. (3 in the half-term). (QR/2). May not be repeated for credit.*

This course is an introduction to rigorous mathematical reasoning, for students planning on a career in the humanities. The focus is on significant ideas in mathematics but not on notation or computation.

**MATH 105. Data, Functions, and Graphs**

*(4). (MSA). (BS). (QR/1). May not be repeated for credit. No credit granted to those who have completed any Mathematics course numbered 110 or higher. A maximum of four credits may be earned in MATH 105 and 110.*

This course presents the concepts of precalculus from four points of view: geometric (graphs), numeric (tables), symbolic (formulas), and written (verbal descriptions). The emphasis is on the mathematical modeling of real-life problems using linear, polynomial, exponential, logarithmic, and trigonometric functions. Students develop their reading, writing, and questioning skills in an interactive classroom setting.

**MATH 106. Introduction to Calculus and Mathematical Modeling**

*Consent of department required. (3). (MSA). (BS). (QR/1). May not be repeated for credit.*

The course presents the concepts of precalculus and calculus from four points of

view: geometric (graphs), numeric (tables), symbolic (formulas) and written (verbal descriptions). The emphasis is on conceptual understanding and mathematical modeling of real life problems.

**MATH 110. Pre-Calculus (Self-Study)**

*MATH 110 is by recommendation or permission of MATH 115 instructor. (2). May not be repeated for credit. No credit granted to those who already have 4 credits for pre-calculus mathematics courses. A maximum of four credits may be earned in MATH 105 and 110.*

The course is a condensed, half-term version of Math 105 designed for students who appear to be prepared to handle calculus but are not able to successfully complete Math 115. Students may enroll in Math 110 only on the recommendation of a mathematics instructor after the third week of classes in the Fall and must visit the Math Lab to complete paperwork and receive course materials. The course covers data analysis by means of functions and graphs.

**MATH 115. Calculus I**

*Four years of high school mathematics. (4). (MSA). (BS). (QR/1). May not be repeated for credit. No credit for students having completed Math 116, 185, 215, or 216.*

The course presents the concepts of calculus from four points of view: geometric (graphs), numeric (tables), symbolic (formulas), and verbal descriptions. Students will develop their reading, writing, and questioning skills, as well as their ability to work cooperatively. Topics include functions and graphs, derivatives and their applications to real-life problems in various fields, and an introduction to integration.

**MATH 116. Calculus II**

*MATH 115. (4). (MSA). (BS). (QR/1). May not be repeated for credit. Credit is granted*

*for only one course among MATH 116 and 156. No credit for students having completed or enrolled in Math 156, 176, 186, 215, 216, 285, or 286.*

The course presents the concepts of calculus from four points of view: geometric (graphs), numeric (tables), symbolic (formulas), and verbal descriptions. Students will develop their reading, writing and questioning skills, as well as their ability to work cooperatively. Topics include techniques of integration, applications of integration, Taylor series, an introduction to differential equations, and infinite series.

**MATH 145. Houghton Scholars Calculus Workshop I**

*Consent of department required. Concurrent enrollment in MATH 115. (2). May not be repeated for credit. Offered mandatory credit/no credit.*

An intensive supplemental workshop experience for students in the Douglas Houghton Scholars Program. In a small-class setting, students work in small groups on problems more challenging than those in the regular section of Math 115. The goal is to develop the students' problem-solving capabilities and promote their interest in challenging problems.

**MATH 146. Houghton Scholars Calculus Workshop II**

*Credit in MATH 145. (Prerequisites enforced at registration.) Concurrent enrollment in MATH 116. (2). May not be repeated for credit. Offered mandatory credit/no credit.*

For students in the Douglas Houghton Scholars Program.

**MATH 147. Introduction to Interest Theory**

*Three to four years high school mathematics. (3). (MSA). (BS). May not be*

*repeated for credit. No credit granted to those who have completed a 200- (or higher) level mathematics course, except MATH 385, 485, 489, or 497.*

An introduction to the mathematical concepts and techniques used by financial institutions. Topics include rates of simple and compound interest and present and accumulated values; annuity functions and applications to amortization, sinking funds and bond values; depreciation methods; introduction to life tables, life annuities and life insurance value.

**MATH 156. Applied Honors Calculus II**  
*Score of 4 or 5 on the AB or BC Advanced Placement calculus exam. (4). (MSA). (BS). (QR/1). May not be repeated for credit. Credit is granted for either MATH 116 or 156, not both. F.*

Second semester calculus for engineering and science majors. Topics include applications of integral calculus (e.g. arc length, surface area, work, hydrostatic pressure, center of mass), improper integrals, sequences and series, differential equations, complex numbers, MAPLE.

**MATH 175. An Introduction to Cryptology**  
*Permission of department. (4). (MSA). (BS). (QR/1). May not be repeated for credit. No credit granted to those who have completed a 200-level or higher Mathematics course other than 385 or 489. F.*

This course introduces students to the science of constructing and attacking secret codes. An important goal of this course to present the mathematical tools, from combinatorics, number theory and probability, that underlie cryptologic methods. It will be helpful for students in this course to have a strong mathematical background.

### **MATH 176. Explorations in Calculus**

*Background in calculus is suggested, highly recommended for students who have taken Math 175. (4). (MSA). (BS). (QR/1). May not be repeated for credit. Credit is granted for either MATH 176 or 186, not both.*

This course is an Inquiry--Based version of Honors Calculus I and II (such as Math 185/186) and will prepare you for Calculus III (Math 215 or the honors version, Math 285). A student with some exposure to calculus (e.g. AB or BC in high school, or Math 115) will be well -prepared for this course. The majority of class time will be working in groups and presenting ideas and solutions to problems.

### **MATH 185. Honors Calculus I**

*Permission of the Honors advisor. (4). (MSA). (BS). (QR/1). May not be repeated for credit. F.*

Topics covered include functions, graphs, continuity, limits, derivatives, and integrals. Tuesday meetings are usually devoted to introducing linear algebra.

### **MATH 186. Honors Calculus II**

*Permission of the Honors advisor. (4). (MSA). (BS). (QR/1). May not be repeated for credit. Credit is granted for either MATH 176 or 186, not both. W.*

Topics covered include transcendental functions, techniques of integration, introduction to differential equations, conic sections, and infinite sequences and series. Other topics will be included at the discretion of the instructor.

### **MATH 205. Calculus of Several Variables**

*This is a multivariable calculus course that is an alternative to Math 215 for students intending to major in Math, Stats or the Social Sciences. (4). (MSA). (BS). (QR/1). May not be repeated for credit. Credit is*



*only granted to one course among MATH 205, 215, 255, and 285.*

This is a multivariable calculus course. Topics covered include graphs, limits, continuity, and partial derivatives of functions of several variables; vectors; optimization including Lagrange multipliers; line and volume integrals; and Green's Theorem.

**MATH 214. Applied Linear Algebra**

*MATH 116, 156, 176, 186, or 296. (4). (MSA). (BS). (QR/1). May not be repeated for credit. No credit granted to those who have completed or are enrolled in MATH 217, 417, 419, or 420.*

This course is an introduction to matrices and linear algebra, with an emphasis on concepts and problem solving. It is particularly designed for students who are planning to take a course in linear programming or computer science.

**MATH 215. Multivariable and Vector Calculus**

*MATH 116, 156, 176, 186, or 296. (4). (MSA). (BS). (QR/1). May not be repeated for credit. Credit can be earned for only one of MATH 215, 255, or 285.*

Topics include vector algebra and vector functions; analytic geometry of planes, surfaces and solids; functions of several variables and partial differentiation; line, surface, and volume integrals and applications; vector fields and integration; Green's Theorem, Stokes' Theorem, and Gauss's Theorem. There is a weekly lab using MAPLE.

**MATH 216. Introduction to Differential Equations**

*Permission required after credit earned in MATH 216, 286, or 316. (Prerequisites enforced at registration.) MATH 116, 156, 176, 186, or 296. (4). (MSA). (BS). (QR/1). May not be repeated for credit. Credit can*

*be earned for only one of MATH 216, 286, or 316.*

MATH 216 is a basic course on differential equations, intended for engineers and other scientists. Topics covered include some material on complex numbers and matrix algebra, first and second order linear and non-linear systems with applications, introductory numerical methods, and elementary Laplace transform techniques.

**MATH 217. Linear Algebra**

*MATH 215 or 285. Most students take only one course from MATH 214, 217, 417, and 419. (4). (MSA). (BS). (QR/1). May not be repeated for credit. No credit granted to those who have completed or are enrolled in MATH 419 or 420. Only 2 credits granted to those who have completed MATH 214 or 417.*

Systems of linear equations; matrix algebra; vectors, vector spaces and subspaces; geometry of  $R^n$ ; linear dependence, bases and dimension; linear transformations; Eigenvalues and Eigenvectors; diagonalization; inner products; spectral theorem, Gram-Schmidt process.

**MATH 285. Honors Multivariable and Vector Calculus**

*MATH 156, 176, or 186, or permission of the Honors advisor. (4). (MSA). (BS). (QR/1). May not be repeated for credit. Credit can be earned for only one of MATH 215, 255, or 285. F.*

Topics include vector algebra and vector functions, analytic geometry of planes, surfaces and solids; function of several variables and partial differentiation; line surface and volume integrals and applications; vector fields and applications; Green's Theorem; Stokes' Theorem, Gauss's Theorem.

**MATH 286. Honors Differential Equations**

*Permission required after credit earned in MATH 216 or 316. (Prerequisites enforced at registration.) MATH 285. (3). (MSA). (BS). (QR/1). May not be repeated for credit. Credit can be earned for only one of MATH 216, 286, or 316. W.*

Topics include first-order differential equations, higher-order linear differential equations with constant coefficients; linear systems.

**MATH 289. Problem Seminar**

*(1). (BS). May be repeated for credit.*

**MATH 295. Honors Mathematics I**

*Prior knowledge of first year calculus and permission of the Honors advisor. (4). (MSA). (BS). (QR/1). May not be repeated for credit. F.*

Introduction to mathematical analysis with emphasis on proofs and theory. Covers such topics as set theory, construction of the real number field, limits of sequences and functions, continuity, elementary functions, derivatives and integrals. Additional topics may include countability, topology of real numbers, infinite series, uniform continuity.

**MATH 296. Honors Mathematics II**

*MATH 295. (4). (BS). (QR/1). May not be repeated for credit. W.*

Topics generally include infinite series, power series, Taylor expansion, metric spaces. Other topics may include applications of analysis, Weierstrass Approximation theorem, elements of topology, introduction to linear algebra, complex numbers.

**MATH 297. An Introduction to Analysis**

*MATH 217 or permission of the Undergraduate Program Director. (Prerequisites enforced at registration.) (4). (MSA). (BS). (QR/1). May not be repeated for credit.*

This is a course in analysis for students who know how to write rigorous mathematical arguments and possess a firm understanding of the standard concepts of linear algebra. It is specifically designed for students who excelled in Math 217, love mathematics, and wish to transition into the Honors Analysis Sequence.

**MATH 310. Chance and Choice**

*Sophomore standing and one previous university math class. (3). (BS). (QR/1). May not be repeated for credit.*

This course is a hands-on introduction to various topics in probability. We will explore topics in randomness and probability, with some real-life applications. Topics include basic probability and combinatorics, conditional probability, expectations, random walks, Poisson distributions, and Markov chains. This course is taught in an inquiry based (IBL) approach: no lectures, no exams, no textbook. Instead, students work on worksheets together in groups in class. These worksheets, together with their solutions, form the student's own "final textbook". Attendance and group work are an essential part of the course.

**MATH 312. Applied Modern Algebra**

*MATH 217. (3). (BS). May not be repeated for credit. Only one credit granted to those who have completed MATH 412.*

**MATH 316. Differential Equations**

*Permission required after credit earned in MATH 216, 256, or 286. (Prerequisites enforced at registration.) MATH 215, 255, or 285 and 217. (3). (BS). May not be repeated for credit. Credit can be earned for only one of MATH 216, 256, 286, or 316.*

This is a rigorous course on differential equations for math, science and engineering majors with a good background in both

calculus and linear algebra. As well as material normally included in a junior level differential equations course. This course will include qualitative theory, and existence and uniqueness theorems. The use of microcomputers and standard commercial programs available for such a course will be encouraged.

**MATH 333. Directed Tutoring**

*Consent of instructor required. Enrollment in the secondary teaching certificate program with concentration in Mathematics and permission of instructor. (1 - 3). (EXPERIENTIAL). May be repeated for a maximum of 3 credits. F, W, Sp. Offered mandatory credit/no credit.*

An experiential mathematics course for students enrolled in the Secondary Teaching Certificate Program with a concentration in Math. Students would tutor pre-calculus (MATH 105) or calculus (MATH 115) in the Math Lab. They also would participate in a bi-weekly seminar to discuss mathematical and methodological questions.

**MATH 351. Principles of Analysis**

*MATH 215 and 217. (3). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in MATH 451.*

Content: Logic and techniques of proof, sequences, continuous functions, uniform continuity, differentiation, integration, and the Fundamental Theorem of Calculus.

**MATH 354. Fourier Analysis and its Applications**

*Cannot be taken after MATH 454 without permission. (Prerequisites enforced at registration.) MATH 216, 256, 286, or 316. (3). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in MATH 450 or 454.*

Fourier series; discrete Fourier transforms, and continuous Fourier transforms, with applications to subjects such as signal processing and filtering; Fourier optics; partial differential equations (Poisson, heat, and wave equations); probability theory (random walks); and Weyl's theorem on equidistribution of arithmetic sequences.

**MATH 371 / ENGR 371. Numerical Methods for Engineers and Scientists**

*ENGR 101; one of MATH 216, 256, 286, or 316, and one of MATH 214, 217, 417, or 419. (3). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in MATH 471 or 472.*

This is a survey course of the basic numerical methods which are used to solve scientific problems. In addition, concepts such as accuracy, stability and efficiency are discussed. The course provides an introduction to MATLAB, an interactive program for numerical linear algebra as well as practice in computer programming.

**MATH 385. Mathematics for Elementary School Teachers**

*One year each of high school algebra and geometry. (3). May not be repeated for credit. No credit granted to those who have completed or are enrolled in MATH 485.*

The real number system: foundations, numeration systems, algorithms, algebraic structure, and applications.

**MATH 389. Explorations in Math Research**

*Consent of department required. Reasonable familiarity with proofs shown by good performance at the level of MATH 217 or MATH 295 is expected. (3). (BS). May not be repeated for credit.*

This course is designed to show you how new mathematics is actually created: how to

take a problem, make models and experiment with them, and search for underlying structure. Students also learn how to explain their findings clearly and how to work effectively in a group.

**MATH 395. Honors Analysis I**

*MATH 296 or permission of the Honors advisor. (4). (BS). May not be repeated for credit.*

This course studies functions of several real variables. Topics are chosen from elementary linear algebra, elementary topology, differential and integral calculus of scalar- and vector-valued functions and vector-valued mappings, implicit and inverse function theorems.

**MATH 396. Honors Analysis II**

*MATH 395. (4). (BS). May not be repeated for credit. W.*

Differential and integral calculus of functions on Euclidean spaces.

**MATH 399. Independent Reading**

*Consent of instructor required. (1 - 6). (INDEPENDENT). May be repeated for credit. F, W, Sp/Su, Sp, Su.*

**MATH 404. Intermediate Differential Equations and Dynamics**

*MATH 216, 256, 286 or 316. (3). (BS). May not be repeated for credit.*

Linear systems, qualitative theory of ordinary differential equations for planar and higher-dimensional systems, chaos, stability, non-linear oscillations, periodic orbits, Floquet theory, applications.

**MATH 412. Introduction to Modern Algebra**

*MATH 215, 255 or 285; and 217; only 1 credit after MATH 312. (3). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in MATH 493. One credit granted to those who have completed MATH 312.*

The initial topics include ones common to every branch of mathematics: sets, functions (mappings), relations, and the common number systems (integers, rational, real and complex numbers). These are then applied to the study of particular types of mathematical structures: groups, rings, and fields).

**MATH 416. Theory of Algorithms**

*[MATH 312, 412 or EECS 280] and MATH 465. (3). (BS). May not be repeated for credit.*

Many common problems from mathematics and computer science may be solved by applying one or more algorithms, well-defined procedures that accept input data specifying a particular instance of the problem and produce a solution. Students in this course typically have encountered some of these problems and their algorithmic solutions in a programming course. The goal here is to develop the mathematical tools necessary to analyze such algorithms with respect to their efficiency (running time) and correctness. Each term offers varying degrees of emphasis on mathematical proofs and computer implementation of these ideas.

**MATH 417. Matrix Algebra I**

*Three courses beyond MATH 110. (3). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in MATH 214, 217, 419, or 420. MATH 417 and 419 not be used as electives in the Statistics concentration.*

Matrix operations, vector spaces, Gaussian and Gauss-Jordan algorithms for linear equations, subspaces of vector spaces, linear transformations, determinants, orthogonality, characteristic polynomials, eigenvalue problems and similarity theory. Applications include linear networks, least

squares method, discrete Markov processes, linear programming.

**MATH 419. Linear Spaces and Matrix Theory**

*Four courses beyond MATH 110. (3). (BS). May not be repeated for credit. No credit for those who have completed or are enrolled in 214, 217, 419, or 420. MATH 417 and 419 not be used as electives in the Statistics concentration. F, W, Su.*

Finite dimensional linear spaces and matrix representations of linear transformations. Bases, subspaces, determinants, eigenvectors and canonical forms. Structure of solutions of systems of linear equations. Applications to differential and difference equations. Provides more depth and content than MATH 417. MATH 420 is the proper election for students contemplating research in mathematics.

**MATH 420. Advanced Linear Algebra**

*Linear algebra course (MATH 214, 217, 417, or 419) and one of MATH 296, 412, or 451. (3). (BS). May not be repeated for credit.*

This is an introduction to the formal theory of abstract vector spaces and linear transformations. The emphasis is on concepts and proofs with some calculations to illustrate the theory. Students should have some mathematical maturity and in particular should expect to work with and be tested on formal proofs.

**MATH 423. Mathematics of Finance**

*MATH 217 and 425; EECS 183 or equivalent. (3). (BS). May not be repeated for credit.*

An introduction to mathematical models used in finance and economics with particular emphasis on models for pricing derivative instruments such as options and futures. Topics include risk and return theory, portfolio theory, capital asset

pricing model, random walk model, stochastic processes, Black-Scholes Analysis, numerical methods and interest rate models.

**MATH 424. Compound Interest and Life Insurance**

*MATH 215, 255, or 285 or permission of instructor. (3). (BS). May not be repeated for credit.*

**MATH 425 / STATS 425. Introduction to Probability**

*MATH 215. (3). (BS). May not be repeated for credit.*

**MATH 429. Internship**

*Concentration in Mathematics. (1). (EXPERIENTIAL). May be elected three times for credit. Continuing Course. Y grade can be reported at end of the first-term to indicate work in progress. At the end of the second term of MATH 429, the final grade is posted for both term's elections. May not apply toward a Mathematics concentration. May be used to satisfy the Curriculum Practical Training (CPT) required of foreign students. Internship credit is not retroactive and must be prearranged. Offered mandatory credit/no credit.*

Credit is granted for a full-time internship of at least eight weeks that is used to enrich a student's academic experience and/or allows the student to explore careers related to his/her academic studies. Internship credit is not retroactive and must be prearranged.

**MATH 431. Explorations in Euclidean Geometry**

*One of MATH 215, 255, or 285 (completed with a minimum grade of C- or better), and MATH 217 (completed with a minimum grade of C- or better). (Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit.*

This course deepens students' understanding of the structure and practice of mathematics through an axiomatic development of Euclidean geometry. Throughout the course, students will write proofs, make conjectures, communicate mathematics verbally and in writing, and critique mathematical arguments. At instructor discretion, examples of non-Euclidean geometries may be studied for comparison.

**MATH 433. Introduction to Differential Geometry**

*MATH 215 (or 255 or 285), and 217. (3). (BS). May not be repeated for credit.*

**MATH 450. Advanced Mathematics for Engineers I**

*Permission required after credit earned in MATH 354 or 454. Consent of department required. (Prerequisites enforced at registration.) MATH 215, 255, or 285. (4). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in MATH 354 or 454. F, W, Su.*

Review of curves and surfaces in implicit, parametric and explicit forms; differentiability and affine approx., implicit and inverse function theorems; chain rule for 3-space; multiple integrals, scalar and vector fields; line and surface integrals; computations of planetary motion; work, circulation and flux over surfaces; Gauss' and Stokes' Theorems; heat equation.

**MATH 451. Advanced Calculus I**

*Previous exposure to abstract mathematics, e.g. MATH 217 and 412. (3). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in MATH 351.*

**MATH 452. Advanced Calculus II**

*MATH 217, 419, or 420; and MATH 451. (3). (BS). May not be repeated for credit. W.*

Topics include: (1) partial derivatives and differentiability; (2) gradients, directional derivatives, and the chain rule; (3) implicit function theorem; (4) surfaces, tangent planes; (5) max-min theory; (6) multiple integration, change of variable, etc.; (7) Greens' and Stokes' theorems, differential forms, exterior derivatives.

**MATH 454. Boundary Value Problems for Partial Differential Equations**

*Permission required after credit earned in MATH 354 or 450. (Prerequisites enforced at registration.) MATH 216, 256, 286 or 316. (3). (BS). May not be repeated for credit. Students with credit for MATH 354 can elect MATH 454 for one credit. No credit granted to those who have completed or are enrolled in MATH 450.*

This course is devoted to the use of Fours Series and Transforms in the solution of boundary-value problems for 2nd order linear partial differential equations. We study the heat and wave equations in one and higher dimension. We introduce the spherical and cylindrical Bessel functions, Legendre polynomials and analysis of data smoothing and filtering.

**MATH 462. Mathematical Models**

*MATH 216, 256, 286, or 316; and MATH 214, 217, 417, or 419. Students with credit for MATH 463 must have department permission to elect MATH 462. (3). (BS). May not be repeated for credit. Students with credit for MATH 362 must have department permission to elect MATH 462.*

Construction and analysis of mathematical models in physics, engineering, economics, biology, medicine, and social sciences. Content varies considerably with instructor. Recent versions: Use and theory of dynamical systems (chaotic dynamics, ecological and biological models, classical

mechanics), and mathematical models in physiology and population biology.

**MATH 463 / BIOINF 463 / BIOPHYS**

**463. Mathematical Modeling in Biology**

*MATH 214, 217, 417, or 419; and MATH 216, 256, 286, or 316. (3). (BS). May not be repeated for credit.*

An introduction to the use of continuous and discrete differential equations in the biological sciences. Modeling in biology, physiology and medicine.

**MATH 465. Introduction to Combinatorics**

*Linear Algebra (one of MATH 214, 217, 256, 286, 296, 417, or 419) or permission of instructor. (3). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in MATH 565 or 566. Rackham credit requires additional work.*

An introduction to combinatorics, covering basic counting techniques (inclusion-exclusion, permutations and combinations, generating functions) and fundamentals of graph theory (paths and cycles, trees, graph coloring). Additional topics may include partially ordered sets, recurrence relations, partitions, matching theory, and combinatorial algorithms.

**MATH 466 / EEB 466. Mathematical Ecology**

*MATH 217, 417, or 419; MATH 256, 286, or 316; and MATH 450 or 451. (3). May not be repeated for credit. Rackham credit requires additional work.*

This course gives an overview of mathematical approaches to questions in the science of ecology. Topics include: formulation of deterministic and stochastic population models; dynamics of single-species populations; and dynamics of interacting populations (predation, competition, and mutualism), structured

populations, and epidemiology. Emphasis is placed on model formulation and techniques of analysis.

**MATH 471. Introduction to Numerical Methods**

*MATH 216, 256, 286, or 316; and 214, 217, 417, or 419; and a working knowledge of one high-level computer language. No credit granted to those who have completed or are enrolled in MATH 371 or 472. (3). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in MATH 371 or 472.*

**MATH 472. Numerical Methods with Financial Applications**

*Differential Equations (MATH 216, 256, 286, or 316); Linear Algebra (MATH 214, 217, 417, or 419); working knowledge of a high-level computer language. Recommended: MATH 425. (3). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in MATH 471 or 371.*

Theoretical study and practical implementation of numerical methods for scientific problems, with emphasis on financial applications. Topics: Newton's method for nonlinear equations; Systems of linear equations; Numerical integration; Interpolation and polynomial approximation; Ordinary differential equations; Partial differential equations, in particular the Black-Scholes equation; Monte Carlo simulation; Numerical modeling.

**MATH 475. Elementary Number Theory**

*At least three terms of college Mathematics are recommended. (3). (BS). May not be repeated for credit. W.*

**MATH 476. Computational Laboratory in Number Theory**

*Prior or concurrent enrollment in MATH 475 or 575. (1). (BS). May not be repeated for credit.*

**MATH 481. Introduction to Mathematical Logic**

*MATH 412 or 451 or equivalent experience with abstract mathematics. (3). (BS). May not be repeated for credit. F.*

**MATH 485 / EDUC 485. Mathematics for Elementary School Teachers and Supervisors**

*One year of high school algebra or permission of the instructor. (3). May not be repeated for credit. No credit granted to those who have completed or are enrolled in MATH 385. May not be included in a concentration plan in Mathematics. F, Su.*

The history, development and logical foundations of the real number system and of numeration systems including scales of notation, cardinal numbers and the cardinal concept, the logical structure of arithmetic (field axioms) and their relations to the algorithms of elementary school instruction.

**MATH 486. Concepts Basic to Secondary Mathematics**

*One of MATH 215, 255, or 285 (completed with a minimum grade of C- or better), and MATH 217 (completed with a minimum grade of C- or better) OR permission of instructor. (Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit. W.*

This course examines the principles of analysis and algebra underlying theorems, especially the rationals, reals, and complex numbers. It also considers functions, especially polynomials, exponential functions, and logarithmic functions. The mathematical underpinnings of these ideas serve as an important intellectual resource for students pursuing teacher certification.

**MATH 487. Number Theory and Algebra for Secondary Teachers**

*Math 486 or the prerequisites to 486 (One of MATH 215, 255, or 285 completed with a*

*minimum grade of C- or better, AND MATH 217 completed with a minimum grade of C- or better OR permission of instructor). (Prerequisites enforced at registration.) (3). May not be repeated for credit.*

This course will offer a coherent treatment of topics such as place value, elementary number theory, the geometry of the number line, elementary combinatorics, polynomial algebra, and discrete calculus. The instruction will emphasize rich problem solving, often in small groups, and the discernment of mathematical connections.

**MATH 489. Mathematics for Elementary and Middle School Teachers**

*MATH 385. (Prerequisites enforced at registration.) (3). May not be repeated for credit. May not be used in any Graduate program in Mathematics.*

The course provides an overview of the mathematics underlying the elementary and middle school curriculum. It is required of all students intending to earn an elementary teaching certificate. Concepts are heavily emphasized with some attention given to calculation and proof.

**MATH 490. Introduction to Topology**

*MATH 451 or equivalent experience with abstract mathematics. (3). (BS). May not be repeated for credit.*

Knots, orientable and non-orientable surfaces, Euler characteristic, open sets, connectedness, compactness, metric spaces. The topics covered are fairly constant but the presentation and emphasis will vary significantly with the instructor.

**MATH 493. Honors Algebra I**

*MATH 296. (3). (BS). May not be repeated for credit.*

Description and in-depth study of the basic algebraic structures: groups, rings, fields



including: set theory, relations, quotient groups, permutation groups, Sylow's Theorem, quotient rings, field of fractions, extension fields, roots of polynomials, straight-edge and compass solutions, and other topics.

#### **MATH 494. Honors Algebra II**

*MATH 493. (Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit.*

Basic definitions and properties of rings and modules: quotients, ideals, factorization, field extensions. Further topics selected from representation theory, structure theory of modules over a PID, Jordan canonical form, Galois theory, Nullstellensatz, finite fields, Euclidean, Principal ideals and unique factorization domains, polynomial rings in one and several variables and algebraic varieties.

#### **MATH 497. Topics in Elementary Mathematics**

*MATH 489 or permission of instructor. (3). (BS). May be repeated for a maximum of 6 credits. F.*

Selected topics in geometry, algebra, computer programming, logic and combinatorics for prospective and in-service elementary, middle, or junior-high school teachers. Content will vary from term to term.

#### **MATH 498. Topics in Modern Mathematics**

*Senior Mathematics concentrators and Master Degree students in Mathematical disciplines. (3). (BS). May not be repeated for credit.*

#### **MATH 501. Applied & Interdisciplinary Mathematics Student Seminar**

*At least two 300 or above level math courses, and Graduate standing; Qualified undergraduates with permission of instructor only. (1). May be repeated for a*

*maximum of 6 credits. Offered mandatory credit/no credit.*

MATH 501 is an introductory and overview seminar course in the methods and applications of modern mathematics. The seminar has two key components: (1) participation in the Applied and Interdisciplinary Math Research Seminar; and (2) preparatory and post-seminar discussions based on these presentations. Topics vary by term.

#### **MATH 507. Mathematical Methods for Algorithmic Trading**

*(3). May not be repeated for credit.*

This is a graduate level course focused on the Mathematical methods for designing automated trading strategies. The aim is to teach the relevant techniques from Probability, Statistics, PDEs, and Optimization, as well as to introduce students to the wide range of specific problems and existing models related to algorithmic trading.

#### **MATH 520. Life Contingencies I**

*MATH 424 and 425 with minimum grade of C-, plus declared Actuarial/Financial Mathematics Concentration. (Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit.*

Quantifying the financial impact of uncertain events is the central challenge of actuarial mathematics. The goal of this course is to teach the basic actuarial theory of mathematical models for financial uncertainties, mainly the time of death. The main topics are the development of (1) probability distributions for the future lifetime random variable; (2) probabilistic methods for financial payments on death or survival; and (3) mathematical models of actuarial reserving.

#### **MATH 521. Life Contingencies II**

*MATH 520 with a grade of C- or higher.*

*(Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit.*

This course extends the single decrement and single life ideas of MATH 520 to multi-decrement and multiple-life applications directly related to life insurance. The sequence 520-521 covers the Part 4A examination of the Casualty Actuarial Society and covers the syllabus of the Course 150 examination of the Society of Actuaries. Concepts and Calculation are emphasized over proof.

### **MATH 523. Loss Models I**

*MATH/STATS 425. (Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit.*

Risk management and modeling of financial losses. Review of random variables (emphasizing parametric distributions), review of basic distributional quantities, continuous models for insurance claim severity, discrete models for insurance claim frequency, the effect of coverage modification on severity and frequency distributions, aggregate loss models, and simulation.

### **MATH 524. Loss Models II**

*STATS 426 and MATH 523. (Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit.*

Risk management and modeling of financial losses. Frequentist and Bayesian estimation of probability distributions, model selection, credibility, and other topics in casualty insurance.

### **MATH 525 / STATS 525. Probability Theory**

*MATH 451 (strongly recommended). MATH 425/STATS 425 would be helpful. (3). (BS). May not be repeated for credit.*

### **MATH 526 / STATS 526. Discrete State Stochastic Processes**

*MATH 525 or STATS 525 or EECS 501. (3). (BS). May not be repeated for credit.*

### **MATH 537. Introduction to Differentiable Manifolds**

*MATH 420, and 590 or 591. (3). (BS). May not be repeated for credit.*

This course is intended for students with a strong background in topology, linear algebra, and multivariable advanced calculus equivalent to the courses 420 and 590. Its goal is to introduce the basic concepts and results of differential topology and differential geometry. Content covered includes Manifolds, vector fields and flows, differential forms, Stokes' theorem, Lie group basics, Riemannian metrics, Levi-Civita connection, geodesics.

### **MATH 555. Introduction to Functions of a Complex Variable with Applications**

*MATH 451 or equivalent experience with abstract mathematics. (3). (BS). May not be repeated for credit.*

Intended primarily for students of engineering and of other cognate subjects. Doctoral students in mathematics elect Mathematics 596. Complex numbers, continuity, derivative, conformal representation, integration, Cauchy theorems, power series, singularities, and applications to engineering and mathematical physics.

### **MATH 556. Applied Functional Analysis**

*MATH 217, 419, or 420; MATH 451; and MATH 555. (3). (BS). May not be repeated for credit.*

This is an introduction to methods of applied functional analysis. Students are expected to master both the proofs and applications of major results. The prerequisites include linear algebra, undergraduate analysis, advanced calculus and complex variables. This course is a core

course for the Applied and Interdisciplinary Mathematics (AIM) graduate program.

**MATH 557. Applied Asymptotic Analysis**

*MATH 217, 419, or 420; MATH 451; and MATH 555. (3). (BS). May not be repeated for credit.*

Topics include: asymptotic sequences and (divergent) series; asymptotic expansions of integrals and Laplace's method; methods of steepest descents and stationary phase; asymptotic evaluation of inverse Fourier and Laplace transforms; asymptotic solutions for linear (non-constant coefficient) differential equations; WBK expansions; singular perturbation theory; and boundary, initial, and internal layers.

**MATH 558. Applied Nonlinear Dynamics**

*MATH 451. (3). (BS). May not be repeated for credit.*

This course is an introduction to dynamical systems (differential equations and iterated maps). The aim is to survey a broad range of topics in the theory of dynamical systems with emphasis on techniques and results that are useful in applications, including chaotic dynamics. This is a core course for the Applied and Interdisciplinary Mathematics (AIM) graduate program.

**MATH 559. Selected Topics in Applied Mathematics**

*MATH 451; and 217, 419, or 420. (3). (BS). May be repeated for a maximum of 6 credits.*

This course will focus on particular topics in emerging areas of applied mathematics for which the application field has been strongly influenced by mathematical ideas. It is intended for students with interests in mathematical, computational, and/or modeling aspects of interdisciplinary science, and the course will develop the

intuitions of the field of application as well as the mathematical concepts.

**MATH 561 / IOE 510 / TO 518. Linear Programming I**

*MATH 217, 417, or 419. (3). (BS). May not be repeated for credit. F, W, Sp.*

Formulation of problems from the private and public sectors using the mathematical model of linear programming. Development of the simplex algorithm; duality theory and economic interpretations. Postoptimality (sensitivity) analysis application and interpretations. Introduction to transportation and assignment problems; special purpose algorithms and advanced computational techniques. Students have opportunities to formulate and solve models developed from more complex case studies and to use various computer programs.

**MATH 562 / IOE 511. Continuous Optimization Methods**

*MATH 217, 417, or 419. (3). (BS). May not be repeated for credit.*

Survey of continuous optimization problems. Unconstrained optimization problems: unidirectional search techniques; gradient, conjugate direction, quasi-Newton methods. Introduction to constrained optimization using techniques of unconstrained optimization through penalty transformations, augmented Lagrangians, and others. Discussion of computer programs for various algorithms.

**MATH 565. Combinatorics and Graph Theory**

*MATH 465. (3). (BS). May not be repeated for credit.*

Topics in the graph theory part of the course include (if time permits) trees, k-connectivity, Eulerian and Hamiltonian graphs, tournaments, graph coloring, planar graphs, Euler's formula, the 5-Color theorem, Kuratowski's theorem, and the

matrix-tree theorem. The second part of the course will deal with topics in the theory of finite partially ordered sets. This will include material about Mobius functions, lattices, simplicial complexes, and matroids.

**MATH 566. Combinatorial Theory**

*MATH 465. (3). (BS). May not be repeated for credit.*

Permutations, combinations, generating functions, and recurrence relations. The existence and enumeration of finite discrete configurations. Systems of representatives, Ramsey's Theorem, and extremal problems. Construction of combinatorial designs.

**MATH 567. Introduction to Coding Theory**

*One of MATH 217, 419, 420. (3). (BS). May not be repeated for credit.*

Introduction to coding theory focusing on the mathematical background for error-correcting codes. Topic include: Shannon's Theorem and channel capacity; review of tools from linear algebra and an introduction to abstract algebra and finite fields; basic examples of codes such as Hamming, BCH, cyclic, Melas, Reed-Muller, and Reed-Solomon; introduction to decoding starting with syndrome decoding and covering weight enumerator polynomials and the Mac-Williams Sloane identity

**MATH 568 / BIOINF 568. Mathematical and Computational Neuroscience**

*MATH 463 or 462 (for undergraduate students) or Graduate standing. (Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit.*

Computational neuroscience provides a set of quantitative approaches to investigate the biophysical mechanisms and computational principles underlying the function of the nervous system. This course introduces students to mathematical modeling and

quantitative techniques used to investigate neural systems at many different scales, from single neuron activity to the dynamics of large neuronal networks.

**MATH 571. Numerical Linear Algebra**

*MATH 214, 217, 417, 419, or 420; and one of MATH 450, 451, or 454. (3). (BS). May not be repeated for credit.*

Direct and iterative methods for solving systems of linear equations (Gaussian elimination, Cholesky decomposition, Jacobi and Gauss-Seidel iteration, SOR, introduction to multi-grid methods, steepest descent, conjugate gradients), introduction to discretization methods for elliptic partial differential equations, methods for computing eigenvalues and eigenvectors.

**MATH 572. Numerical Methods for Differential Equations**

*MATH 214, 217, 417, 419, or 420; and one of MATH 450, 451, or 454. (3). (BS). May not be repeated for credit.*

Finite difference methods for ordinary differential equations and hyperbolic partial differential equations. Topics include one-step and multi-step methods, A-stability, root condition, Lax-Richtmyer Equivalence Theorem, CFL-condition, von Neumann stability condition, discrete energy methods, Kreiss matrix theorem.

**MATH 573. Financial Mathematics I**

*(3). (BS). May not be repeated for credit.*

This is a core course for the quantitative finance and risk management masters program and introduces students to the main concepts of Financial Mathematics. This course emphasizes the application of mathematical methods to the relevant problems of financial industry and focuses mainly on developing skills of model building.

**MATH 574. Financial Mathematics II**

*MATH 526 and MATH 573. (Prerequisites enforced at registration.) Although MATH 506 is not a prerequisite for MATH 574, it is strongly recommended that either these courses are taken in parallel, or MATH 506 precedes MATH 574. (3). (BS). May not be repeated for credit.*

This is a core course for the quantitative finance and risk management masters program and is a sequel to Math 573. This course emphasizes the application of mathematical methods to the relevant problems of financial industry and focuses mainly on developing skills of model building.

**MATH 575. Introduction to Theory of Numbers I**

*MATH 451 and 420 or permission of instructor. (1 - 3). (BS). May not be repeated for credit.*

Topics covered include divisibility and prime numbers, congruences, quadratic reciprocity, quadratic forms, arithmetic functions, and Diophantine equations. Other topics may be covered as time permits or by request.

**MATH 582. Introduction to Set Theory**

*MATH 412 or 451 or equivalent experience with abstract mathematics. (3). (BS). May not be repeated for credit.*

The main topics covered are set algebra (union, intersection), relations and functions, orderings (partial, linear, well), the natural numbers, finite and denumerable sets, the Axiom of Choice, and ordinal and cardinal numbers.

**MATH 590. Introduction to Topology**

*MATH 451. (3). (BS). May not be repeated for credit. Rackham credit requires additional work.*

Topics include metric spaces, topological spaces, continuous functions and homeomorphisms, separation axioms, quotient and product topology, compactness, and connectedness. We will also cover a bit of algebraic topology (e.g., fundamental groups) as time permits.

**MATH 591. Differentiable Manifolds**

*MATH 451, 452 and 590. (3). (BS). May not be repeated for credit.*

This is one of the basic courses for students beginning the PhD program in mathematics. The approach is rigorous and emphasizes abstract concepts and proofs. The first 2-3 weeks of the course will be devoted to general topology, and the remainder of the course will be devoted to differential topology.

**MATH 592. Introduction to Algebraic Topology**

*MATH 591. (3). (BS). May not be repeated for credit.*

Fundamental group, covering spaces, simplicial complexes, graphs and trees, applications to group theory, singular and simplicial homology, Eilenberg-Steenrod axioms, Brouwer's and Lefschetz' fixedpoint theorems, and other topics.

**MATH 593. Algebra I**

*MATH 412, 420, and 451 or MATH 494. (3). (BS). May not be repeated for credit.*

Topics include basics about rings and modules, including Euclidean rings, PIDs, UFDs. The structure theory of modules over a PID will be an important topic, with applications to the classification of finite abelian groups and to Jordan and rational canonical forms of matrices. The course will also cover tensor, symmetric, and exterior algebras, and the classification of bilinear forms with some emphasis on the field case.

**MATH 594. Algebra II**

*MATH 593. (3). (BS). May not be repeated for credit.*

Topics include group theory, permutation representations, simplicity of alternating groups for  $n > 4$ , Sylow theorems, series in groups, solvable and nilpotent groups, Jordan-Hölder Theorem for groups with operators, free groups and presentations, fields and field extensions, norm and trace, algebraic closure, Galois theory, and transcendence degree.

**MATH 596. Analysis I**

*MATH 451. (3). (BS). May not be repeated for credit. Students with credit for MATH 555 may elect MATH 596 for two credits only.*

**MATH 597. Analysis II**

*MATH 451 and 420; or MATH 395. (3). (BS). May not be repeated for credit.*

Topics include: Lebesgue measure on the real line; measurable functions and integration on  $\mathbb{R}$ ; differentiation theory, fundamental theorem of calculus; function spaces,  $L_p(\mathbb{R})$ ,  $C(K)$ , Hölder and Minkowski inequalities, duality; general measure spaces, product measures, Fubini's Theorem; Radon-Nikodym Theorem, conditional expectation, signed measures, introduction to Fourier transforms.

**Materials Science Engineering (MATSCIE)****MATSCIE 410 / BIOMEDE 410 /  
MACROMOL 410. Design and  
Applications of Biomaterials**

*MATSCIE 220 or 250 with a grade of C- or better; or graduate standing. (Prerequisites*

*enforced at registration.) (3). (BS). May not be repeated for credit.*

Biomaterials and their physiological interactions. Materials used in medicine/dentistry: metals, ceramics, polymers, composites, resorbable, smart, natural materials. Material response/degradation: mechanical breakdown, corrosion, dissolution, leaching, chemical degradation, wear. Host responses: foreign body reactions, inflammation, wound healing, carcinogenicity, immunogenicity, cytotoxicity, infection, local/systemic effects.

**MATSCIE 412 / CHE 412 /****MACROMOL 412. Polymeric Materials**

*MATSCIE 220 or 250, and CHEM 210 with a grade of C- or better; or graduate standing. (Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit.*

The synthesis, characterization microstructure, rheology, and processing of polymeric materials. Polymers in solution and in the liquid, liquid-crystalline, crystalline, and glassy states. Engineering and design properties, including viscoelasticity, yielding, and fracture. Forming and processing methods. Recycling and environmental issues.

**MATSCIE 510 / CHEM 511. Materials  
Chemistry**

*CHEM 461, BIOLCHEM 415, CHEM 430; and permission of course director. (3). (BS). May not be repeated for credit.*

This course presents concepts in materials chemistry. The main topics covered include structure and characterization, macroscopic properties and synthesis and processing.

**MATSCIE 512 / CHE 512 /****MACROMOL 512. Polymer Physics**

*Senior or graduate standing in engineering*

*or physical science. (3). (BS). May not be repeated for credit.*

**MATSCIE 514 / MACROMOL 514 / MFG 514. Composite Materials**

*MATSCIE 350 or equivalent, or permission of instructor. (3). (BS). May not be repeated for credit. F.*

**MATSCIE 515 / MACROMOL 515. Mechanical Behavior of Solid Polymeric Materials**

*MECHENG 211 and CHE 412 or MATSCIE 412 or MACROMOL 412 or permissions of instructor. (3). (BS). May not be repeated for credit.*

**MATSCIE 517 / MACROMOL 530.**

**Advanced Functional Polymers: Molecular Design and Applications**

*MATSCIE 412 or CHE 412 or MACROMOL 412; completed with a minimum grade of C- or better. Consent of instructor required. (Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit.*

Development of global perspective of interdisciplinary issues involved in functional polymers. Learn how to design, synthesize, evaluate, and analyze functional polymers.

**MATSCIE 559 / CHE 559 / MACROMOL 559. Foundations of Nanotechnology II**

*Senior or graduate standing. (3). (BS). May not be repeated for credit.*

This course will cover the synthesis and processing of nano-sized metal, metal oxide, and semiconductor powders. It will also include organic/inorganic and nanobiomaterials. Emphasis will be on particle properties and their use in making nanostructured materials with novel properties.

## **Molecular, Cellular, and Developmental Biology (MCDB)**

**MCDB 300. Undergraduate Research**

*Consent of instructor required. Eight credits of BIOLOGY/MCDB courses; 3.0 GPA in science courses. (1 - 3). (BS). (INDEPENDENT). May be repeated for a maximum of 9 credits. Continuing Course. Y grade can be reported at end of the first-term to indicate work in progress. At the end of the second term (MCDB 300 or 400), the final grade is posted for both term's elections. Three credits of independent research must be completed in one term to satisfy a Biology laboratory requirement. A maximum of three credits of any independent study course may count toward the Biology concentration programs.*

**MCDB 301. Active Learning Assistant**

*Consent of instructor required. BIOLOGY 171, 172/174, and 173, as well as experience in the target course subject matter. (2). (EXPERIENTIAL). May be elected four times for credit. 8 credits max allowed between EEB 301 and MCDB 301. Offered mandatory credit/no credit.*

Many courses are transitioning to active learning formats. Even large enrollment courses are doing more in-class group work. Some classes have significant problem-solving components. Students enrolled in MCDB or EEB 301 will assist the instructors in these classrooms. They will actively facilitate group work and other activities planned by the instructor.

**MCDB 302. Teaching Experience for Undergraduates**

*Consent of instructor required. (1 - 3). (EXPERIENTIAL). May not be repeated for credit.*

**MCDB 303. Topics in Biology**

*Recommended prerequisites will be established at the class level by the section instructors. (1 - 4). (NS). (BS). May be repeated for a maximum of 6 credits. May be elected more than once in the same term.*

Topics will vary by term and specific descriptions will be provided for each offering.

**MCDB 306. Introductory Genetics****Laboratory**

*BIOLOGY 171 & 172 (or 174) & 173; or BIOLOGY 192 & 173; or BIOLOGY 195 & 173. (Prerequisites enforced at registration.) Prior or concurrent enrollment in BIOLOGY 305. (3). (BS). May not be repeated for credit. F and W. Satisfies a Biology laboratory requirement.*

This course provides students with laboratory experience in basic genetic principles. Students will analyze patterns of inheritance, gene interaction, linkage relationship, and genetic mapping of unknown mutants of *Drosophila* through a series of genetic crosses. By using molecular techniques such as polymerase chain reaction (PCR) and gel electrophoresis, mutations in *Caenorhabditis elegans* will be mapped to chromosomal locations. The experiments in microbial genetics include mapping by conjugation in *E. coli*. Experiments in human population genetics include calculating allelic frequencies of PTC tasting in the class. Students also will be doing DNA fingerprinting of a VNTR locus using their own squamous epithelial cells. A computer exercise on bioinformatics is included.

**MCDB 310. Introductory Biochemistry**

*CHEM 210; and one of: BIOLOGY 172 or 174 or 192 or [195 and 173]. (Prerequisites enforced at registration.) Prior or concurrent enrollment in CHEM 215. (4).*

*(BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in BIOLCHEM 415 or 451 or 515, or CHEM 351 or 451.*

Introductory Biochemistry is designed to be a general introduction to the chemistry of biological systems. The biweekly lectures for this course are designed to help students put biochemical reactions into a cellular context. Students are exposed to the strategies used by cells and multicellular organisms to coordinate the activity of various metabolic pathways.

**MCDB 321. Introductory Plant****Physiology Lectures**

*BIOLOGY 171 and either 172 or 174; or BIOLOGY 192; or BIOLOGY 195. (Prerequisites enforced at registration.) College Physics recommended. (3). (BS). May not be repeated for credit.*

The course introduces the basic concepts and mechanisms that underlie plant functions: 1) plant cell physiology; 2) cellular and internal transport; and 3) plant growth and development.

**MCDB 351. Synapses**

*BIOLOGY 222 or 225. (Prerequisites enforced at registration.) (4). (BS). May not be repeated for credit.*

Synapses are the most important sites of information transfer in the nervous system. This course focuses on synaptic structure, function and development. Considerable emphasis is placed on electrophysiological and molecular mechanisms.

**MCDB 352. Neurobiology of Sensory and Motor Systems**

*BIOLOGY 225. (Prerequisites enforced at registration.) (4). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in BIOLOGY 222.*



This course focuses on understanding how the pattern of synaptic connections between neurons and the cellular properties of neurons and glia allow nervous systems to decipher incoming sensory information, and generate appropriate motor responses.

**MCDB 360. Undergraduate**

**Neurobiology Research**

*PSYCH 230 or BIOLOGY 222 or BIOLOGY 225. (Prerequisites enforced at registration.) (2 - 3). (NS). (BS). (INDEPENDENT). May be repeated for a maximum of 9 credits.*

Independent research is a wonderful opportunity to take an active role in studying what you enjoy! Students in MCDB 360 participate in a project in which they themselves have a say in the design, implementation, and interpretation of experiments. Students meet regularly with their mentors and gain exposure to the scientific literature of the field.

**MCDB 396. Science Outreach for Biology**

*BIOLOGY 172, 174, 192, or 195. (Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit.*

Students will learn the principles of inquiry-based activities that bring concepts in modern molecular, cellular and developmental biology to the general public. Students will learn what makes for an effective outreach activity and then develop and run hands-on demonstrations for the public in concert with the Natural History Museum.

**MCDB 397. Writing in Biology**

*MCDB 300 or 400, or EEB 300 or 400, or permission of instructor. (3). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in EEB 301, MCDB 301, or EEB 397.*

This course is designed to be an introduction to the types of writing engaged in by biologists. We will consider a variety of types of texts, with the goals of understanding how these texts are written and what their roles are in the broader scientific community. The two overarching goals of this course are 1) to help students learn how to read, write, and present science research, and 2) to consider various purposes and processes required for communication in science.

**MCDB 399 / EEB 399. Doing Science: An Introduction to Experimental Design in the Life Sciences**

*Prior or concurrent enrollment in MCDB or EEB 300. (1 in the half-term). (BS). May not be repeated for credit.*

This course will introduce students to basics of experimental design in life science research.

**MCDB 400. Advanced Research**

*MCDB 300. (Prerequisites enforced at registration.) 12 credits of biology, 3.0 average in science, and permission of faculty member in biology. (1 - 3). (BS). (INDEPENDENT). May be repeated for a maximum of 9 credits. Continuing Course. Y grade can be reported at end of the first-term to indicate work in progress. At the end of the second term of MCDB 400, the final grade is posted for both term's elections. Three credits of independent research must be completed in one term to satisfy a Biology laboratory requirement. A maximum of three credits of any independent study course may count toward the Biology concentration programs.*

**MCDB 401. Advanced Topics in Biology**  
*Seniors or Graduate standing. Prerequisites will be set by the instructor as appropriate for each section. (1 - 4). (BS). May be repeated for a maximum of 6 credits. May be elected more than once in the same term.*

Various current topics in Molecular, Cellular, and Developmental Biology are explored. Specific descriptions for topic offerings will be provided on a term-by-term basis.

**MCDB 402. Molecular Biology of Pain and Sensation**

*BIOLOGY 222 or BIOLOGY 225 or MCDB 422. (Prerequisites enforced at registration.) BIOLOGY 305; MCDB 310, BIOLCHEM 415 or CHEM 351; and MCDB 423. (3). (BS). May not be repeated for credit. Rackham credit requires additional work.*

The course examines how pain and sensory stimuli such as odors, touch, and temperature are transformed into a cellular response. It is divided between lectures and group discussions, with most assigned readings chosen from primary research articles.

**MCDB 403. Molecular and Cell Biology of the Synapse**

*One of: MCDB 310, MCDB 311, BIOLCHEM 415, or CHEM 351. (Prerequisites enforced at registration.) BIOLOGY 305 and MCDB 422. (3). (BS). May not be repeated for credit. Rackham credit requires additional work.*

The overall aim of this course is to introduce students to the most recent advances in a rapidly growing topic of neuroscience: synaptic plasticity or the change in nerve cell connection efficacy over time. The course is divided into lectures (the first half of the semester and related papers discussions (the second half of the semester).

**MCDB 404 / EEB 404. Genetics, Development, and Evolution**

*BIOLOGY 305. (Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit.*

This course introduces students to the field of evolution and development, with an emphasis on genetics as a unifying force. After reviewing fundamental principles in development and evolutionary biology, papers from the primary literature investigating the molecular mechanisms responsible for evolutionary change will be discussed.

**MCDB 405. Molecular Basis of Development**

*BIOLOGY 305; or graduate standing. (Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit.*

**MCDB 406. Modern Genetic Advances**

*BIOLOGY 305. (Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit. Rackham credit requires additional work.*

From mutants to high-throughput DNA sequencing to targeted genome editing, researchers have developed a powerful set of genetic tools for simple model systems to human populations. This class covers the theory and application of genetic methods from the foundational to the latest technical advances using examples from the primary research literature.

**MCDB 409 / INTMED 409 / MICRBIOL 409. Investigational and Experimental Bacteriology**

*Biology 207 AND concurrent enrollment in or previous completion of ONE of the following courses: Micrbiol 405, Micrbiol 430, Intmed460/Micrbiol 460; or instructor permission. (Prerequisites enforced at registration.) (4). (BS). May not be repeated for credit.*

This course will study bacteriology at multiple levels. Topics include microbial ecology, biochemistry, genomics, epidemiology, applications and pathogenesis. The course will use an active

learning approach for individual and group projects that encompasses didactic, discussion, primary literature review, data analysis and problem-solving formats.

**MCDB 410. Capstone: Integrating Cellular and Molecular Biology Concepts**  
*BIOLOGY 305 and (MCDB 310, CHEM 351, or BIOLCHEM 415); or Graduate Standing. (Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit. Rackham credit requires additional work.*

This course is designed to integrate concepts from the cell and molecular biology courses students take as Biology, CMB and Neuroscience majors. We will explore how cell and molecular biology features emerge from fundamental principles. Students will tackle projects designed to address real-world problems in cell and molecular biology.

**MCDB 411. Protein Structure and Function**  
*MCDB 310, BIOLCHEM 415, or CHEM 351. Or Graduate standing. (Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit. F.*

This course is a practical hands-on approach to extract information about a protein sequence by using protein sequence analysis tools available on the web. Students also identify 3D protein structural motifs, discuss how they are related to the protein's functions and discuss how proteins fold.

**MCDB 412. Teaching Biology**  
*Consent of instructor required. (3). (EXPERIENTIAL). May be elected twice for credit. F.*

This course is intended for upper-level undergraduates wishing to gain experience teaching biology in specific courses in Biology or MCDB. Enrollment requires

instructor permission. Student teaching assistants will meet weekly with their students and attend one weekly meeting with the instructor.

**MCDB 415. Microbial Genetics**  
*BIOLOGY 305; and MCDB 310, BIOLCHEM 415, or CHEM 351. Or Graduate Standing. (Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit.*

This course is a lecture-based course covering the principal aspects of microbial genetics, with special emphasis on model organisms. We will review the current state of recombinant DNA research and discuss the application of these techniques to solving problems in basic and applied research fields. Each day class time will be devoted to group problem solving. Students will be encouraged and expected to participate in group discussions and problem solving.

**MCDB 416 / EEB 416. Introduction to Bioinformatics**  
*BIOLOGY 305 and EEB 390, or graduate standing. (Prerequisites enforced at registration.) (4). (BS). May not be repeated for credit. Rackham credit requires additional work.*

Introduction to Bioinformatics is an advanced elective for upper-level Program in Biology majors and graduate students that wish to gain exposure to the basic principles of bioinformatics as well as guided practice using the typical computational tools of the field.

**MCDB 417. Chromosome Structure and Function**  
*BIOLOGY 305. (Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit. Rackham credit requires additional work.*

This course focuses on understanding how the structure of a chromosome affects in mitotic and interphase functions. Topics include assembly of chromatin and chromosomes, euchromatin and heterochromatin, epigenetics, and gene regulation. A combination of lecture, literature review, and in class discussion is used to explore genetic, biochemical, and cytological methods for defining our current knowledge and chromosomes.

**MCDB 418. Endocrinology**

*BIOLOGY 225; BIOLOGY 305; and MCDB 310 or BIOLCHEM 415 or CHEM 351 (or consent of instructor). (Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit. F.*

This course is a comparative study of animal endocrine functions with emphasis on the cellular origin and chemical nature of hormones, the cellular and molecular mechanisms of hormone action, general endocrine control mechanisms, the evolution of hormones and hormonal control and their physiological actions in animals. The course will concentrate on the endocrine systems of vertebrates; there will be limited treatment of human endocrinology.

**MCDB 419. Endocrinology Laboratory**

*Prior or concurrent enrollment in BIOLOGY 225 or 310 or 311, or MCDB 418 or 426. (3). (BS). May not be repeated for credit. F. Satisfies a Biology laboratory requirement.*

The laboratory course provides hands-on experience with methods used in endocrinological investigations. The students will learn techniques ranging from the organismal to the molecular level. The course emphasizes hypothesis testing, modern techniques, and data analysis.

**MCDB 420 / BIOPHYS 420. Structural Biology: The Architecture of Life**

*CHEM 230 or CHEM 260 or BIOPHYS 370. (BS). May not be repeated for credit.*

This course covers topics including structure and folding of biological molecules, biochemistry of cellular processes, biochemical approaches, reaction rate and enzyme kinetics.

**MCDB 421. Topics in Cellular and Molecular Neurobiology**

*BIOLOGY 225 and PSYCH 230 or NEUROSCI 601. (3). (BS). May be elected twice for credit. May be elected more than once in the same term. Rackham credit requires additional work.*

Current research in an area of cellular and molecular neurobiology will be explored under the direction of a faculty member expert in the topic.

**MCDB 422. Brain Development, Plasticity, and Circuits**

*MCDB 310 or 311, or BIOLCHEM 415, or CHEM 351; or graduate standing. (Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit. F.*

The course presents mechanisms underlying the development, plasticity and regeneration of the nervous system and function of neural circuits. There is an emphasis on experiments using molecular and cellular approaches in genetically amenable animals. Topics covered include neurogenesis, axon guidance, synapse formation, regeneration and molecular analysis of circuit function.

**MCDB 423. Introduction to Research in Cellular and Molecular Neurobiology**

*BIOLOGY 173. (Prerequisites enforced at registration.) BIOLOGY 225 or BIOLOGY 222; or concurrent enrollment in MCDB 422. (3). (BS). May not be repeated for*

*credit. F and W. Satisfies a Biology laboratory requirement.*

This course provides an introduction to state-of-the-art research approaches in cellular and molecular neurobiology. The course is divided into three modules: electrophysiological methods, anatomical methods, and molecular biological methods.

**MCDB 424. Behavioral Neurobiology Laboratory**

*(BIOLOGY 225 or PSYCH 230) and BIOLOGY 173. (Prerequisites enforced at registration.) BIOLOGY 305. (2). (BS). May not be repeated for credit. Rackham credit requires additional work.*

This course focuses on the neurobiological mechanisms underlying animal behavior. Using *Drosophila melanogaster* as a model system, students will learn how to design, perform and analyze behavioral experiments. The course explores the connections between genes, neuronal circuits and a repertoire of behaviors, including aggression, sexual courtship, feeding, sleep and circadian rhythms.

**MCDB 426. Molecular Endocrinology**  
*BIOLOGY 225; and one of: MCDB 310 or 311, or BIOLCHEM 415, or CHEM 351; or Graduate standing. (Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit.*

Introduces students to the latest advances in our understanding of how hormones work at the molecular and cellular level in vertebrate systems, including humans. Topics include gene structure, expression, regulation, and cellular actions of various hormones.

**MCDB 427. Molecular Biology**  
*BIOLOGY 305, and one of MCDB 310 or BIOLCHEM 415 or CHEM 351; OR Graduate standing. (Prerequisites enforced*

*at registration.) (4). (BS). May not be repeated for credit. F.*

Lectures and discussions are concerned with the following topics: the physical methods used in molecular biology; structure and coding capacity of DNA chromosomes; DNA replication; transcription, protein synthesis; prokaryotic and eukaryotic regulation; molecular aspects of development; transposable elements and genetic engineering.

**MCDB 428. Cell Biology**

*MCDB 310, BIOLCHEM 415, or CHEM 351; or graduate standing. (Prerequisites enforced at registration.) (4). (BS). May not be repeated for credit. Students with credit for MCDB 320 must obtain permission of instructor. W.*

The following topics are included: methods for handling relevant organisms; general properties of membranes; secretion, endocytosis, and related processes; functions and biogenesis of cell walls, of mitochondria, or chloroplasts; cellular organization of energy metabolism in prokaryotes; cytoskeleton and cell motility; structural organization and functional consequences of nuclei and nucleoids; cell cycle and its regulation; cellular aspects of differentiation and development; functions of specialized cell types.

**MCDB 429. Laboratory in Cell and Molecular Biology**

*BIOLOGY 173. (Prerequisites enforced at registration.) Previous or concurrent enrollment in BIOLOGY 305 and (MCDB 310, BIOLCHEM 415, or CHEM 351). (3). (BS). May not be repeated for credit. This course can be used to satisfy requirements for the Cell and Molecular Biology Concentration and the Biology Concentration. W. Satisfies a Biology laboratory requirement.*

This laboratory course encompasses a broad spectrum of common methods and theory essential to Cellular and Molecular Biology and other related majors. The projects include several kinds of microscopy, cellular organelle isolation, gel electrophoresis, Western blotting, column chromatography, and tissue culture, in addition to molecular biology methods such as plasmid construction, transfection, polymerase chain reaction, and Southern blotting.

**MCDB 430. Molecular Biology of Plants**  
*BIOLOGY 305; and MCDB 310, BIOLCHEM 415, or CHEM 351. Or Graduate standing. (Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit. W.*

Basic aspects of molecular genetic/biochemistry as they pertain to plants: genome and gene structure and expression; processes of protein synthesis and localization; and the interaction of these macromolecules within and between cells.

**MCDB 433. Plant Metabolic Biochemistry**  
*BIOLOGY 305 and (MCDB 310, BIOLCHEM 415, or CHEM 351). (Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit.*

The course examines the major biochemical pathways that occur in plants, with emphasis on the chemical reactions and pathways that are unique to plants.

**MCDB 434. Protein Misfolding Diseases**  
*MCDB 310, BIOLCHEM 415, or CHEM 351. (Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit. Rackham credit requires additional work.*

The course uses primary research papers and review article to discuss various

molecular mechanisms and potential therapeutic strategies of several human diseases caused by misfolded proteins.

**MCDB 435. Intracellular Trafficking**  
*BIOLOGY 305; or Graduate Standing. (Prerequisites enforced at registration.) MCDB 428. (3). (BS). May not be repeated for credit.*

Topics covered include molecular basis of secretion, vesicle transport, protein targeting, molecular motors and organelle biogenesis. Students are presented lectures introducing them to current issues, and then read the latest experimental papers anticipated having a large impact in the field. The course includes critical discussions of the experiments, interpretations, and conclusions of primary research papers.

**MCDB 436. Human Immunology**  
*MCDB 310, BIOLCHEM 415, or CHEM 351. Or Graduate standing. (Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit. MICRBIOL/IMMUNO 440/540. Only one of MICRBIOL 440 or IMMUNO 440 or MCDB 436 will count toward a Microbiology major.*

Detailed study of the organs, cells, and molecules that constitute the human immune system; cellular interactions involved in initiating and mediating an immune response; role of the immune system in organ transplants, cancer therapy, and immunodeficiency diseases; use of Polyclonal and Monoclonal Antibodies as precise probes in all fields of modern biological and biomedical research.

**MCDB 440. Cell Cycle Control and Cancer**  
*Genetics (BIOLOGY 305) and Biochemistry (MCDB 310, CHEM 351, or BIOLCHEM 415). (Prerequisites enforced at registration.) (3). (BS). May not be repeated*

*for credit. Rackham credit requires additional work.*

This course is an examination of current genetic and cell biology research on the topic of cell cycle control and cancer biology, designed for graduate and advanced undergraduates. This course involves introductory lectures, reading and analysis of current primary scientific literature and careful analysis of "pop-science" representations of cancer research.

**MCDB 441. Cell Biology and Disease**  
*Consent of instructor required. MCDB 428 and [MCDB 310 or MCDB 311 or BIOLCHEM 415 or CHEM 351]. (3). May not be repeated for credit. Rackham credit requires additional work.*

This course will extend the basic knowledge of molecular cell biology into cellular disorders in human diseases. The course will be comprised of lectures, in-class discussions, paper readings, and presentations. It is appropriate for students interested in cell biology, biochemistry, molecular biology, pharmacology, and genetics.

**MCDB 447. Lysosomes and Diseases**  
*BIOLOGY 305; and, one of: MCDB 310, CHEM 351, or BIOLCHEM 415. (Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit. Rackham credit requires additional work.*

The lysosome is an essential organelle, and its dysfunction is linked to over 70 lysosomal storage diseases in humans. In this course, we will study the functions of the lysosome and its connection to diseases. We will also discuss the exciting discoveries that advanced our understanding of the lysosomal functions.

**MCDB 448. Telomerase Function in Stem Cells and Cancers**  
*BIOLOGY 305 and (MCDB 310 or CHEM*

*351 or BIOLCHEM 415). (Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit. Rackham credit requires additional work.*

This course involves a combination of lectures and paper-reading exercises on topics related to the roles of cellular complexes called telomerase and telomeres in cancer and stem cell biology.

**MCDB 450. Genetics and Molecular Biology of Complex Behavior**  
*BIOLOGY 222 or 225; BIOLOGY 305; and, one of: MCDB 310, BIOLCHEM 415, or CHEM 351. (Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit. Rackham credit requires additional work.*

This course explores recent advances in the genetics and molecular biology of brain function and complex behavior. It emphasizes advances due to the application of genetic strategies that uncovered molecules important for complex behavior and brain function in organisms amenable to genetic analysis such as *Drosophila*, *C. elegans*, zebrafish, and mice.

**MCDB 451. Molecular Neurobiology of Health and Disease**  
*BIOLOGY 222 or 225; and one of: BIOLOGY 305 or Biochemistry (MCDB 310, BIOLCHEM 415, or CHEM 351). (Prerequisites enforced at registration.) Biochemistry experience is recommended. (3). (BS). May not be repeated for credit. Rackham credit requires additional work.*

This course presents a detailed understanding of the neurobiology of the neuronal connections (synapses) and a variety of synaptopathies and psychiatric diseases (diseases related to dysfunction of synapses). This course also provides students with exposure to experimental

designs that produced our current knowledge in the field.

**MCDB 452. The Visual System**

*BIOLOGY 222; or BIOLOGY 225 and (MCDB 310, BIOLCHEM 415, or CHEM 351); or NEUROSCI 614; or graduate standing. (Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit. Rackham credit requires additional work.*

This course surveys the molecular, cellular and circuit mechanisms underlying vision, our most important sense.

**MCDB 453. Ion Channels and their Channelopathies**

*[BIOLOGY 225 OR Physiology 502 or Neuroscience 601] AND [MCDB 310 OR Biological Chem 415 OR Chem 351], OR [Permission of the instructor]. (Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit. Rackham credit requires additional work.*

Subtle alterations in the properties of ion channels can lead to dramatic changes in the behavior of animals, and can cause many diseases in humans (channelopathies). We will explore the molecular basis by which changes in the properties of ion channels bring about such dramatic whole animal phenotypes.

**MCDB 454. Cytoskeletal Dynamics**

*BIOLOGY 305; and one of: MCDB 310 or BIOLCHEM 415 or CHEM 351. (Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit. Rackham credit requires additional work.*

Cytoskeletal dynamics drives key cellular processes including cell shape change, organelle movement, cell migration, and cell division. This advanced biology course uses primary literature as a tool to discuss key concepts and techniques related to the cytoskeleton and further helps students gain

an appreciation of how scientific knowledge is generated.

**MCDB 455. Cell Biology of Neurodegeneration**

*BIOLOGY 222 or 225 or 305; and MCDB 310 or BIOLCHEM 415 or CHEM 351. (Prerequisites enforced at registration.) MCDB 422 or 428. (3). (BS). May not be repeated for credit. Rackham credit requires additional work.*

This course covers current research into the cellular mechanisms that underlie neurodegenerative disorders, focusing on Alzheimer's Disease, Parkinson's Disease, ALS, and Multiple Sclerosis. Class will consist predominantly of discussion of scientific papers, and evaluation will be based on daily quizzes, participation, and a scientific research proposal.

**MCDB 456. Genes, Circuits, and Behavior**

*BIOLOGY 222 or 225 or MCDB 422; and BIOLOGY 305. (Prerequisites enforced at registration.) MCDB 310 or BIOLCHEM 415 or CHEM 351. (3). (BS). May not be repeated for credit. Rackham credit requires additional work.*

This course explores model systems neuroscience through guided reading of seminal works of experimental neuroscience and current primary scientific literature. Strong focus is placed on newly emerging systems approaches to the neuronal control of behavior that integrate gene-function, neuroanatomy, live-imaging, and quantitative behavioral analysis.

**MCDB 457. Neurobiology of Sexual and Aggressive Behaviors**

*BIOLOGY 225 or PSYCH 230. (Prerequisites enforced at registration.) BIOLOGY 305. (3). (BS). May not be repeated for credit. Rackham credit requires additional work.*



This course explores behavioral neuroscience through guided reading of recent literature involving research in two "opposite" behaviors, sexual courtship and aggression. The class is based on group discussions and it is designed to strengthen the ability to critically read experimental neuroscience and propose hypotheses and experiments to test them.

**MCDB 458. Neuroepigenetics**

*BIOLOGY 222 or 225, and BIOLOGY 305. (Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit. Rackham credit requires additional work.*

Have you ever wondered how life experiences are translated into changes in the DNA and how these in turn affect behavior? While genomes are hidden inside cells, they are also influenced by the "experience" of cells and organisms. These experiences, which come in the many forms, from diet to pollutants to stress, alter the chemical nature of the genome, and in turn, its function. This is particularly crucial in the brain, as its function is linked to behavior.

**MCDB 459. Brain States and Behavior**

*BIOLOGY 225. (Prerequisites enforced at registration.) BIOLOGY 305, MCDB 351 or 352. (3). (BS). May not be repeated for credit. Rackham credit requires additional work.*

This course is aimed at providing students with an overview of recent studies using electrophysiological, genetic, and behavioral techniques focused on brain states including sleep and wakefulness, attention, and motivation.

**MCDB 460. Advanced Undergraduate Neurobiology Research**

*MCDB 300 or MCDB 360 or PSYCH 326 or PSYCH 331. (Prerequisites enforced at registration.) (2 - 3). (BS).*

*(INDEPENDENT). May be repeated for a maximum of 9 credits.*

Independent research is a wonderful opportunity to take an active role in studying what you enjoy! Students in MCDB 460 participate in a project in which they themselves have a say in the design, implementation, and interpretation of experiments. Students meet regularly with their mentors and gain exposure to the scientific literature of the field.

**MCDB 461. Neuroscience Senior Thesis**

*Consent of instructor required. (1). (BS). (INDEPENDENT). May not be repeated for credit.*

This course provides a structure for students admitted to the Neuroscience Honors Program or approved for a Non-honors Thesis experience to receive credit for their work on their senior thesis.

**MCDB 462. Epigenetics**

*BIOLOGY 305; and one of MCDB 310 or BIOLCHEM 415 or CHEM 351. (Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit.*

This course is an introduction to epigenetics, the exciting field of research about heritable changes in gene function that cannot be explained by changes in DNA sequence. Topics include chromatin structure, establishment and maintenance of chromatic modifications, non-coding RNA biology, and implications of epigenetic mechanisms for human health.

**MCDB 463. Sensory Circuits and Diseases**

*BIOLOGY 222 or BIOLOGY 225. (Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit. Rackham credit requires additional work.*

How can we sense the world? The overall goal of this course is to provide a

comprehensive overview of the neural mechanisms underlying touch, temperature sensation, audition, olfaction, and taste. The course will also discuss basic and clinical issues related to a variety of neurological diseases in sensory systems.

**MCDB 489. Microbial Genes and Genomes**

*BIOLOGY 305; and one of: MCDB 310 or 311, or BIOLCHEM 415, or CHEM 351; or graduate standing. (Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit.*

This course covers a broad range of pathways used by bacteria to replicate and maintain their genetic material. The course covers genetic, cell biological, biochemical, and modern genomic techniques. The course material is from the primary literature.

**MCDB 494 / EEB 494. Teaching College Science**

*Consent of department required. Science concentrators having completed a range of courses, such as BIOLOGY 171, 172 and 173; BIOLOGY 225, 281, 305 or EEB 390; CHEM 130, 210 or 211; PHYSICS 140 or 160; or EARTH 119. (2). (BS). May not be repeated for credit.*

This course helps students build a foundation of knowledge about effective science teaching. It is both scholarly and practical in nature. Students construct an understanding of fundamental principles and sound pedagogy that they apply to their own teaching.

**MCDB 499 / EEB 499. Responsible Conduct of Research and Scholarship in Biology**

*Prior or concurrent enrollment in MCDB or EEB 300. (1). (BS). May not be repeated for credit. Does not count toward electives for the EEB major, or the Biology major or minor. Offered mandatory credit/no credit.*

The organization of this class is based on the premise that the educational objective of a research university like the University of Michigan is to produce scholars capable of original and independent research and that such research requires responsible conduct and integrity.

**Mechanical Engineering (MECHENG)**

**MECHENG 567 / EECS 567 / MFG 567 / ROB 510. Robotic Kinematics and Dynamics**

*Graduate standing or permission of instructor. (3). (BS). May not be repeated for credit. W.*

Geometry, kinematics, differential kinematics, dynamics, and control of robot manipulators. The mathematical tools required to describe spatial motion of a rigid body will be presented in full. Motion planning including obstacle avoidance is also covered.

**Middle East Languages (MELANG)**

**MELANG 101 / JUDAIC 120 / RELIGION 110. Elementary Classical Hebrew I**

*(3). May not be repeated for credit.*

An introduction to the language and style of the Hebrew Bible and other ancient texts written in Hebrew. Regular instruction on grammar and vocabulary with drills.

**MELANG 102 / JUDAIC 121 /  
RELIGION 111. Elementary Classical  
Hebrew II**

*MELANG 101 (NESLANG 101). (3). May  
not be repeated for credit.*

Lessons and exercises on the language of  
the Hebrew Bible and other ancient texts  
written in Hebrew. Presentation of grammar  
and vocabulary.

**MELANG 201 / JUDAIC 220 /  
RELIGION 210. Intermediate Classical  
Hebrew I**

*MELANG 102 (NESLANG 102). (3). May  
not be repeated for credit.*

Introduction to the Hebrew language and  
literature of Ancient Israel which includes,  
but is not limited to, the biblical traditions.  
Special emphasis is placed on refining the  
student's knowledge of Classical Hebrew  
through the study of Hebrew syntax.

**MELANG 202 / JUDAIC 221 /  
RELIGION 211. Intermediate Classical  
Hebrew II**

*MELANG 201 (NESLANG 201). (3). (Lang  
Req). May not be repeated for credit.*

Introduction to Classical Hebrew language  
and literature through the reading and  
analysis of Biblical and extra-Biblical texts  
from the time of Ancient Israel. Special  
emphasis placed on the study of Classical  
Hebrew syntax.

**MELANG 307 / GREEK 307. The  
Synoptic Gospels: Matthew, Mark and  
Luke**

*GREEK 101 and 102; and permission of  
instructor. (4). May not be repeated for  
credit.*

Careful attention will be paid to the  
morphology and syntax of Koine Greek,  
particularly as the morphology and syntax  
contrasts with Attic Greek. The three  
Gospels will be read in their entirety, with

close attention paid to stylistic differences  
in the accounts.

**MELANG 308 / GREEK 308. The Acts  
of the Apostles**

*GREEK 101 and 102; and permission of  
instructor. (4). (Lang Req). May not be  
repeated for credit.*

A continuation of GREEK 307, with greater  
attention to New Testament idiom and style.  
Special attention will be given to selected  
vocabulary: the etymology and the shift in  
meaning as the words are used in ATTIC,  
Hellenistic, and KOINE Greek.

**MELANG 410. Topics in Middle East  
Languages**

*Students should not enroll in the same topic  
twice. (3). May be elected four times for  
credit.*

This course is aimed at undergraduate and  
graduate students who wish to pursue  
proficiency in a Middle Eastern language  
not regularly taught by the department.  
Topics will vary, but will focus on  
introducing the basic grammar, vocabulary,  
and writing systems of a Middle Eastern  
language.

**MELANG 415. Elementary Hittite**  
*(3). May not be repeated for credit.*

An introduction to the earliest-attested  
Indo-European language. Presentation of  
the fundamentals of Hittite grammar and  
orientation to the cuneiform writing system.  
Consideration of the position of Hittite  
among the languages of Europe and the  
Middle East.

**MELANG 420. Introduction to  
Akkadian**

*(3). May not be repeated for credit.*

An introduction to Akkadian, an east  
Semitic language (part of the greater

Afroasiatic language family) that was spoken in ancient Mesopotamia.

**MELANG 430. Introduction to Middle Egyptian I**

*(3). May not be repeated for credit.*

An introduction to the grammar and literature of ancient Egypt, and to the hieroglyphic script.

**MELANG 431. Introduction to Middle Egyptian II**

*MELANG 430 (NESLANG 430).*

*(Prerequisites enforced at registration.) (3). May not be repeated for credit.*

This course is a continuation of MELANG 430, which is an introduction to the grammar and literature of ancient Egypt, and to the hieroglyphic script

**MELANG 435. Introduction to Sumerian**

*(3). May not be repeated for credit.*

This course is an introduction to Sumerian, a language of ancient Sumer, which was spoken in southern Mesopotamia (modern Iraq).

**MELANG 440. Coptic I**

*(3). May not be repeated for credit.*

An introduction to Coptic, a northern Afro-Asiatic language spoken in Egypt until at least the 17th century.

**MELANG 441. Coptic II**

*MELANG 440 (NESLANG 440) or permission of instructor. (3). May not be repeated for credit.*

This course is a continuation of MELANG 440, which is an introduction to Coptic, a northern Afro-Asiatic language spoken in Egypt until at least the 17th century.

**MELANG 450. Introductory Central Asian Language I**

*(4 - 5). May be elected three times for*

*credit. May be elected more than once in the same term.*

This course develops students' ability to speak, listen, read, and write at a basic level in the Central Asian language of their choice. Repeatable for different languages.

**MELANG 451. Introductory Central Asian Language II**

*MELANG 450 (or NESLANG 450 or ASIANLAN 119), with a minimum grade of C- or better. (Prerequisites enforced at registration.) (4 - 5). May be elected three times for credit. May be elected more than once in the same term. May not repeat the same language at the same level.*

This course develops students' ability to speak, listen, read, and write at a basic level in the Central Asian language of their choice.

**MELANG 460. Introduction to Demotic Egyptian**

*(3). May not be repeated for credit.*

This course is an introduction to Demotic, the indigenous language/script used in ancient Egypt from around 650 BCE to 450 CE for documentary, monumental, literary, religious and magical texts. No prior knowledge of Egyptian is assumed. We learn Demotic working through a Demotic literary text, the Instructions of Onchsheshonqy.

**MELANG 465. Syriac I**

*(3). May not be repeated for credit.*

This course introduces students to Syriac, an ancient dialect of Aramaic that was used by Christians in Syria and Mesopotamia beginning in late antiquity.

**MELANG 470 / GREEK 473. Advanced Koine**

*Two years of Greek, one term of New*

*Testament Greek (300 level or equivalent). (3). May not be repeated for credit.*

Interpretation of selected New Testament texts with attention to philological, historical, and theological problems. This course also provides an introduction to questions of the textual transmission of New Testament writings.

**MELANG 499. Independent Study in Middle East Languages**

*Consent of department required. (1 - 4). (INDEPENDENT). May be elected three times for credit. May be elected more than once in the same term.*

An independent study course taught in one of the languages under the MELANG subject code of the Department of Middle East Studies. Approval from the department is required.

**MELANG 505. Intermediate Central Asian Language I**

*MELANG 451 (or NESLANG 451 or ASIANLAN 120), with a minimum grade of C- or better. (Prerequisites enforced at registration.) (3 - 5). May be elected three times for credit. May be elected more than once in the same term. Students may not repeat the same language at the same level.*

This course develops students' ability to speak, listen, read, and write at an intermediate level in the Central Asian language of their choice.

**MELANG 506. Intermediate Central Asian Language II**

*(Lang Req). May be elected three times for credit. May be elected more than once in the same term. Rackham credit requires additional work.*

This course develops students' ability to speak, listen, read, and write at an intermediate level in the Central Asian language of their choice.

**MELANG 513. Readings in Akkadian**  
*MELANG 420. (Prerequisites enforced at registration.) (3). May not be repeated for credit.*

Readings in Akkadian meant for advanced students in the language.

**MELANG 531. Advanced Middle Egyptian II**

*MELANG 530 (NESLANG 530). (Prerequisites enforced at registration.) (3). (Lang Req). May not be repeated for credit.*

This course is a continuation of Advanced Middle Egyptian I. Students will be exposed to a variety of texts in Middle Egyptian, expanding their proficiency, knowledge, and skills within the language.

**MELANG 537. Readings in Sumerian**  
*MELANG 435 (NESLANG 435). (3). May be repeated for a maximum of 12 credits.*

This course is intended for students who have completed MELANG 435: Introduction to Sumerian. Readings will be in Sumerian and vary according to instructor and student needs.

**MELANG 550. Advanced Central Asian Language I**

*MELANG 506 (NESLANG 481), completed with a minimum grade of C- or better. (Prerequisites enforced at registration.) (3 - 4). May be elected three times for credit. May be elected more than once in the same term. May not repeat the same language at the same level.*

This course develops students' ability to speak, listen, read, and write to an advanced level in the Central Asian language of their choice.

**MELANG 551. Advanced Central Asian Language II**

*MELANG 550 (NESLANG 550). (Prerequisites enforced at registration.) (3 -*

4). *May be elected three times for credit. May be elected more than once in the same term. May not repeat the same language at the same level.*

This course develops students' ability to speak, listen, read, and write to an advanced level in the Central Asian language of their choice.

## Medieval and Early Modern Studies (MEMS)

University of Michigan's program in Medieval and Early Modern Studies is distinctive because of its global conception—embracing work on the Middle East, Africa, Asia, and the Americas as well as Europe, the traditional focus of MEMS scholarship. We cover a similarly broad temporal range, from ca. 500 CE to 1800 CE, that is, late antiquity through the Industrial Revolution (in the European context) and encourage exploration of the cultural range of this period in and across other geographic regions. Within this historical period, MEMS affiliates study history, the history of art and architecture, archaeology, history, literature, linguistics, anthropology, sociology, philosophy, religious studies, music, and the history of science and technology.

### **MEMS 210 / HISTORY 210. Early Medieval Europe, 300-1000**

*(4; 3 in the half-term). (SS). (R&E). May not be repeated for credit. F.*

A survey course covering the decline of Rome and the rise of Germanic monarchy, the Carolingian and Ottonian Empires, the growth of feudalism, monasticism and papal reform.

### **MEMS 211 / HISTORY 211. Later Medieval Europe, 1000-1500**

*(4). (SS). (R&E). May not be repeated for credit. W.*

A survey of political, economic, religious, and intellectual developments within western Christendom. Special emphasis on main currents of medieval thoughts.

### **MEMS 212 / HISTORY 212. Renaissance Europe**

*(4). (HU). May not be repeated for credit.*

Social, cultural, intellectual traditions and innovations, predominantly in Italy, with comparisons with northern Europe, 1300-1500, will be the subject of this course.

### **MEMS 220 / HISTORY 220. Knights, Peasants, and Bandits**

*(3). (SS). May not be repeated for credit.*

The class will focus on social organization in medieval England from the reign of Alfred (d. 899) to 1500. The guiding questions for the class will be how was social order created, what constituted social disruption, and whether these notions change according to time period and social class? To understand these processes we will explore the social and political experiences of the aristocracy, urban dwellers, and peasantry; what were their daily lives like materially and culturally, and what did they view as threats to this life?

### **MEMS 240 / HISTART 240. The Visual Arts in Medieval Society**

*(3). (HU). May not be repeated for credit.*

A study of masterworks of medieval art in relation to society, environment, technology, and literature and as an expression of a phase in the development of the moral and intellectual ideas of the western world. Emphasis is on the fortress, the castle, the city, the cathedral, the abbey,

and the book. Lectures and discussions are supplemented by museum trips and by readings in medieval epic, romance, and general history in addition to more specialized studies in the history of art.

**MEMS 250 / HISTART 250. Italian Renaissance Art**

(4). (HU). May not be repeated for credit.

This course examines the principal monuments of Italian Renaissance Art: Giotto's Arena Chapel, Botticelli's Birth of Venus, Michelangelo's David and Sistine Chapel Ceiling, and Leonardo da Vinci's Mona Lisa.

**MEMS 253 / HISTORY 253. Europe, 300-1648: The Rise and Fall of the Middle Ages**

(4; 3 in the half-term). (SS). May not be repeated for credit.

Survey of European history from the end of the Roman Empire through the 17th century. The creation of European medieval society out of its Roman, Christian and Germanic components, its evolution through political and scientific revolutions of the 17th century.

**MEMS 310 / RCHUMS 310. Pagans, Christians, Barbarians in Late Antiquity and the Early Middle Ages**

(3). (HU). May not be repeated for credit.

An introduction to the literature and the visual arts of the Late Antique/Early Christian period. Topics covered include: the Desert tradition and its influence; Augustine's Confessions and its philosophical foundations; Gregory of Tours and the transmission of Roman culture; Beowulf and the art of northern peoples.

**MEMS 314 / RCHUMS 314. The Figure of Rome in Shakespeare and 16th-**

**Century Painting**

(3). (HU). May not be repeated for credit.

An interdisciplinary course including literature and the visual arts focused on the figure of "Rome" in four of Shakespeare's Roman plays and in painting by Caravaggio, Mantegna and Titian.

**MEMS 316 / HISTORY 316 / WGS 316. Women and Gender in Medieval Europe: 500-1500**

One course in Women's Studies or History.

(3). (SS). May not be repeated for credit.

The Middle Ages have a bad reputation with respect to women, but just how bad were they? This course explores the history of women and gender relations in medieval European society and culture from roughly 500 to 1500.

**MEMS 317 / HISTORY 317 / WGS 317. Women and Gender in Early Modern Europe, 1500-1800**

At least one course in WGS or HISTORY.

(3). (HU). May not be repeated for credit.

This course explores the history of women and gender relations in European society and culture from the Protestant Reformation and the opening out to the New World through the French Revolution.

**MEMS 318 / ISLAM 318 / MIDEAST 318 / REEES 318 / RELIGION 318. The Church of Armenia: Profile of a National Institution**

Upper-class undergraduates or graduate students. (3). (HU). May not be repeated for credit.

This course highlights the introduction of Christianity to Armenia and rise of the Armenian Church as an independent institution, with Armenia's political, cultural, and social history as its background. Focal topics include the

following: the Christian Armenian self-image as fashioned by the Church; the Church's relations with other churches and Islam; and the religious, cultural, social, and political administrative role, whether formal or informal, the Church played in Armenian realities.

**MEMS 323 / FRENCH 343 / HISTORY 323. French Enlightenment**

(3). (HU). *May not be repeated for credit.*

Through primary source readings, discussions, and lectures, students gain an understanding of the French Enlightenment as a part of the critical response to French society, politics, and culture before the French Revolution. Through readings in secondary sources students are introduced to current debates about the Enlightenment. All Readings are in English translation.

**MEMS 325 / ASIAN 324 / HISTORY 325 / ISLAM 325 / MIDEAST 375 / RELIGION 325. The History of Islam in South Asia**

(4). (HU). (R&E). *May not be repeated for credit.*

This course examines the history of Muslim communities and institutions in South Asia. It will consider Muslim political expansion and sovereignty, conversion, the interaction between religious communities, Islamic aesthetics, the impact of colonial rule, India's partition and the creation of Pakistan, and the contemporary concerns of South Asia's Muslims.

**MEMS 327 / ISLAM 327 / MIDEAST 327. Shahnameh: Iranian Myth, Epic, and History**

(3). (HU). *May not be repeated for credit.*

This course is an introduction to Iranian myth, epic, and history through a close reading of the Shahnameh (Book of Kings), the foundational text of Persian classical

poetry and one of the major achievements in world literature.

**MEMS 333 / ITALIAN 333. Dante's Divine Comedy**

*A knowledge of Italian is not required. (3). (HU). May not be repeated for credit. Taught in English.*

Study of Inferno, Purgatorio, and Paradiso in context of medieval culture and history, with focus on the encounter between Dante and the classical past as a model for a present-day encounter with the Middle Ages. The course is taught in English, but uses bi-lingual editions of the text for readers with some knowledge of Italian.

**MEMS 345 / HISTART 345. Introduction to Medieval Architecture**

(3). (HU). *May not be repeated for credit.*

This course provides an introduction to the built environment of the Middle Ages from the fall of Rome to the dawn of the Renaissance. Students will integrate the study of architecture with the study of medieval culture, exploring for example the impact of the cult of saints, princely courts and civil authority, religious reform and radicalism and rising urbanism.

**MEMS 348 / HISTART 348. The Medieval Book**

(3). (HU). *May not be repeated for credit.*

This course focuses on an art form highly developed in the Middle Ages: the richly illuminated hand-written book. Students come to know such masterworks as the Lindisfarne Gospels and the Tres Riches Heures as they are learned about significant episodes in the history of manuscript production, beginning with the invention of the codex in late antiquity and ending with the advent of the printed book in the early modern era.



**MEMS 350 / ENGLISH 350. Literature in English to 1660**

*(4; 3 in the half-term). (HU). May not be repeated for credit. F.*

Part one of a two-term sequence designed to give students a principled sense of the range of literary works in English to 1660.

**MEMS 355 / HISTART 355. The Miraculous and the Diabolical in Late Medieval and Early Modern Europe**

*(3). (HU). May not be repeated for credit.*

In this course we investigate 'supernatural' phenomena in the visual arts: divine acts, miracles, magic, and sorcery. We are interested in how and why people in late medieval and early modern Europe distinguished between the 'supernatural' and the 'natural', as well as the extreme fluidity of these terms.

**MEMS 360. Special Topics in Medieval and Early Modern Studies**

*(3). May be elected twice for credit. May be elected more than once in the same term.*

This course examines an aspect or topic in Medieval and/or Early Modern History.

**MEMS 367 / ENGLISH 367. Shakespeare's Principal Plays**

*(3 - 4; 3 in the half-term). (HU). May not be repeated for credit.*

An intensive study of 8 to 10 plays designed to increase the student's critical appreciation and understanding of Shakespeare's art and thought.

**MEMS 375 / GERMAN 375 / SCAND 375. Celtic and Nordic Mythology**

*(3). (HU). May not be repeated for credit. Taught in English.*

A study of the Celtic and Nordic cycles of myths and sagas, including the Nibelungenlied, Tristan and Isolde cycles,

the Irish Tain, the Welsh Mabinogi, the Scandinavian Edda and some of the literature based on mythology of these cycles.

**MEMS 391 / RUSSIAN 391. Art, Culture, and Literature in Old Russia**

*(3). (HU). May not be repeated for credit. No credit granted to those who have completed or are enrolled in RUSSIAN 551.*

An examination of the culture, arts, and literature of the Eastern Slavs from the ninth to the seventeenth centuries.

**MEMS 398 / HISTORY 398. The Black Death**

*(3). (ID). May not be repeated for credit.*

In the fourteenth century, a massive epidemic hit East Asia, the Middle East, and finally Western Europe. Known conventionally as the Black Death, in two years, it killed a third to a half of the European population. How did it come to kill so many people? How did Europe cope with such a loss? Did it change medieval society or just accelerate changes already underway? This course will look primarily at the impact of the Black Death on late medieval European society and culture. We will start with medieval attitudes towards disease, and the role of modern science in studying this epidemic, then move to discussion of its short- and long-term impact on such issues such as politics, economics, religion, and social structure.

**MEMS 411. Special Topics**

*(1 - 3). May not be repeated for credit.*

**MEMS 412 / HISTORY 412 / MIDEAST 412. City of Empires: Byzantium, Constantinople, Istanbul**

*(3). May not be repeated for credit.*

Using a wide range of textual and visual material, from archaeological, architectural, archival evidence, to literature, arts, and

cinema, this course offers new insights into the history and cultural significance of Constantinople/Istanbul, one of the most magnificent and mythical cities of the old world.

**MEMS 440 / LATIN 435. Postclassical Latin I**

*Two years of college Latin. (3; 2 in the half-term). May not be repeated for credit.*

**MEMS 441 / LATIN 436. Postclassical Latin II**

*Two years of college Latin. (3; 2 in the half-term). May not be repeated for credit.*

**MEMS 465 / ENGLISH 465. Chaucer: The Canterbury Tales**

*(3). May not be repeated for credit.*

This course is an intensive study of Chaucer's major works. It includes reading in Middle English and background lectures covering as many tales as possible at the instructor's discretion.

**MEMS 490. Directed Reading**

*Permission of instructor. (1 - 4). (INDEPENDENT). May be repeated for credit.*

## **Middle Eastern and North African Studies (MENAS)**

**MENAS 231. Social Science Topics in MENAS**

*(1 - 4). (SS). May be elected three times for credit.*

This course is intended for undergraduate students interested in the Middle East and North African region. Social Science topics will vary but may incorporate history, sociology, anthropology, communication or political science.

**MENAS 243 / HISTORY 243 / ISLAM 243. The Dawn of Islamic History**

*(4; 3 in the half-term). (HU). May not be repeated for credit.*

This course offers neither a conspectus of Muslim religious beliefs and practices nor a comprehensive survey of the political expansion of Islamic states. Rather, by examining the role of Islam in world history through the five themes outlined below, it moves away from viewing Islam as a monolithic, timeless entity and instead explores its diverse pathways without privileging any single narrative or viewpoint. Ultimately, the course asks how useful the category of "Islam" is to understanding the global past. This course examines the history of Islam in its global dimensions and contexts through five key themes: 1. Islam as Religion; 2. Islam as Polity; 3. Islam as Cosmopolis; 4. Islam as Ideology; 5. Islam and Modernity.

**MENAS 244 / HISTORY 244 / JUDAIC 244 / MIDEAST 284. The History of the Arab-Israeli Conflict**

*(4; 3 in the half-term). (SS). (R&E). May not be repeated for credit.*

This course assesses the origins, dynamics, and the amazing, chameleon-like persistence of Arab-Jewish conflict for over a hundred years, from the late 1800s to the present. How did the rivalry begin? Why is no end in sight? And what does the conflict say about truth and morality in international relations?

**MENAS 308 / INTLSTD 308 / MIDEAST 308. Conflict and Comics: Reframing the Middle East**

*(3). (HU). May not be repeated for credit.*

How do comics--both as journalistic medium and as an autobiographical genre--portray politics, war, and revolution in the Middle East? Explore famous examples

(Palestine and Persepolis) alongside lesser-known print and online comics.

**MENAS 332. MENAS Topics in the Humanities**

(3 - 4). (HU). *May be elected five times for credit. May be elected more than once in the same term.*

Middle Eastern and North African topics in the Humanities; content and number of credits varies by term and instructor.

**MENAS 340 / ASIAN 340 / HISTORY 340 / MIDEAST 340 / REEES 340. From Genghis Khan to the Taliban: Modern Central Asia**

(4; 3 - 4 in the half-term). (SS). (R&E). *May not be repeated for credit.*

This course provides an overview of modern Central Asian history. It focuses on the empires of the last 300 years: especially in Russian and Soviet Central Asia, but also the neighboring areas dominated by Britain and China (Afghanistan, Pakistan, Xinjiang).

**MENAS 398. MENAS Internship**

*Consent of instructor required. ARABIC 101 or higher for Arabic or TURKISH 101 or higher for Turkish. (1 - 3). (EXPERIENTIAL). May not be repeated for credit.*

This course allows students to receive credit for an internship in the Middle Eastern and North African region arranged through the LSA International Internship Program. Students may use the internship experience as the basis for a substantial academic paper in English or in the language of the country under the supervision of a country expert.

**MENAS 461 / EDUC 461. Web Based Mentorship: Earth Odysseys**

(3). *May be repeated for a maximum of 6 credits.*

Students serve as mentors to a worldwide network of middle school and high school participants in cultural issues forum linked to vicarious travel. As the forum participants respond to reports from various global settings, mentors seek to deepen, challenge and honor student thinking, and to help forum participants make connections to their own lives. Mentors learn about the country being explored, develop curriculum for use by network teachers, and participate in ongoing reflection on the teaching and learning dimensions of their mentoring work.

**MENAS 462 / EDUC 462. Web Based Mentorship: Learning Through Character Play**

*Consent of instructor required. (3). (EXPERIENTIAL). May be repeated for credit. May be elected more than once in the same term.*

Students serve as teaching mentors for a web-based character-playing simulation involving high school and middle school students on a worldwide network, and they themselves also research and portray historical figures. The Place Out of Time simulated trial is different every term, but mentors and students are always presented with a contemporary problem that they must think through in the role of their characters, one that frames an array of social, political, cultural and moral question. Mentors are active participants in a dynamic, writing-intensive enterprise that is aimed at enlivening the study of history through juxtaposing historical perspective and sensibilities. The course employs purposeful "play" to frame a hands-on teaching experience that is supported by extensive in-class and written reflective work.

**MENAS 463 / EDUC 463. Web Based Mentorship: Arab-Israeli Conflict**

### **Simulation**

*(3). May be repeated for a maximum of 6 credits.*

This course is linked to a web-based simulation that engages high school students worldwide in exploring the Arab-Israeli Conflict through portraying current political leaders and representing stakeholder nations. Course participants facilitate this diplomatic simulation, working closely with the simulation participants to offer a window into the diplomatic process. Course participants learn about the contemporary politics of the region, and work in teams as gatekeepers and facilitators, helping their student mentees to thoughtfully assume character, and to think and write purposefully and persuasively. This course is a hands-on teaching experience that is supported by extensive in-class and written reflective work.

### **MENAS 492. Advanced Topics in MENAS**

*(1 - 4). May be elected three times for credit. May be elected more than once in the same term.*

This course is intended for students interested in furthering their understanding of the Middle East and North Africa through advanced topics and current issues.

### **MENAS 493 / MIDEAST 483. Comparative Perspectives of the Middle East and North Africa**

*(1). May be repeated for a maximum of 12 credits. May be elected more than once in the same term. Rackham credit requires additional work.*

This 1-credit course, jointly offered by CMENAS and the Near Eastern Studies, brings together a diverse cohort of specialists covering 5000 years of history, languages, and culture, and a geographical

area stretching from the Atlantic to Central Asia. Through a series of lectures by UM faculty and outside speakers, addressing a particular theme chosen for that semester, students consider multiple perspectives of comparative research across the ages and cultures.

### **MENAS 495. Senior Honors Thesis**

*Consent of instructor required. Open only to Honors concentrators with senior standing. (3 - 4). (INDEPENDENT). May not be repeated for credit. Continuing Course. Y grade can be reported at end of the first-term to indicate work in progress. At the end of the second term of MENAS 496, the final grade is posted for both term's elections.*

### **MENAS 496. Senior Honors Thesis**

*Consent of instructor required. MENAS 495; Open only to Honors concentrators with senior standing. (3 - 4). (INDEPENDENT). May not be repeated for credit.*

### **MENAS 591. Interdisciplinary Middle East Topics Seminar**

*Upperclass standing; concentration in MENAS, NES or other fields with main interest in Middle Eastern Studies. (3). May be repeated for a maximum of 9 credits. May be elected more than once in the same term.*

This is a seminar for students beginning graduate study of the Middle East and North Africa. It introduces them to a broad range of disciplinary approaches and methodologies. The course will concentrate on different areas and problems each year.

## **Manufacturing Engineering (MFG)**

**MFG 466 / IOE 466. Statistical Quality Control**

*STATS 401 or IOE 366, (completed with a minimum grade of C- or better); or graduate standing. (Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit.*

Quality Improvement Philosophies; Modeling Process Quality, Statistical Process Control, Control Charts for Variables and Attributes, CUSUM and EWMQ, Short Production Runs, Multivariate Quality Control, Auto Correlation, Engineering Process Control, Economic Design of Charts, Fill Control, Precontrol, Adoptive Schemes, Process Capability, Specifications and Tolerances, Gage Capability Studies, Acceptance Sampling by Attributes and Variables, International Quality Standards.

**MFG 514 / MACROMOL 514 / MATSCIE 514. Composite Materials**

*MATSCIE 350 or equivalent, or permission of instructor. (3). (BS). May not be repeated for credit. F.*

**MFG 567 / EECS 567 / MECHENG 567 / ROB 510. Robotic Kinematics and Dynamics**

*Graduate standing or permission of instructor. (3). (BS). May not be repeated for credit. W.*

Geometry, kinematics, differential kinematics, dynamics, and control of robot manipulators. The mathematical tools required to describe spatial motion of a rigid body will be presented in full. Motion planning including obstacle avoidance is also covered.

**Microbiology (MICRBIOL)****MICRBIOL 399. Independent Research for Undergraduates**

*Consent of instructor required. PER. INSTR. (1 - 8; 1 - 4 in the half-term). (INDEPENDENT). May be repeated for credit.*

Students will conduct microbiological research in the laboratory of a faculty member. Hands on lab experience will be conducted under the direction of the principal investigator.

**MICRBIOL 405. Medical Microbiology and Infectious Diseases**

*(3). (BS). May not be repeated for credit. Rackham credit requires additional work.*

This course focus and scope is mainly geared to students interested in continuing onto post-graduate education in the areas of public health, medicine, biomedical research or other health-related areas. This lecture-based course covers topics on the biology of microbial cells, medical immunology, pathogenic virology and pathogenic bacteriology and develops concepts on the types of interaction between host and pathogen that contribute to infectious diseases.

**MICRBIOL 409 / INTMED 409 / MCDB 409. Investigational and Experimental Bacteriology**

*Biology 207 AND concurrent enrollment in or previous completion of ONE of the following courses: Micrbiol 405, Micrbiol 430, Intmed460/Micrbiol 460; or instructor permission. (Prerequisites enforced at registration.) (4). (BS). May not be repeated for credit.*

This course will study bacteriology at multiple levels. Topics include microbial ecology, biochemistry, genomics, epidemiology, applications and pathogenesis. The course will use an active learning approach for individual and group

projects that encompasses didactic, discussion, primary literature review, data analysis and problem-solving formats.

**MICRBIOL 415. Virology**

*BIOLOGY 172. (3). (BS). May not be repeated for credit. Rackham credit requires additional work.*

**MICRBIOL 440. Human Immunology**

*BIOLOGY 172. (3). (BS). May not be repeated for credit. Only one of MICRBIOL 440 or IMMUNO 440 or MCDB 436 will count toward a Microbiology major. Rackham credit requires additional work.*

**MICRBIOL 460 / INTMED 460.**

**Eukaryotic Microbiology**

*BIOLOGY 172. (3). (BS). May not be repeated for credit. F. Rackham credit requires additional work.*

This upper level undergraduate course will cover the biology of eukaryotic microbes and the environments in which they live. Eukaryotic microbes include single-celled protozoa, multi-cellular helminths (worms), and fungi. This course will cover the complex life cycles (intermediate hosts, insect vectors) required for survival of many protozoa and helminths. Eukaryotic microbes are also a significant cause of human disease throughout the world (e.g. Malaria, Leishmaniasis, Trypanosomiasis, Giardiasis, Histoplasmosis, Blastomycosis). We will examine the evolutionary relationship between eukaryotic pathogens and their mammalian hosts, including the complex relationship between host immunity and pathogen immunoevasion. We will also discuss the renewed interest in Neglected Tropical Diseases (NTDs). NTDs are a group of diseases causing substantial illness in more than one billion people globally. The most common NTDs include Lymphatic Filariasis (Elephantiasis), Onchocerciasis (River Blindness), Schistosomiasis, Soil-Transmitted

Helminths, and Dracunculiasis (Guinea Work Disease).

## **Middle East Studies (MIDEAST)**

**MIDEAST 200. Introduction to the Middle East**

*(4). (HU). (R&E). May not be repeated for credit. No credit granted to students who have taken NEAREAST 100.*

An introductory course on the diversity of peoples, cultures and economics, and politics of the Middle East. Topics will include religion (Judaism, Islam, Christianity), cities and nomads, women in the Middle East, economic change, social and political systems, and the world's first civilization of Mesopotamia and Egypt.

**MIDEAST 201 / HISTORY 242.**

**Madness, Medicine, and Magic in the Middle East**

*(4). (HU). May not be repeated for credit.*

This course introduces the history of medicine in the Middle East, from the ancient world to the modern, with a focus on madness.

**MIDEAST 202 / RELIGION 201.**

**Introduction to Judaism, Christianity, Islam**

*(4; 3 in the half-term). (HU). May not be repeated for credit.*

Religions of the Book include Judaism, Christianity, and Islam, all with roots in the Middle East. This course serves as an introduction to those world religions. Traditions studied include Ancient Israel (including the Hebrew Bible/Old Testament) as well as its "offspring:" Judaism, Christianity, and Islam. Special

attention is paid the origins and development of these traditions, what they share, and how they differ.

**MIDEAST 207 / RELIGION 277. The Land of Israel/Palestine through the Ages** (4; 3 in the half-term). (HU). (R&E). *May not be repeated for credit.*

This survey course on the history of the Land of Israel/Palestine will outline the historical events that occurred in that territory, analyze the various factors (political, economic, cultural) that shaped its development, and introduce empires and nations that ruled the land as well as the people who inhabited its cities and villages.

**MIDEAST 209 / ENVIRON 219. Food and Drink in the Middle East** (4). (SS). *May not be repeated for credit.*

This course will explore the social history of Middle Eastern (and North African) food and drink, examining records from ancient Mesopotamia and Egypt, medieval cookbooks and wine poetry from Baghdad, imperial art and account books of the Ottoman palace, to modern cookbook-memoirs. We will also have a direct experience of culinary practices in the Middle East and the diaspora. Food and social practices of eating and drinking provide a uniquely intimate version of the history of this region through lived experience that also shows the universal humanity of these cultures.

**MIDEAST 216 / ISLAM 216 / RELIGION 204. Introduction to Islam** (4; 3 in the half-term). (HU). *May not be repeated for credit.*

This course provides a comprehensive introduction to Islam as a religious tradition. After examining the fundamental sources of Islam, particularly the Qur'an and the reports about the activities and sayings of the Prophet Muhammad, we will

discuss how these foundations gave rise to the beliefs and practices of Muslims and to an Islamic civilization with spectacular achievements in such areas as law, theology, science, philosophy, and mysticism. Our emphasis will be on the first thousand years of Islam, but modern and recent developments will be covered as well.

**MIDEAST 218. Armenia: Culture and Ethnicity** (3). (HU). *May not be repeated for credit.*

This course will explore various aspects of the Christian Armenian identity, from the earliest times to the present, against a historical and political background, with a greater emphasis on the more modern times. It will highlight the formation of the Armenian self-image; its principal features (political, religious, cultural); and its historical evolution in a multi-religious and multi-national region that has undergone territorial and cultural transformations.

**MIDEAST 219 / GTBOOKS 246 / ISLAM 219. Great Books of the Middle East** (3). (HU). *May not be repeated for credit.*

This course explores the classics of Islamic literature, including scripture, poetry, theology, novels, and historical works written in Arabic, Persian and Turkish. The readings focus on two themes: justice, governance and the Islamic polity; and love, both mystical love for God and romantic love. We will study works that approach these themes from different historical, geographical and cultural perspectives, and that have proved to have global resonance - for a Muslim readership and beyond. All works read in English.

**MIDEAST 220. Religion and Revolutions: A Comparison of the French, Russian, Turkish, and Iranian**

## Cases

(3). (HU). *May not be repeated for credit.*

This course addresses the central questions concerning the struggle between widely-held religious ideas propagated by various religious establishments (such as "the Church," or "the Muslim ulama") and freedom of thought and conscience by focusing on the cultural revolutions within the French, Russian, Turkish, and Iranian contexts during the 18th-20th centuries.

### **MIDEAST 235 / JUDAIC 235 / RELIGION 235. Introduction to the Tanakh/Old Testament**

(3). (HU). *May not be repeated for credit.*

This course is designed to introduce to the student to the modern study of the Tanakh or Old Testament within the context of a contemporary public university liberal arts curriculum. This collection of texts will be studied both as cultural vestige of the ancient Near East and as a foundational document to Western thought. Lectures and readings will focus on the development of ancient Israel's literature, religion and history as well as on the roles of those central to the formation and maintenance of early Israelite traditions, the priest, king, prophet, and sage.

### **MIDEAST 236 / RELIGION 236. Introduction to the New Testament**

(4; 3 in the half-term). (HU). *May not be repeated for credit.*

The course will introduce the student to the modern study of the New Testament, the most widely read, but probably least understood, book in the world.

### **MIDEAST 238 / JUDAIC 280 / RELIGION 280. The Historical Jesus in Christianity, Judaism, and Islam**

(4; 3 in the half-term). (HU). *May not be repeated for credit.*

The course focuses on the founder of Christianity, Jesus son of Joseph (Joshua bar-Yosef), as an historical character. By examining all extant historical sources (Jewish, Christian, and Pagan), the course offers a critical reconstruction of the major stages of the life and deeds of the prophet from Nazareth, from his birth under Herod the Great to his death and crucifixion under Pontius Pilate, within the diverse world of Second Temple Judaism. The course also explores the way in which the figure of Jesus has been reinterpreted over the centuries within the Christian, Jewish, and Muslim traditions, as well as his numerous portraits in the arts, involving the students in a multimedia experience of theater, fine arts, and music (Gospel music, and operas like *Amahl and the Night Vision* by Menotti as well as musicals like *Jesus Christ Superstar* and *Godspell*). Particular emphasis is placed on a detailed analysis of the many movies on Jesus, from Zecca-Noguet (1905) to DeMille (1927), Ray (1961), Pasolini (1966), Scorsese (1988), and Gibson (2004).

### **MIDEAST 239. Mythology of the Ancient Middle East**

(3). (HU). *May not be repeated for credit.*

After establishing a theoretical framework of the interpretation of mythological narratives and reviewing the various cultures of the ancient Middle East, we will read in translation and discuss the most important myths and epics of Sumer, Babylonia, Egypt, Anatolia, Canaan, Israel, and Hellenism in the East.

### **MIDEAST 240. Ancient Egypt: Religion and Culture**

(4; 3 in the half-term). (HU). *May not be repeated for credit.*

A general introduction to the religion and culture of Ancient Egypt, students in this



course will examine aspects of ancient Egyptian religion through its intellectual and material culture.

**MIDEAST 242 / RELIGION 270.**

**Introduction to Rabbinic Literature**

(3). (HU). *May not be repeated for credit. No credit granted to those who have completed or are enrolled in HJCS 470 or JUDAIC 470 or HJCS 570 or ACABS 570 or JUDAIC 570.*

This course will explore the history and substance of these writings on three levels. First, we will situate the rabbinic literary enterprise within a broader cultural, historical and religious context. Second, we will examine the various genres that constitute rabbinic literature and get acquainted with the sages, an elite group of Jewish intellectuals, who created this corpus during the Roman and Byzantine periods. Finally, we will trace the way subsequent generations gradually shaped these texts to their current format and endowed them with their exalted status.

**MIDEAST 243. Ancient Egypt and its World**

(4; 3 in the half-term). (HU). *May not be repeated for credit.*

This is an undergraduate introductory survey of ancient Egyptian culture and history, with the objective that students gain a basic understanding of the ancient Egyptian world.

**MIDEAST 244. The Otherworldly Past: Ancient Middle East in Science Fiction and Fantasy**

(3). (HU). *May not be repeated for credit.*

Discover how the ancient Middle East inspires science fiction and fantasy. This course explores mummies, curses, ancient aliens, and more in both written and visual media.

**MIDEAST 246 / HISTORY 273. History and Archaeology of Ancient Turkey to the Conquests of Alexander the Great**

*Previous knowledge in the history of ancient Western Asia. (3). (HU). May not be repeated for credit.*

A survey of the archaeology and history of ancient Turkey from the Neolithic beginnings, through the rise of civilization, the exploitation of the land by Mesopotamian traders and kings, the flowering of the Hittite empire, the petty states of the first millennium BCE, and the Persian domination, culminating in the early conquests of Alexander the Great.

**MIDEAST 255 / JUDAIC 296 / RELIGION 296. Perspectives on the Holocaust**

(4; 3 in the half-term). (HU). (R&E). *May not be repeated for credit.*

This course is a study of the Holocaust as an historical event and its impact on Jewish thought and culture.

**MIDEAST 256 / JUDAIC 256. Israeli Literature and Culture**

(3). (HU). *May not be repeated for credit.*

This course introduces students to the main works of Israeli literature and primary concerns of Israeli culture. It covers the pre-state period from the late 19th century to contemporary Israel.

**MIDEAST 275 / AMCULT 215 / ARABAM 215. Introduction to Arab-American Studies**

(4). (HU). (R&E). *May not be repeated for credit.*

This course is an introductory survey to Arab-American studies.

**MIDEAST 276 / JUDAIC 205. What is Judaism?**

(3). (HU). *May not be repeated for credit.*

*No credit granted to those who have completed or are enrolled in JUDAIC 505 or HJCS 576.*

An interdisciplinary, introductory survey of Jewish civilization and culture from Biblical times to the present in many countries. Jewish culture and civilization, among the oldest extant, have been enriched by their development in different cultural contexts. The course includes history, rabbinics, Jewish thought, Hebrew and Yiddish literatures, sociology, political science.

**MIDEAST 278 / ALA 238 / EARTH 238 / ENVIRON 238 / HISTORY 238. Zoom: A History of Everything**  
(4; 3 - 4 in the half-term). (ID). *May not be repeated for credit.*

This interdisciplinary course in "Big History" integrates the human story with its terrestrial and cosmic surroundings. It uses the notion of "powers of ten" to shift perspectives in space and time. It proceeds logarithmically, "nesting" each topic (and disciplinary perspective) within its predecessor, from astrophysics to history and back again.

**MIDEAST 279 / JUDAIC 255. Tel Aviv and Jerusalem in Israeli Culture**  
(3). (HU). *May not be repeated for credit.*

Tel Aviv and Jerusalem are perceived as two polar opposites in the cultural geography of Israel. Through the years, both cities went through massive changes-geographical, cultural and social -and their images have developed in complex ways. This course examines prose, poetry, art and film which portray the two cities from the first half of the 20th century to present day, alongside historical and theoretical studies.

**MIDEAST 280 / FTVM 250 / JUDAIC 250. Screening Jewish Cultures**

(3). (HU). (R&E). *May not be repeated for credit.*

An exploration of Jewish Diversity through films about and by Jews from how Jews fit in the black/white scheme, to propaganda, race, and antisemitism in Nazi and post-Holocaust films to Israel's diversity as an immigrant society reflecting on casting, language use, subtitling, cross-dressing, and genre choices that affect the cinematic construction of Jewishness in relationship to other social groups.

**MIDEAST 281 / JUDAIC 281 / SLAVIC 281. Jews in the Modern World: Texts, Images, Ideas**

(4). (HU). (R&E). *May not be repeated for credit.*

In this course we examine the multiple ways in which Jews in Europe, America, Israel, and the Middle East have responded to the cultural, political, economic, and social forces of modernity. By focusing on a variety of textual and visual material from the late 18th century to the present (including literary texts, fine arts, film, architecture), students have an opportunity to explore the processes by which Jewish culture has been shaped and reshaped in the face of unprecedented new freedoms and persecutions.

**MIDEAST 284 / HISTORY 244 / JUDAIC 244 / MENAS 244. The History of the Arab-Israeli Conflict**  
(4; 3 in the half-term). (SS). (R&E). *May not be repeated for credit.*

This course assesses the origins, dynamics, and the amazing, chameleon-like persistence of Arab-Jewish conflict for over a hundred years, from the late 1800s to the present. How did the rivalry begin? Why is no end in sight? And what does the conflict say about truth and morality in international relations?

**MIDEAST 285 / HISTART 285 / ISLAM  
285. Visual Culture Islam**

(4). (HU). *May not be repeated for credit.*

We survey the arts in the Islamic world from Spain to India, 7th-19th centuries. Students study a limited selection of architectural monuments and luxury arts (books, paintings, objects) in light of the art historical and socio-economic parameters of their production and consumption. The visual culture also anchors our study of the spiritual and intellectual values of Islam and the formation and development of its distinctive culture idioms.

**MIDEAST 287 / HISTORY 290 /  
JUDAIC 290. Jews and Muslims**

(3). (HU). *May not be repeated for credit.*

Despite negative portrayals of Jewish-Muslim relations in the media, Jews and Muslims have been in intimate contact since the rise of Islam. This course examines how Jews and Muslims interacted, competed, and coexisted from the Middle Ages to the present, and how the ethnic, religious, and racial categories of "Jew" and "Muslim" have been constructed.

**MIDEAST 291. Humanities Topics in  
Middle East Studies**

(3). (HU). *May be elected twice for credit.*

Intended for lower-level undergraduate students, designated by the section title and taught by a visiting or permanent faculty member. Topics may include such fields such as philosophy, religion, screen arts, literature, history, political science, etc., as they pertain to Middle East studies.

**MIDEAST 295. First Year Seminar in  
Middle East Studies**

*Enrollment restricted to first-year students, including those with sophomore standing.*

(3). (HU). *May not be repeated for credit.*

First year seminar to be offered on special topics. Courses would not be part of the permanent curriculum, but offered by visiting faculty or permanent faculty for special purposes.

**MIDEAST 308 / INTLSTD 308 / MENAS  
308. Conflict and Comics: Reframing the  
Middle East**

(3). (HU). *May not be repeated for credit.*

How do comics--both as journalistic medium and as an autobiographical genre--portray politics, war, and revolution in the Middle East? Explore famous examples (Palestine and Persepolis) alongside lesser-known print and online comics.

**MIDEAST 309. Sin, Sex, and Desire:  
Romance in the Middle East**

(3). (HU). *May not be repeated for credit.*

This class offers an introduction to romance in the Middle East through a close reading of some of its prominent examples, allowing students to develop a framework for tracing the historical development of love as personal experience and ethical practice.

**MIDEAST 310. Blood, Oil, and Water:  
Ancient and Modern Environmental  
History in the Middle East**

(3). (ID). *May not be repeated for credit.*

This class teaches students fundamental themes in environmental history in the context of the historical and contemporary Middle East. We will assess the environmental challenges of ancient empires, as well as their modern successor states, with a new theme introduced each week.

**MIDEAST 315 / ISLAM 315.  
Introduction to Arab Culture**

(4). (HU). (R&E). *May not be repeated for credit.*

This course offers a broad mosaic survey of the cultural, historical, social, religious, political and ethnic diversity in the Arab world.

**MIDEAST 317 / ISLAM 317. Turkey in the 20th century: Modernity and the Politics of Culture**

(3). (ID). *May not be repeated for credit.*

Introduction to the culture, language, and society of modern Turkey with a special emphasis on the Turkish position between Europe and the middle East, and the Turkish project of modernity.

**MIDEAST 318 / ISLAM 318 / MEMS 318 / REEES 318 / RELIGION 318. The Church of Armenia: Profile of a National Institution**

*Upper-class undergraduates or graduate students. (3). (HU). May not be repeated for credit.*

This course highlights the introduction of Christianity to Armenia and rise of the Armenian Church as an independent institution, with Armenia's political, cultural, and social history as its background. Focal topics include the following: the Christian Armenian self-image as fashioned by the Church; the Church's relations with other churches and Islam; and the religious, cultural, social, and political administrative role, whether formal or informal, the Church played in Armenian realities.

**MIDEAST 319 / HISTORY 306 / ISLAM 319. History of the Ottoman Empire: The "Classical Age", (ca. 1300-1600)**

*Not available to students who have completed AAPTIS 291 (#16) or HISTORY 303 (#10) when taught with the topic "Ten Sultans, One Empire: The Ottoman Classical Age". (Prerequisites enforced at registration.) (3). (HU). May not be repeated for credit.*

Using the reigns of the first ten Ottoman sultans as its structural/chronological basis, this course traces the history of the Ottoman Empire from its humble beginnings in the beginning of the 14th century to its grandeur under Suleyman "the Magnificent."

**MIDEAST 320 / HISTORY 307 / ISLAM 320. History of the Ottoman Empire: The "Post-Classical Age", (ca. 1600-1922)**

*Not available to students who have completed AAPTIS 291 (#17) or HISTORY 303 (#13) when taught with the topic "The Ottoman Empire in the 'Post Classical Age'". (Prerequisites enforced at registration.) (3). (HU). May not be repeated for credit.*

Commencing with an overview of the Ottoman "Classical Age" (ca. 1300-1600), this course will "trace the history of the Ottoman Empire from its grandeur under Suleyman the Magnificent" to its collapse in the first quarter of the 20th century.

**MIDEAST 321. Jihad in History**

(3). (HU). *May not be repeated for credit.*

This course examines the idea of jihad and the ways in which muslims have experienced it and thought about it throughout their history. Jihad is not only an important part of religious doctrine and belief; it has also been an element in the building of Islamic societies and states in many environments over many centuries. The course uses jihad as a key to understanding relations between Muslims and non-Muslims (peaceful and otherwise). It pays special attention to the controversies and debates that have taken place over jihad, both among Muslims and non-Muslims.

**MIDEAST 322 / RELIGION 363. The Qur'an and Its Interpretations**

*No prior knowledge of Islam is necessary,*

*although some knowledge of the Bible would be helpful. (3). (HU). May not be repeated for credit.*

This course examines the history of the Qur'anic text from its inception in seventh century Arabia to the present. Special attention is given to the world of ideas of the Qur'an and the ways in which it was understood and interpreted by Muslims living in vastly different social, political and cultural environments. The Qur'an's multifarious influences on all aspects of Muslim life (language, literature, arts, politics, jurisprudence, moral/ethical codes, rites of passage/lifecycle) will be examined.

**MIDEAST 323 / ISLAM 323. The Prophet Muhammad in Islam**

*(3). (HU). May not be repeated for credit.*

This course introduces students to the Islamic traditions about the life of the Prophet Muhammad, the basic historical and historiographical problems, the veneration of the prophet as a fundamental if non-cannonical part of Islam, and modern Muslim and western interpretation of his life and role in history.

**MIDEAST 324. Persian Literature in Translation**

*(3). May not be repeated for credit.*

This course will introduce students to what one scholar has called "the jewel in the crown of Persian culture," a literary tradition that spans a thousand years and covers a vast geographical landscape.

**MIDEAST 325. Introduction to Arab Literature in Translation**

*(3). (HU). May not be repeated for credit.*

Materials in English translation will illustrate the progression of Arabic Literary culture from the earliest recorded sources to the present. Lectures and discussion, along with audio-visual materials, will introduce

the essentials of the history of the Arabs and the cultural context expressed in their writings.

**MIDEAST 326. The Arab-Israeli Conflict in Middle Eastern Literature and Film**

*(3). (HU). May not be repeated for credit.*

This course examines how authors from various parts of the Middle East (primarily but not exclusively Israelis and Palestinians) portray the Arab-Israeli conflict in their writings, from within different cultural contexts and literary traditions, and from differing ideological and political viewpoints.

**MIDEAST 327 / ISLAM 327 / MEMS 327. Shahnameh: Iranian Myth, Epic, and History**

*(3). (HU). May not be repeated for credit.*

This course is an introduction to Iranian myth, epic, and history through a close reading of the Shahnameh (Book of Kings), the foundational text of Persian classical poetry and one of the major achievements in world literature.

**MIDEAST 328 / ISLAM 328. Peace and Nonviolence in Islamic Cultures**

*MIDEAST 200. (3). (HU). May not be repeated for credit.*

It's often assumed that Muslims today had no traditions of peace, and those assumptions in turn become the basis for misunderstanding and war against Muslims. This course questions that paradigm by exploring a spectrum of cultural ideas and practices that address conflict.

**MIDEAST 330 / ISLAM 330 / RCHUMS 330 / RELIGION 330. The Arabian Nights**

*(3). (HU). May not be repeated for credit.*

This course introduces students to the Arabian Nights in translation. Students have an opportunity to discuss the structures and the functions of narratives in society. We also focus on attitudes toward death, madness, and love. The course ends with the reception of the Nights in Euro-American contexts.

**MIDEAST 331 / FTVM 321. Iranian Cinema: Re/Presenting a Nation**

(3). (HU). (R&E). *May not be repeated for credit.*

This course provides an overview of the history of Iranian cinema, with an eye for identifying the major trends, genres, and filmmakers from the 1960s to the present day.

**MIDEAST 335 / JUDAIC 335 / RELIGION 359. History and Religion of Second Temple Judaism**

(3). (HU). *May not be repeated for credit.*

The course covers the history and religion of Ancient Judaism from the Babylonian exile (6th century BCE) to the emergence of Rabbinic Judaism (3rd century CE).

**MIDEAST 337 / ANTHRARC 384. Ancient Mesopotamia: History and Culture**

*Sophomore standing. (4; 3 in the half-term). (ID). May not be repeated for credit.*

Sumerian, Babylonian, and Assyrian civilization from the first cuneiform documents to the fall of the Neo-Babylonian empire; special attention to (1) the rise and nature of early Mesopotamian city-states; (2) Mesopotamian economics; (3) Mesopotamian law; (4) ethnic relations in Mesopotamia; (5) Mesopotamia and its neighbors - Egypt, Iran, Israel; (6) the collapse of Mesopotamian civilization.

**MIDEAST 338 / ANTHRARC 381 / HISTART 382. Introduction to Egyptian Archaeology**

(4; 3 in the half-term). (HU). *May not be repeated for credit.*

This course focuses on the material culture and disposition of archaeological sites in ancient Egypt and Nubia from c. 3200 BCE-285 ac. The logic and nature of both sacred and secular landscapes are explored, and specific sites, some well known (such as the extensive temple precinct at Karnak and the Meroitic pyramids).

**MIDEAST 339 / HISTORY 259 / JUDAIC 339 / RELIGION 358. Israel Before the Exile (587 BCE): Its History & Religion**

(4; 3 in the half-term). (HU). *May not be repeated for credit.*

This course encompasses a series of studies in the cultural and political histories of ancient Israel. Early Israelite history and religion from their beginnings to the aftermath of the 6th century CE Babylonian exile will be examined within their respective biblical and ancient Near Eastern contexts (i.e., Palestine-Israel, Mesopotamia, Egypt, Syria, Persia, and Anatolia).

**MIDEAST 340 / ASIAN 340 / HISTORY 340 / MENAS 340 / REEES 340. From Genghis Khan to the Taliban: Modern Central Asia**

(4; 3 - 4 in the half-term). (SS). (R&E). *May not be repeated for credit.*

This course provides an overview of modern Central Asian history. It focuses on the empires of the last 300 years: especially in Russian and Soviet Central Asia, but also the neighboring areas dominated by Britain and China (Afghanistan, Pakistan, Xinjiang).

**MIDEAST 341 / RCIDIV 341. Science and Technology in the Ancient Middle East**

*MIDEAST 200: Introduction to the Middle East. (3). (ID). May not be repeated for credit.*

This course explores the social and intellectual history of science and technology in the ancient Middle East, including writing, agricultural tools, weaponry, mathematics, astronomy, and medicine.

**MIDEAST 354 / CLCIV 354 / RELIGION 353. Ancient Jerusalem: Archaeology, Religion, and Culture**  
*(3). (ID). May not be repeated for credit.*

The centrality of Jerusalem in our modern society requires no elaboration. This course reconstructs the history of ancient Jerusalem in its Graeco-Roman, and Byzantine contexts. It examines archaeological remains, inscriptions, coins, and artistic depictions, and studies the multi-faceted literary tradition that preserved the story of this ancient place.

**MIDEAST 355 / CLARCH 327 / CLCIV 327 / RELIGION 326. Jews in the Roman Mediterranean: Archaeology, Religion, and Culture**  
*(3). (ID). May not be repeated for credit.*

An introductory survey course on the history of the Jews in the Roman and Byzantine worlds, from the arrival of the Romans in the East in the first century BCE through the Arab conquests in the seventh and eighth centuries CE.

**MIDEAST 356 / JUDAIC 373. Israeli Culture and Society**  
*(3). (SS). May not be repeated for credit.*

Contemporary Israeli culture from the origins of the state to the present; study of various bases of identity and tensions

within the society. The approach will be multidisciplinary and incorporate a wide variety of materials from different media.

**MIDEAST 375 / ASIAN 324 / HISTORY 325 / ISLAM 325 / MEMS 325 / RELIGION 325. The History of Islam in South Asia**  
*(4). (HU). (R&E). May not be repeated for credit.*

This course examines the history of Muslim communities and institutions in South Asia. It will consider Muslim political expansion and sovereignty, conversion, the interaction between religious communities, Islamic aesthetics, the impact of colonial rule, India's partition and the creation of Pakistan, and the contemporary concerns of South Asia's Muslims.

**MIDEAST 376 / HISTORY 394 / ISLAM 394. History of the Turkish Republic**  
*(3). (HU). May not be repeated for credit.*

Commencing with an overview of the 19th-century reform movements within the Ottoman Empire, this course traces the political, social, and economic history of Turkey from the establishment of the Turkish Republic in 1923 until today.

**MIDEAST 380 / AMCULT 320 / JUDAIC 320. The Jewish Graphic Novel**  
*(3). (HU). May not be repeated for credit.*

Are the Jews the people of the graphic book? Can the Bible be rendered as comics? Did Jewish immigrants invent American superheroes? This seminar explores the poignant and oftentimes subversive ways in which American, European, and Israeli graphic narratives reconfigure canonical Jewish texts and address pivotal events in twentieth-century Jewish history.

**MIDEAST 383 / HISTART 323 / HISTORY 350 / JUDAIC 323 / RELIGION 324. History of Jewish**

**Visual Culture: From Ancient Mosaics to Jew-Hop Videos**

(3). (HU). *May not be repeated for credit.*

This course introduces art and images from ancient Israel through contemporary Jewish American and Israeli art and popular visual culture. Can art be Jewish? What of the supposed prohibition against idolatry? How do Jewish attitudes about arts and the ways of making it change across time and space?

**MIDEAST 386 / JUDAIC 360. A Global History of the Jews of Spain**

JUDAIC 205. (3). (HU). *May not be repeated for credit.*

1492 marked the expulsion of Jews from Spain, but Iberian Jews retained a distinct identity long after leaving their peninsula. This course examines how Sephardic Jews maintained ties of commerce, language, and identity across the globe and uses the story of Spanish Jewry as case study in world history.

**MIDEAST 387 / HISTORY 397 / WGS 397. Religion and Politics in Contemporary Iran**

(3). (ID). *May not be repeated for credit.*

The Iranian Revolution of 1979 transformed Iran into a theocracy, put an end to American colonial rule and made political Islam a force to be reckoned with globally. Thirty years later, the custodians of the Islamic Republic have had to contend with a civil rights movement (the Green Movement of 2009) that demanded a government characterized by voting rights, gender equality, and freedom of assembly and of expression. This course will explore 40 years of revolutionary change in Iran through public spaces where popular social and political visions were articulated and shaped. In this course we will employ ethnographic studies of daily life in the capital city of Tehran to explore piety,

sexuality, the occult and politics in modern Iran. Using the media of cinema, blogs, painting, and photography, we will investigate both the challenges Iranians have faced in a radically changed society as well as the language of resistance with which they have experimented.

**MIDEAST 389 / ARMENIAN 389 / HISTORY 389. From Natives to Foreigners: Armenians in Turkey and the Diaspora**

(3). (SS). (R&E). *May not be repeated for credit.*

With the establishment of the Republic of Turkey in 1923, the Armenian genocide 'survivors' became citizens of an ethno-religious nation-state that once sought their annihilation. We read the history of the Republic of Turkey parallel with the Armenian experience to look at the ambiguous relationship Armenians continue to have with the Turkish state following the Lausanne Treaty of 1923, the Armenian Patriarchate of Istanbul, as well as the Armenian diaspora institutions. The readings will contrast official and critical historiographical accounts of republican Turkey and modern Armenians, as well as silenced chapters, absences, and misrepresentation of Armenians in such accounts by looking at ethnographies and social historical accounts.

**MIDEAST 390. Topics in Middle East Studies**

*At least one previous course in Near Eastern studies. (3). May be elected twice for credit. May be elected more than once in the same term.*

This course is intended for undergraduates with some experience in the field of Middle East Studies. The course will be taught by a temporary faculty member or as a testing course for permanent faculty. Topics will vary, focusing on such areas as film,



literature, history, popular culture, religion, etc.

**MIDEAST 391. Humanities Topics in Middle East Studies**

*At least one previous course in Middle East studies. Students should not elect the same topic twice. (3). (HU). May be elected twice for credit.*

This course is intended for undergraduates with some experience in the field of Middle East Studies. The course will be taught by a temporary faculty member or as a testing course for permanent faculty. Topics will vary, focusing on such areas as film, literature, history, popular culture, religion, etc.

**MIDEAST 395. Study Abroad in the Middle East**

*Consent of instructor required. (1 - 3). (EXPERIENTIAL). May be elected twice for credit.*

This course is required for any student participating in a study abroad program associated with a Department of Middle East Studies course. Students will attend meetings with the instructor leading the trip to discuss travel requirements, safety, cultural norms, and some basic language instruction when necessary. It is the goal of this course to prepare students for travel abroad and to increase their understanding of Middle Eastern cultures through experiential learning.

**MIDEAST 396. Internship in Middle East Studies**

*Consent of department required. (1). (EXPERIENTIAL). (INDEPENDENT). May be elected twice for credit.*

An independent study for students to analyze their experiences in an internship focused on topics relevant to Middle East studies. Special focus is given to how the experiences of such internships can be used

to deepen students' understanding of Middle Eastern cultures, histories, or current sociological issues.

**MIDEAST 401. Politics of Heritage: Culture and History in the Middle East**

*At least one prior course in Near Eastern studies. (3). May not be repeated for credit.*

This course explores practices of archaeology, exhibition, trade, and tourism in order to understand politics of culture and identity in the Middle East. It looks at local and international, commercial and political actors in order to understand why and how the past matters, and to whom, in the modern Middle East and in the West.

**MIDEAST 411 / REEES 411. Islamic Movements in Comparative Perspective**

*Introductory course on Islam (i.e. NEAREAST 216). (3). May not be repeated for credit.*

This course examines the rise and evolution of political movements that derive their distinct identity from Islam and appeal to its foundational ideas, values and practices.

**MIDEAST 412 / HISTORY 412 / MEMS 412. City of Empires: Byzantium, Constantinople, Istanbul**

*(3). May not be repeated for credit.*

Using a wide range of textual and visual material, from archaeological, architectural, archival evidence, to literature, arts, and cinema, this course offers new insights into the history and cultural significance of Constantinople/Istanbul, one of the most magnificent and mythical cities of the old world.

**MIDEAST 413 / HISTORY 428. The Rise of Islam**

*Junior standing or permission of instructor. Taught in English. (3). May not be repeated for credit.*

The Near East and eastern Mediterranean world in late antiquity; Muhammad and the formation of Islam; the early Islamic empire at its heights.

**MIDEAST 414. Nationalities in the Ottoman Empire: The Rise and Demise of the Western Armenians**

*(3). May not be repeated for credit.*

This course outlines the gradual coalescence of the Western Armenians into a loosely united national entity, from their beginnings in Cilicia to their destruction in the Ottoman Empire in WW I. It highlights the historical, religious, literary, linguistic, social and cultural aspects of Western Armenian realities in the past millennium.

**MIDEAST 416. The Sultan and His Subjects: Society and Culture in the Ottoman Empire**

*(3). May not be repeated for credit.*

An introduction to the Turko-Islamic elite and popular culture of the Ottoman Empire. The course approaches its subject within the broader context of Islamic culture on the one hand, and the specific geographical and social conditions of the Ottoman world on the other.

**MIDEAST 417 / HISTORY 442. The First Millennium of the Islamic Near East**

*Junior standing. (3). May not be repeated for credit.*

This is the first course in a two-course introductory sequence that covers Near Eastern history from the era of Muhammad to the present. The purpose is to introduce students to methods of studying the Near East as well as to some of the content of Near Eastern history; no previous background is expected.

**MIDEAST 418 / ISLAM 418 / REEES 418 / RUSSIAN 418. Islam in/and Russia: Russia's Encounters with Islam and Muslims**

*(3). May not be repeated for credit.*

This course covers the complex history of Russia's encounters with Muslim communities and states within and outside its geographical and political borders. The topics include: Ivan the Terrible, recent wars in Chechnya and Dagestan, and attempts of the Russian government to manage, accommodate and integrate Muslim communities into new Russia.

**MIDEAST 421 / RELIGION 465. Islamic Mysticism: Sufism in Time and Space**

*(3). May not be repeated for credit.*

Beginning with the Qur'anic origins of Islamic mysticism and its early Christian and ascetic influences, this course will explore the central themes and institutional forms of Sufism, a stream of Islam which stresses the esoteric (mystical) dimensions of religious faith. It will reflect upon the inward quest and devotions of Muslim mystics as these have been lived and expressed in art, theology, literature, and fellowship since the 8th century CE.

**MIDEAST 422 / HISTORY 427 / ISLAM 422 / RELIGION 467. The History of Shi'ism: Drama, Ritual, and Memory**

*Junior standing or permission of instructor. (3). May not be repeated for credit.*

The course will survey the history of diverse Alid movements from the assassination of Ali (d.661) to the crystallization of shi'ism into distinct political, legal and theological schools (Twelver, Isma'ili, Zaydi), and ends with the establishment of Twelver Shi'ism as an imperial religion in Safvi Iran (1501-1722). Emphasis on the debate over authority.

**MIDEAST 423 / ISLAM 423 /  
RELIGION 423. Islamic Law/Shariah**  
*NEAREAST 216. (3). May not be repeated  
for credit.*

This course will introduce students to classical Islamic legal theory and some applications of positive law in the Sunni tradition. This will include an examination of such key issues as *ijtihad* versus *taqlid*, the *madhhab* (or school of law), the legal responsum (*fatwa*), legal eclecticism, and the issue of legal change, stasis and borrowing.

**MIDEAST 424 / ISLAM 424 /  
RELIGION 461. Islamic Intellectual  
History**  
*Taught in English. (3). May not be repeated  
for credit.*

A comparative study of Islamic Sufism, theosophy, philosophy, and dialectical theology, focusing on how these diverse fields - varying in methodology and purpose - have conceived of God and the relationship between him and the created world, especially the world of human beings.

**MIDEAST 426. An Introduction to  
Modern Armenian Literature**  
*(3). May not be repeated for credit.*

This course will outline a history of Armenian Literature from the 16th to the 20th centuries, concentrating on the works of major authors who flourished within and without Armenia. Both the traditional and new literature will be analyzed, but a greater emphasis will be placed on the 19th-20th centuries, including Eastern and Western Armenian literatures, literature of the post-Genocide dispersion, and that of Soviet Armenia.

**MIDEAST 428 / ISLAM 428. Theology  
and Political Thought in Islam**  
*MIDEAST 200 (NEAREAST 200).*

*(Prerequisites enforced at registration.)  
MIDEAST 413, MIDEAST 417, or its  
equivalent. (3). May not be repeated for  
credit.*

This course is an in-depth survey of political ideology, statecraft, and political thought in the Islamic world, together with the intellectual discipline of theology. The course covers all of Islamic history, with focus on the first 4 or 5 centuries and the modern and contemporary eras.

**MIDEAST 429. Topics in Modern Arabic  
Literature in Translation**  
*(3). May be elected three times for credit.*

Topics for this course will vary. The class is conducted in English with all readings in English.

**MIDEAST 430 / ISLAM 430. History of  
Arabic Literature in English**  
*(3). May not be repeated for credit.*

An introduction to the literary history of Arabic, from the earliest to modern times. Works in English translation will exemplify this literature which is drawn from poetry and prose. Lectures and class discussion will relate these writings to the societies, historical circumstances, and cultural values to which they give expression.

**MIDEAST 432 / HISTORY 429 /  
RELIGION 496 / WGS 471.  
Gender and Sexuality in Pre-Modern  
Islam**

*Students should preferably have had one  
course in Islamic Studies. (3). May not be  
repeated for credit.*

An introduction to Muslim understanding of gender and gender relations, first through a study of those sacred texts (Qur'an and Hadith) that came to define the ideal woman and man, as well as their roles and relationships. Then, gender participation in the political and cultural life of the Safavi,

Ottoman and Mughal Courts shall be explored to view the interplay between theory and practice.

**MIDEAST 433 / ISLAM 433 / WGS 496. Gender and Representation in the Modern Middle East**

*(3). May not be repeated for credit.*

An examination of the construction of gender as pertains to the contemporary Middle East (predominately but not exclusively the Arab Middle East) as found in a wide array of literary and cultural representations (fiction, travel accounts, photographs, painting, film) produced both in the Middle East and outside of it.

**MIDEAST 436. Archaeology of Ancient Mesopotamia**

*Junior standing. (3). May not be repeated for credit.*

This course introduces students to theoretical perspectives on the material record of ancient Middle Eastern societies, from early agricultural villages in Israel, Syria, Turkey, and Iran, to the first cities and states in Mesopotamia, and the empires of Assyria, Babylonia, and Persia.

**MIDEAST 438. Exhibiting Ancient Egypt: Past Culture in the Modern Museum**

*(3). May not be repeated for credit.*

This seminar explores how ancient Egypt is displayed, interpreted and constructed in the context of museums. The course covers a historic overview of ancient Egyptian artifacts in museums, and examines issues surrounding museum display and interpretation of Egyptian material, and how contemporary understandings of ancient Egypt are shaped by museums.

**MIDEAST 441 / WGS 487. Gender and Society in Ancient Egypt**

*Some familiarity with Egypt is helpful. (3). May not be repeated for credit.*

Using ancient texts in translation, secondary readings and artifacts in the Kelsey Museum of Archaeology, students in this course will examine the definitions of gender, gender roles and relations and the impact of status, religion, sexuality and ethnicity on ancient Egyptian understandings of gender.

**MIDEAST 442 / JUDAIC 470. Reading the Rabbis**

*MELANG 202 (NESLANG 202) or HEBREW 202. (4). May not be repeated for credit. No credit granted to those who have completed or are enrolled in MIDEAST 242 (NEAREAST 242/JUDAIC 270).*

Students will study rabbinic sugyot in the original language and discuss modern scholarship and theory on rabbinic literature.

**MIDEAST 443 / RELIGION 442. Mythology and Literature of Ancient Mesopotamia**

*(3). May not be repeated for credit.*

This course will provide a broad introduction to the two and a half millennia of Sumerian and Akkadian writing including myth and literature. It will be studied from a variety of perspectives, concentrating on the historical and social contexts of writing. Genre theory, semiotics, hermeneutics and reader response will be studied in conjunction with the unique problems of ancient myths.

**MIDEAST 445. Selected Topics in Ancient Egyptian History and Culture**  
*(3). May be repeated for a maximum of 6 credits.*

This course is an in-depth seminar on the pivotal Middle Kingdom (ca. 2040-1650 BCE) in ancient Egypt which investigates

the period from a diachronic and critical historical perspective through a combination of textual and archaeological date. We will also contextualize the complex political, social and religious trends of the Middle Kingdom Egypt within the larger and interrelated systems of cultures in Africa, The Aegean and southwest Asia.

**MIDEAST 455 / JUDAIC 478 /  
RELIGION 478. Modern Jewish  
Thought**

*(3). May not be repeated for credit.*

An exploration of selected 20th-century Jewish thinkers and their responses to the crisis of modernity (and post-modernity): the breakdown of traditional Jewish culture and its system of meaning; the encounter with, and assimilation of, Western culture; the impact of the traumas of World War I and the Holocaust; and the contemporary quest for intimacy and tikkun, or "healing."

**MIDEAST 456 / JUDAIC 468 /  
RELIGION 469. Jewish Mysticism**

*(3). May not be repeated for credit.*

A critical study of the historical development of Jewish mysticism, its symbolic universe and its social ramifications. While the course will survey mystical traditions from the early rabbinic period through the modern, the focus will be on the variegated medieval stream known as kabbalah.

**MIDEAST 476 / JUDAIC 467 /  
RELIGION 471. Seminar: Topics in the  
Study of Judaism**

*(3). May be repeated for a maximum of 9 credits. May be elected more than once in the same term.*

Topics within history of modern Judaism such as reform and tradition in modern Judaism, theological responses to the

Holocaust, modern Jewish philosophy. Topics will change.

**MIDEAST 480 / ANTHRCUL 430 /  
HISTORY 430. History, Memory, and  
Silence in the Middle East**

*(3). May not be repeated for credit.*

This senior/graduate seminar is an exploration in the anthropological approaches to the study of history and memory. It introduces and problematizes the concept of 'silence' in the ethnographic practices of history such as the silences of the empty archives, the ruptured oral historical accounts, and the fragments left behind by past events. Taking the demise of the Ottoman Empire as a starting point, the readings focus on minorities, refugees, and genocide survivors to probe into the history, historiography, and historicity that trace the lived experiences, mundane lives, and emotions of such marginal populations, underrepresented groups, undocumented individuals, and in-archived events. We take the creation of ethno-religious nation-states in the Middle East and the Balkans to navigate the following questions: How do we trace and represent the past in the aftermath of violence and destruction? How do historians and anthropologists conduct their research when the evidence is destroyed? Ultimately, what constitutes an 'evidence' for history, and how could we entertain material and immaterial remnants of the past to rethink our understanding of the 'archive'? Overall, the seminar invites participants to think of the role of historians and anthropologists as storytellers who are perpetually struggling with the politics of representation of the past. Second, we read ethnographies as genre of writing history with an eye on texts, research methods, and theories employed. The readings are anchored on the ethnography of Middle East and North Africa, with a comparative reference to the post-Ottoman Balkans. We

take the Armenian genocide and the politics of its historiography, commemoration, and denial as a case study.

**MIDEAST 483 / MENAS 493.**

**Comparative Perspectives of the Middle East and North Africa**

*(1). May be repeated for a maximum of 12 credits. May be elected more than once in the same term. Rackham credit requires additional work.*

This 1-credit course, jointly offered by CMENAS and the Near Eastern Studies, brings together a diverse cohort of specialists covering 5000 years of history, languages, and culture, and a geographical area stretching from the Atlantic to Central Asia. Through a series of lectures by UM faculty and outside speakers, addressing a particular theme chosen for that semester, students consider multiple perspectives of comparative research across the ages and cultures.

**MIDEAST 487 / HISTORY 443 / ISLAM 443. Modern Middle East History**

*(4). May not be repeated for credit.*

Impact of the West on the Islamic Near East in the nineteenth and twentieth centuries. Emphasis is on the modernization of the Ottoman Empire and Republican Turkey and Egypt, the rise of the Arab and Zionist nationalisms and the subsequent Arab-Israeli dispute, and inter-Arab and international rivalries to the present.

**MIDEAST 490. Topics in Middle East Studies**

*(3). May be elected twice for credit. May be elected more than once in the same term.*

This course is for upper-level undergraduates and graduate students in the field of Middle East Studies. The course will be taught by a temporary faculty member or as a testing course for permanent faculty. Topics will vary,

focusing on such areas as film, literature, history, popular culture, religion, etc.

**MIDEAST 492. Mini-course in Middle Eastern Studies**

*At least one prior course in Near Eastern studies and/or related to the topic of the course. (1 - 3). May be elected twice for credit.*

Special topics in Near Eastern studies offered in a mini-course format. Topics will vary but typically center around such disciplines as literature, linguistics, history, religion, visual culture, or cultural studies.

**MIDEAST 498. Senior Honors Thesis**

*Consent of department required. (1 - 4). (INDEPENDENT). May be elected twice for credit.*

This independent study aids Middle East Studies majors in completing original research through an honors thesis.

**MIDEAST 499. Independent Study in Middle East Studies**

*Consent of department required. (1 - 4). (INDEPENDENT). May be elected four times for credit. May be elected more than once in the same term.*

An independent study course in the area of Middle East Studies. The intended language of instruction is English. Approval from the department is required.

**MIDEAST 517. Classical Persian Texts**

*PERSIAN 202. (3). May be elected four times for credit.*

A survey of classical Persian prose and poetry. A variety of authors and textual histories are explored.

**MIDEAST 518. Persianate History Through Political and Cultural Texts**

*PERSIAN 202 or advanced reading knowledge of Persian. (3). May be repeated for a maximum of 9 credits.*

Persian history is explored through literature, looking at poetry and prose that spans several centuries and political movements.

**MIDEAST 521. Modern Arabic Fiction**  
*ARABIC 402 or reading knowledge of Arabic. (3). May not be repeated for credit.*

Selected examples of contemporary imaginative prose writing, such as short and long fiction and drama, will be studied. Readings will be in Arabic and class discussions will be in English.

**MIDEAST 522. Modern Arabic Nonfiction**  
*ARABIC 401 or reading knowledge of Arabic. (3). May not be repeated for credit.*

This course introduces the work of major Arab writers of the 19th and 20th centuries. Variable in focus according to the interests of the class, readings are selected for translation, analysis, and commentary. The course explores the historical progression in the development of political and societal theories in modern times in the Arab world.

**MIDEAST 590. Topics in Middle East Studies**  
*Upper-level undergraduates or graduate students with previous coursework in Middle East Studies. (3). May be elected three times for credit. May be elected more than once in the same term.*

This course is for upper-level undergraduates and graduate students in the field of Middle East Studies taught by a temporary faculty or as a testing course for permanent faculty. Topics will vary.

**MIDEAST 601 / HISTORY 664. Studies in the Modern Middle East**  
*(3). May not be repeated for credit.*

Topics course; topics will vary depending on instructor.

## **Military Science (MILSCI)**

**MILSCI 101. Introduction to Officership**  
*(1). May not be repeated for credit. Not for credit toward LSA degree. F. (non-LSA credit).*

**MILSCI 102. Introduction to Leadership**  
*(1). May not be repeated for credit. Not for credit toward LSA degree. (non-LSA credit).*

**MILSCI 201 / UC 203. Innovative Tactical Leadership**  
*(1). May not be repeated for credit.*

This course considers military government leadership with a focus on leadership development and interpersonal and group dynamics. It explores the dimensions of creative and innovative tactical leadership strategies and styles through lecture, historical case studies, and interactive student exercises.

**MILSCI 202 / UC 204. Leadership in Changing Environments**  
*Permission of professor. (1). May not be repeated for credit.*

This course examines the challenges of leading in complex contemporary operational environments. Dimensions of the cross-cultural challenges of leadership in a constantly changing world are highlighted and applied to practical Army leadership tasks and situations.

**MILSCI 301 / UC 301. Leading Small Organizations I**  
*Permission of Army OEP chair. (2). May not be repeated for credit.*

This course is a continuation to the study of military organizational leadership focusing on leadership development and interpersonal and group dynamics. Lecture-discussion course (with lab) provides insights into methods of visualizing, planning and leading organizations to achieve set goals.

**MILSCI 302 / UC 302. Leading Small Organizations II**

*MILSCI 301/UC 301. (Prerequisites enforced at registration.) Permission of program chairman. (2). May not be repeated for credit.*

This course is a continuation of the study of organizational leadership focusing on organizational behavior as well as interpersonal and small group relationships. This lecture-discussion course (with lab) provides the student with an insight into formal methods of visualizing, planning, and leading organizations to achieve set goals.

**MILSCI 401 / UC 401. Leadership and Management**

*MILSCI 302 or UC 302. (Prerequisites enforced at registration.) Permission of chair of Army OEP. (2). May not be repeated for credit.*

This course studies military leadership, with a focus on development and interpersonal and group dynamics. Lecture-discussion course (with lab) provides insights into methods of visualizing, planning, and leading to achieve set goals.

**MILSCI 402 / UC 402. Military Professionalism and Professional Ethics**

*MILSCI 401/UC 401. (Prerequisites enforced at registration.) (2). May not be repeated for credit.*

This is an interdisciplinary course that integrates history, political science, ethics

and morality, law, leadership and management. It prepares students to ethically lead and manage complex organizations by focusing on the moral, ethical, legal, and regulatory aspects of being a commissioned officer in the U.S. Army.

**MILSCI 499. Independent Study-Directed Readings**

*Consent of instructor required. (1 - 4). (INDEPENDENT). May be repeated for a maximum of 8 credits. Not for credit toward LSA degree. (non-LSA credit).*

Directed reading or research in consultation with a member of the Army Officer Education faculty.

## **Museums (MUSEUMS)**

**MUSEUMS 301. Museums and Society**

*Sophomore standing or above. (Prerequisites enforced at registration.) (3). (HU). May not be repeated for credit.*

This course serves as a gateway to the field of Museum Studies. It establishes an understanding of museums derived from a historical and theoretical examination of objects and collections, the institution of the museum, and the role of museums in society.

**MUSEUMS 309. Exhibition Seminar**

*(3). (HU). May be elected five times for credit. May be elected more than once in the same term.*

The course is designed to be linked to a specific museum exhibition in which a faculty member is involved or to the creation of a virtual exhibition, or it may focus on some aspect of exhibition practice.



The students will learn about the processes involved in planning and mounting an exhibition. Topics will vary in relation to the specific exhibition activities and interests of the faculty teaching the course in a given semester.

**MUSEUMS 401. Contemporary Issues in Museums**

*MUSEUMS 301 or MSP 601. (Prerequisites enforced at registration.) (3). May not be repeated for credit. Rackham credit requires additional work.*

This course complements MUSEUMS 301 by examining major areas of concern in the contemporary museum world. Thematic emphasis varies depending on the instructor and current news, but always relates to objects and collections, museums as institutions, and the museum in society.

**MUSEUMS 407 / GERMAN 407.**

**Museums and Literature**

*Consent of instructor required. MUSEUMS 301 or German major/minor. (3). May not be repeated for credit. Rackham credit requires additional work.*

This course develops historical and theoretical perspectives for understanding the intersections of European literature and museum culture. By probing how texts and exhibitions use objects to construct narratives, the course works to understand what museums and literature have in common and how they differ. This course can be taken for graduate credit.

**MUSEUMS 408 / AMCULT 408.**

**Museums in the Digital Age: Technology, Media, Modernity**

*Intended for advanced undergraduates pursuing Museum Studies and Digital Studies minors and related fields (art, architecture, design). Graduate students pursuing a certificate in the Museum Studies Program, graduate students in the School of Information. (3). May not be*

*repeated for credit. Rackham credit requires additional work.*

This course develops perspectives for understanding and thinking about the potential impact of media and technology on museums. Historical intersections of museums, media and technology will provide points of reference for elucidating the particular uses and challenges offered by new media, digitalization, the Internet and mobile computing.

**MUSEUMS 409. Practicum in Museums**

*Declared academic minor in Museum*

*Studies. (Prerequisites enforced at registration.) (3). (EXPERIENTIAL). May be repeated for a maximum of 6 credits. May be elected more than once in the same term. Offered mandatory credit/no credit.*

The experiential emphasis of this class allows students to balance a historical/theoretical knowledge of the museum with firsthand understanding of the ongoing work of museums. It emphasizes reflective practice as a tool to facilitate learning and create a bridge between theory and practice.

**MUSEUMS 498. Special Topics in Museum Studies**

*MUSEUMS 301 or MSP 601. (1 - 3). May be repeated for a maximum of 6 credits. May be elected more than once in the same term. Rackham credit requires additional work.*

Special Topics in Museum Studies allows students to benefit from the varied research interests of faculty from across the university. It provides an in-depth examination of museum-related topics that fall outside the purview of other courses.

**MUSEUMS 499. Independent Study in Museum Studies**

*Consent of department required. MUSEUMS 301 or MSP 601. (1 - 4).*

*(INDEPENDENT). May be repeated for a maximum of 4 credits. May be elected more than once in the same term. Offered mandatory credit/no credit.*

Independent Study in Museum Studies allows students to pursue, under faculty direction, an individualized course of investigation into topics not covered in detail in other courses.

## Music History and Musicology (MUSICOL)

### Music History / Musicology

Musicology is another term for music history and involves research into music as a cultural phenomenon. At its most basic it is the story of the music across time, but its value is also as a wellspring of ideas that enrich the experience of music. These ideas can become the raw material of further creative work by composers and musicians.

A number of music history and theory courses are available to begin exploring the world of music from a research perspective. MUSICOL 121 and THEORY 137 are places to start. MUSICOL 122 offers an introduction to World Music; MUSICOL 123 focuses on popular music.

Courses in Music History/Musicology are listed in the *Schedule of Classes* under the School of Music, Theatre & Dance. All Music History/Musicology courses count as LSA credit.

### **MUSICOL 121. Introduction to the Art of Music**

*NON-MUS ONLY. (4). (HU). May not be repeated for credit. No prior musical experience is required. W.*

Introduces western music for the listener in overview from the baroque era to the present.

### **MUSICOL 122. Intro World Music**

*NON-MUS ONLY. (3). (HU). May not be repeated for credit.*

Introduces the musical cultures of a few selected areas of the world (such as the Caribbeans, West Africa, India, China, and Japan).

### **MUSICOL 123. Introduction to Popular Music**

*(4). (HU). May not be repeated for credit. F.*

This course offers a broad survey of 20th-century popular music, exploring a diverse set of genres and musical artists from the Tin Pan Alley era to the present. The course places the musical conventions, key performers, and aesthetic shifts that mark the history of popular music in social, cultural, technological, and musical context. Designed to develop listening and analytical skills, the course aims to help students to understand, describe, interpret, and write about popular music.

### **MUSICOL 130. Opera!**

*(3). (HU). May be repeated for credit.*

This is an introductory-level course in music and theatre, open to everyone; opera fans as well as those for whom opera is a completely new experience. Although our primary focus is the music of opera, the course does not require musical literacy or the ability to read music. Students are taught to look at a vocal score of opera without fear, but not training in music theory is presumed.

**MUSICOL 139. Intro to Mus**

*S M STU ONLY. (2). (HU). May not be repeated for credit.*

**MUSICOL 140. History of Music**

*S M STU ONLY. (2). (HU). May not be repeated for credit.*

**MUSICOL 239. History of Music**

*S M STU ONLY. (2). (HU). May not be repeated for credit.*

**MUSICOL 240. History of Music**

*S M STU ONLY. (2). (HU). May not be repeated for credit.*

**MUSICOL 305. Special Course**

*NON-MUS ONLY. (3). May not be repeated for credit.*

**MUSICOL 343. Music and Islam**

*(3). (ID). May not be repeated for credit.*

This course focuses on the unity and diversity of musical customs from the Muslim cultures of the Middle East, Central Asia, north India and Indonesia. We will investigate musical systems in terms of instruments, repertoire, modal and rhythmic structures and the effect of religious constraints, cultural policy and social history on musical life.

**MUSICOL 345. History of Music**

*NON-MUS ONLY. (3). (HU). May not be repeated for credit.*

**MUSICOL 346. History of Music**

*NON-MUS ONLY. (3). (HU). May not be repeated for credit.*

**MUSICOL 377. Music in Medieval Culture**

*May not be repeated for credit.*

This course for non-SMTD music students examines how music was understood, performed, and heard in the Latin West

from the late Roman Empire through the fourteenth century. It explores music in concept and practice in five cultural venues: monastery, castle, cathedral, urban square, and palace.

**MUSICOL 405. Special Course**

*Undergraduates only. (1 - 3; 1 - 2 in the half-term). May be repeated for credit. Graduate students elect MUSICOL 505.*

**MUSICOL 406. Special Course**

*(2 - 4; 1 - 2 in the half-term). May be repeated for credit. Graduate students elect MUSICOL 506.*

**MUSICOL 407. Special Course**

*UG ONLY. (1 - 3; 1 - 2 in the half-term). May be repeated for credit. Graduate students elect MUSICOL 507.*

**MUSICOL 408. Special Course**

*UG ONLY. (1 - 3; 1 - 2 in the half-term). May be repeated for credit.*

**MUSICOL 411. Hist of Symphony**

*Undergraduates only. (3). May not be repeated for credit.*

**MUSICOL 413. Topics in the Early History of Opera**

*Undergraduates only. (3; 2 in the half-term). May not be repeated for credit. Graduate students elect MUSICOL 513.*

This course, designed for advanced undergraduates and graduate students, is devoted to the study of opera in its first two centuries, from its beginnings to nearly the end of the 18th century. Opera will be studied critically as music, theater, spectacle, performance medium, and cultural expression. Special aspects of the course include a consideration of operatic eroticism, a look at opera's arrival in the Americas, and a focus on the staging practices of early operas.

**MUSICOL 414. 19-20th Cent Opera**

*UG ONLY. (3). May not be repeated for credit.*

**MUSICOL 417. History of Jazz**

*(3). May not be repeated for credit.*

**MUSICOL 420. Topics in Baroque Music**

*UG ONLY. (3; 2 in the half-term). May not be repeated for credit. Graduate students elect MUSICOL 520.*

This course, designed for advanced undergraduates and graduate students, is devoted to the study of European (and some colonial Latin American) music from the seventeenth and eighteenth centuries. Music is to be studied critically, as music and as culture. Assignments will be primarily listening assignments, supplemented by score study, readings from materials on reserve, and some in-class performances.

**MUSICOL 421. Mus Classic Era**

*Undergraduates only. (3; 2 in the half-term). May not be repeated for credit. Graduate students elect MUSICOL 521.*

**MUSICOL 423. 20th C Music**

*240/EQ. (3; 2 in the half-term). May not be repeated for credit. Graduate students elect MUSICOL 523.*

**MUSICOL 424. The Art Song**

*Undergraduates only. (3). May not be repeated for credit. Graduate students elect MUSICOL 524.*

**MUSICOL 450. Music in U S**

*UG ONLY. (3). May not be repeated for credit. Graduate students elect MUSICOL 550.*

**MUSICOL 458. Mus in Culture**

*UG ONLY. (3). May not be repeated for credit. Graduate students elect MUSICOL 558.*

**MUSICOL 465. Music of Africa**

*UG ONLY. (3). May not be repeated for credit.*

**MUSICOL 467. Music of the Middle East, India, and Southeast Asia**

*(3). May not be repeated for credit. Graduate students elect MUSICOL 567.*

**MUSICOL 477. Medieval Music**

*UG ONLY. (3). May not be repeated for credit.*

**MUSICOL 478. Renaissance Music**

*Undergraduates only. (3). May not be repeated for credit. Graduate students elect MUSICOL 578.*

**MUSICOL 481. Special Projects**

*Consent of instructor required. UG W P.I. (1 - 4). (INDEPENDENT). May not be repeated for credit.*

**MUSICOL 509. Teaching an Introduction to Music**

*(3). May not be repeated for credit. MUSICOL 509 does not fulfill the doctoral course requirement in lieu of the Musicology Prelim Examination.*

## **Museum Methods (MUSMETH)**

The College of LSA offers through the facilities of the Museum of Natural History laboratory/discussion/lecture courses for students interested in natural science museum exhibits. Museum methods courses are open to undergraduate and graduate students. These courses focus mainly on the principles, methods, and techniques used by professional exhibit designers. Some basic concepts in educational design and theory, as related to museums, are also covered.

### **MUSMETH 405. Special Problems in Museum Methods**

*Permission of instructor; MUSMETH 406 is desired. (2 - 4). May be elected twice for credit. F.*

Theory and practice in the reproduction of natural objects; the design of natural history exhibits; and the preparation of dioramas. Special emphasis is given to the problems and interests of those teaching science or nature interpretation. Students desiring instruction and guidance in special fields of museum methods may also elect this course.

### **MUSMETH 499. Independent Research**

*Permission of instructor. (1 - 4). (INDEPENDENT). May be elected three times for credit.*

Independent research in the field of natural history museum studies with a designated exhibit preparator or educator.

## **Musical Theatre (MUSTHTRE)**

### **MUSTHTRE 133. Intro Mus Thtre I**

*FRSH M T MAJ. (2). May not be repeated for credit.*

### **MUSTHTRE 134. Intro Mus Thtre I I**

*FRSH M T MAJ. (2). May not be repeated for credit.*

### **MUSTHTRE 441. Hist Musical Theatr**

*SEE BULLETIN. (3). May not be repeated for credit.*

### **MUSTHTRE 442. Hist Musical Theatr**

*Consent of instructor required. SEE BULLETIN. (3). May not be repeated for credit.*

## **Native American Studies (NATIVEAM)**

### **NATIVEAM 204. Themes in Native American Studies**

*(3 - 4; 3 in the half-term). (HU). May be elected twice for credit. May be elected more than once in the same term.*

This course is intended for first year students, sophomores and juniors as specific illustrations of the issues raised and the approaches used by American Studies scholars. It is an interdisciplinary approach to a social, cultural, or literary theme in Native American Studies.

### **NATIVEAM 217 / AMCULT 217.**

#### **Introduction to Native American Studies**

*(4; 3 in the half-term). (HU). May not be repeated for credit.*

This course will give students an overview of many aspects of Native-American culture, including Pre-Columbian lifestyles and gender roles, religion, literature, Native-American identity, attempts and resistance to forced assimilation, and struggles for sovereignty. Themes of colonialism and its impact on Native Americans are featured throughout. The course emphasizes the diversity of Native-American communities, and seeks to broaden students' understanding of Native Americans beyond the image of Plains Indians on horseback. As the course name implies, the topics will be covered in a way that emphasizes breadth, rather than depth, whetting students' appetite for the advanced courses in these areas offered through the Program in American Culture.

### **NATIVEAM 222 / AMCULT 222.**

#### **Elementary Ojibwe I**

*(3; 2 in the half-term). May not be repeated for credit.*

The course will serve as an introduction to Anishinaabe language and culture. This course is for students who have no previous knowledge of the tribe as well as tribal members interested in learning more about their culture and language. Because Ojibwe is an endangered language, it is of utmost importance that we make sure the language is learned and used. This is a beautiful language with much to teach about living in this place. It deserves to be revitalized for future generations.

**NATIVEAM 223 / AMCULT 223.  
Elementary Ojibwe II**

*NATIVEAM 222 or AMCULT 222; with a minimum grade of C- or better.  
(Prerequisites enforced at registration.) (3;  
2 in the half-term). May not be repeated for credit.*

**NATIVEAM 232 / AMCULT 232 /  
ENGLISH 282. Native American  
Literature**

*(4; 3 in the half-term). (HU). (R&E). May not be repeated for credit.*

This course surveys the history of Native American writing and oratory in the English language from the late eighteenth century to the present. Texts are situated to their historical, cultural, and political contexts, so this course also serves as a basic introduction to American Indian history, policy and law.

**NATIVEAM 301. Topics in Native  
American Studies**

*(1 - 4). May be elected twice for credit. May be elected more than once in the same term.*

This course provides undergraduates the opportunity to explore a specific topic in ethnic life in depth using an interdisciplinary approach.

**NATIVEAM 311. Native American  
Studies and the Humanities**

*(1 - 4). (HU). May be elected twice for credit. May be elected more than once in the same term.*

This course serves as a 300-level humanities course in Native American Studies the content of which varies from term to term.

**NATIVEAM 322 / AMCULT 322.  
Intermediate Ojibwe I**

*NATIVEAM 223 or AMCULT 223; with a minimum grade of C- or better.  
(Prerequisites enforced at registration.) (3;  
2 in the half-term). May not be repeated for credit.*

The course will serve as further introduction to Anishinaabe language and culture. Because Ojibwe is an endangered language, it is of utmost importance that the language is learned and used. This is a beautiful language with much to teach about living in this place. It deserves to be revitalized for future generations. After completing AMCULT 322 students should be able to use Ojibwe to: -- Create and respond to simple and compound statements and questions. Understand 500 - 1000 words. -- Understand some idiomatic phrases. -- Express detailed descriptions of events. -- Describe actions, people, places and things using complete sentences. -- Be able to write using standardized orthography. -- Understand the major contemporary cultural and political issues of the tribes of the Great Lakes.

**NATIVEAM 323 / AMCULT 323.  
Intermediate Ojibwe II**

*NATIVEAM 322 or AMCULT 322; with a minimum grade of C- or better.  
(Prerequisites enforced at registration.) (3;  
2 in the half-term). (Lang Req). May not be repeated for credit.*

**NATIVEAM 328 / AMCULT 328 / ENGLISH 382. Studies in Native American Literature**

(3). (HU). May not be repeated for credit.

This course considers a range of topics in the study of native American literature. It raises questions concerning the canon of texts studied, the cultural construction of ethnicity in America, and the ways in which these texts challenge and expand our understanding of American literature.

**NATIVEAM 333 / AMCULT 333. Green Indigeneity**

Not available to students who have completed AMCULT 311 (Topic #11) or ENGLISH 317 (Topic #33) when taught with the topic "Green Indigeneity". (Prerequisites enforced at registration.) (3 - 4). (HU). May not be repeated for credit.

This course examines environmental issues as they engage, relate to, and contradict with indigenous belongings to land and place in the Pacific Islands and beyond. We will examine the histories of colonialism and imperialism that set the stage for contemporary formations militarization, tourism, national parks, and genetically modified organisms, issues that engage both questions of sustainability and indigenous political sovereignty.

**NATIVEAM 367 / AMCULT 367 / HISTORY 367. American Indian History**  
(4; 3 in the half-term). (SS). (R&E). May not be repeated for credit.

This course will survey the social, cultural and political history of American Indians. The course explores the dynamics of Native American history from conquest to the present mostly within the boundaries of the United States.

**NATIVEAM 373 / AMCULT 373 / HISTORY 373. History of the U.S. West**

(4; 3 in the half-term). (HU). May not be repeated for credit.

This course examines both the "place" and the "process" of the history of the U.S. West, a shifting region of the Native North America that was the object first of Spanish, French, and English imperial designs, then of U.S. expansionism, and finally a region with peculiarities to the federal government, distinctive patterns of race relations, and a unique place in American cultural memory.

**NATIVEAM 388. Field Study**

Consent of instructor required. Sophomore standing. (1 - 4). (EXPERIENTIAL). (INDEPENDENT). May be repeated for a maximum of 8 credits. Offered mandatory credit/no credit.

A field study is available to undergraduates who are interested in exploring new areas in the field of Native American Studies beyond the Michigan campus. These include internship opportunities. Each student makes individual arrangements with a faculty member in the student's area of interest.

**NATIVEAM 389. Reading Course in Native American Studies**

Consent of instructor required. (1 - 4). (INDEPENDENT). May not be repeated for credit. No more than 6 credits of directed readings/internships may be counted toward the American Culture major.

An independent study course available to undergraduates who are interested in designing a reading list for the purpose of exploring new areas in the field of Native American Studies. Each student makes individual arrangements with a faculty member in the student's area of interest.

**NATIVEAM 461 / AMCULT 461 / ANTHRCUL 461 / LING 461. Language, Culture, and Society in Native North**

## **America**

(3). *May not be repeated for credit.*

This course will explore how Native North American languages are used in relation to the historical circumstances, cultural practices and social settings of their speakers. Of particular concern is the interrelationship between linguistic practice and ideologies that can either promote or discourage the use (and maintenance) of these languages.

### **NATIVEAM 498. Capstone Seminar in Native American Studies**

(3 - 4; 3 in the half-term). *May be elected twice for credit. May be elected more than once in the same term.*

## **Naval Science (NAVSCI)**

### **NAVSCI 101. Introduction to Naval Science**

(2). *May not be repeated for credit. Not for credit toward LSA degree. F. (non-LSA credit).*

An introductory look at the organizational structure of the naval service. Attention is concentrated on leadership and management principles as they apply to the naval service and the shipboard organization. Additional subjects to be covered are military justice, and navy policies and procedures.

### **NAVSCI 102 / UC 101. Seapower and Maritime Affairs**

(2). *May not be repeated for credit. W.*

This course focuses on the historical role of sea power, emphasizing the U.S. Navy. Topics include: development of naval power and applications as an instrument of foreign policy; historical relationship of navies with their respective domestic,

political, and economic environments; and the rise of the U.S. as a maritime power.

### **NAVSCI 201 / NAVARCH 102.**

#### **Introduction to Ship Systems**

(3). (BS). *May not be repeated for credit. F. (non-LSA). (non-LSA credit).*

Types, structures and purposes of ships. Ship compartmentation, propulsion systems, auxiliary power systems, interior communications, and ship control. Elements of ship design to achieve safe operations, and ship stability characteristics.

### **NAVSCI 202 / EECS 250. Electronic Sensing Systems**

*Prior or concurrent enrollment in PHYSICS 240 (or 260) or EECS 230. (3). (BS). May not be repeated for credit. W. (non-LSA). (non-LSA credit).*

Introduction to properties and behavior of electromagnetic energy as it pertains to naval applications of communication, radar, and electro-optics. Additional topics include sound navigation and ranging (SONAR), tracking and guidance systems, and computer-controlled systems.

### **NAVSCI 203 / UC 205. Leadership and Management**

*NAVSCI 101,102 OR PI. (3). May not be repeated for credit. F.*

This course is specifically designed to teach introductory-level leadership and management concepts and applications to sophomore-level university students. The course starts with a basic overview of leadership and management and then moves into basic skills including professional reading, writing, briefings, problem solving, team building, situational leadership, morality, ethics, and communications. After the basic skills are covered, the curriculum explores leader-subordinate and peer relationships, while taking an in-depth look at professional and unprofessional



relationships. The course emphasizes ethics in leadership and management and explores subjects in power and influence, counseling, supervision, accountability, responsibility, and core values.

**NAVSCI 301 / ASTRO 261. Navigation**  
(3). (BS). May not be repeated for credit. W.

The purpose of this course is to educate students in all aspects of marine navigation, from getting a vessel underway from port through open ocean navigation using both celestial and electronic means. The content of the course is divided into three major areas. The first section focuses on piloting, emphasizing the safe navigation of vessels in coastal waters. This section provides an introduction to navigational instruments and aids to navigation. The second section concerns celestial navigation, the ability to determine position through observation of celestial bodies. Students learn how to determine position based on the use of the sextant and various almanacs and mathematical tables. The third section of the course considers electronic navigation.

**NAVSCI 302. Naval Operations**  
*NAVSCI 301. (3). May not be repeated for credit. Not for credit toward LSA degree. F. (non-LSA credit).*

A study of the international and inland rules of the nautical road, relative motion vector analysis, relative motion problems at sea, formation tactics, and ship employment. Also included is an introduction to naval operations and operations analysis, ship behavior and characteristics in maneuvering, applied aspects of shiphandling, seamanship, and afloat communications.

**NAVSCI 310 / UC 310. Fundamentals of Warfare**  
*Consent of instructor required. (3). May not be repeated for credit.*

Analysis and application of fundamental maneuver warfare concepts that are critical to the success of the contemporary war-fighter. Students will study fire and maneuver and associated concepts at the individual and small unit level.

**NAVSCI 402 / UC 403. Leadership and Ethics**

*NAVSCI 203. Non-ROTC students need permission of instructor. (2). May not be repeated for credit. W.*

This course is designed to prepare future leaders to make sound, timely, and reliable decisions in any environment, including combat, by use of dialectic reasoning and through exploration and application of a diverse range of leadership and ethical tools and frameworks. Students will study western ethical frameworks and real-life case studies as they explore how best to navigate ethical dilemmas. The course's aim is for students to use dialectic reasoning and effective written and aural communications to convincingly ascertain and articulate the truest path forward for difficult challenges. Students will work to determine what relationship exists between successful leadership and ethics (and leader's adherence to high standards of character and integrity) as they develop their own leadership philosophy. NS 402 is the capstone course for the NROTC academic curriculum but is open to all students.

**NAVSCI 410 / UC 410. Evolution of Warfare**

*Consent of instructor required. Completion of Naval Science 310 The Fundamentals of Maneuver Warfare. (3). May not be repeated for credit.*

Introduction to development of military thought, theory, and technology over time. Utilizes historical case studies to discern patterns and principles for professional

understanding of war-fighting doctrine. Educates student in characteristics, requirements, and problems of modern and amphibious warfare. Uses historical lessons to make practical judgments about present and future. Challenging reading load; writing regularly and extensively to demonstrate analysis, synthesis, and original thought.

## **Nuclear Engineering and Radiological Sciences (NERS)**

### **NERS 572 / APPPHYS 672. Plasma and Controlled Fusion II**

*NERS 571. (3). (BS). May not be repeated for credit.*

## **Nursing (NURS)**

### **NURS 220 / WGS 220. Perspectives in Women's Health**

*(3). (SS). (R&E). May not be repeated for credit.*

A feminist perspective on concepts and issues in women's individual and aggregate health. Course will include definitions of women's health, women's health concerns, and impact of multiple factors on health.

## **Organizational Studies (ORGSTUDY)**

### **ORGSTUDY 201. Leadership and Collaboration**

*(4). (SS). May not be repeated for credit. May not be counted toward a concentration in Organizational Studies.*

This project-based class uses organizational sociology, psychology, economics, and political science to ask what good leadership is and how people can be effective leaders when they lack formal authority. Practical exercises, academic readings, and leader profiles ground this exploration of collaborative leadership, a process with deep roots in Michigan organizational research.

### **ORGSTUDY 204. Nonprofits**

*(3). May not be repeated for credit. No credit granted to those who have completed or are enrolled in ORGSTUDY 420.*

This course is an introduction to the nonprofit sector. It focuses primarily on the history and structure of the nonprofit sector in the United States; contemporary debates concerning the function and impact of the nonprofit sector; and key differences between the U.S. nonprofit sector and those in other countries.

### **ORGSTUDY 205. Psychology of Inequality: Causes of Inequality and Potential Solutions**

*One of: PSYCH 111 or 112 or 114 or 115 or 116. (3). (SS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in PSYCH 297 - Promoting Equity and Inclusion in the University and the Workplace.*

This course examines psychological theories about why intergroup prejudice, discrimination, and inequality are so ubiquitous. We also consider possible paths forward to greater equality and inclusion (in organizations and in society more broadly).

### **ORGSTUDY 206. Technological Innovation**

*Enrollment is not allowed for students who*

*have previously taken ORGSTUDY 495 Special Topics in Organizational Studies, Topic #27: Technological Innovations, or ORGSTUDY 450: Technological Innovation. (Prerequisites enforced at registration.) (3). (SS). May not be repeated for credit.*

This course covers the nature of technological innovation and variation in the characteristics that make some firms, organizations, and regions more innovative than others.

**ORGSTUDY 208 / ENVIRON 208.**  
**Business and the Natural Environment**  
*(3). (SS). May not be repeated for credit.*

This course is an introduction to business and the natural environment. We will start with an overview of the triple bottom line framework, in which corporations take into account social and environmental performance in addition to financial performance. Then we will focus on contemporary business activities that address the natural environment. We will discuss the role of the natural environment on business management and strategy, operations, supply chain, product innovation, and marketing.

**ORGSTUDY 295. Social Science Topics in Organizational Studies**  
*(3 - 4). (SS). May be elected three times for credit. May be elected more than once in the same term.*

This course provides the opportunity for lower level course offerings on special topics to be taught by Organizational Studies and affiliated faculty in a lecture or seminar format. While topics will vary, the courses taught will be thematic in nature and focus an interdisciplinary approach to studying organizations.

**ORGSTUDY 299. Undergraduate Internship**

*Consent of department required. Declared Organizational Studies concentrators. (1). (EXPERIENTIAL). May be repeated for a maximum of 2 credits. May not be used to satisfy requirements for the organizational studies concentration. Internship credit may not be used to satisfy electives for the concentration. Offered mandatory credit/no credit.*

This course allows students to earn one credit for at least 8 weeks of a full-time internship, intended to enrich students' academic experience and help them explore careers related to their academic studies. After an internship, students must submit a letter for review by faculty from the employer verifying the required number of hours. Internship credit may not be used to satisfy electives for the concentration.

**ORGSTUDY 305. Inside Organizations**  
*Introductory Psychology (PSYCH 111, 112, 114, or 115), introductory sociology (SOC 100, 101, 102, or 195), and ECON 101. (3). May not be repeated for credit.*

Survey of theory and research on biological, psychological, and social bases of human coordination. Coordinated activity ranges from relatively informal yet systematized behavior of kin networks to the formalized organization of social institutions. This course emphasizes perspectives from psychology, sociology, and economics that attempt to explain basic patterns of coordinated action.

**ORGSTUDY 310. Formal Organizations and Environments**  
*Introductory Psychology (PSYCH 111, 112, 114, or 115), introductory sociology (SOC 100, 101, 102, or 195), and ECON 101. (3). May not be repeated for credit.*

Survey of theory and research on formal organizations from sociological and economic perspectives. Emphasizes

multiple levels of analysis in organizational theory from internal structure and practice to organization-environment relationships. Students will apply theories to existing case studies and develop original case research over the course of the semester.

**ORGSTUDY 405. Negotiation and Dispute Resolution**

*Consent of department required. (3). May not be repeated for credit. No credit granted to those who have completed or are enrolled in Psych 388.*

This course provides students with the practical skills to become effective negotiators. Students participate in in-class negotiation exercises, mini-lectures, and discussions on a weekly basis. Students learn the fundamentals of distributive and integrative bargaining as well as an array of social influence strategies in order to succeed as a negotiator.

**ORGSTUDY 410. Advanced Research Methods in Organizational Studies**

*One of the following (may be taken concurrently with ORGSTUDY 410): STATS 250 or 280 or SOC 210 or ECON 251. Restricted to Organizational Studies seniors. (Prerequisites enforced at registration.) (4). May not be repeated for credit.*

Research methods in organizations, including interviewing, network analytic methodology, organizational survey methods, data collection and analysis, and use of survey feedback techniques. Team based learning combines lecture, laboratory and field research methods in organizations.

**ORGSTUDY 415. Networking**

*Consent of department required. (3). May not be repeated for credit.*

This course explores relationships between formal and informal social networks and the dynamics of organizational processes. We

discuss network theories and apply them to topics such as Facebook friendships, social movement activism, choice of partners, and professional advancement. We focus on how networks are used to attain organizational objectives.

**ORGSTUDY 418 / ENVIRON 418. Leadership and Environmental Stewardship in Organizations**

*(3). May not be repeated for credit.*

This course focuses on the skills and strategies that can help you become a more effective leader for the environment. Students will learn about the importance of decision-making, influence, and teamwork for implementing organization change and innovation towards greater environmental stewardship.

**ORGSTUDY 420. Nonprofit Organizations**

*Consent of department required. (3). May not be repeated for credit. No credit granted to those who have completed or are enrolled in ORGSTUDY 204: Nonprofits.*

Nonprofits have played a key role in American society, providing a wide range of services and goods that include medical care, education, the arts, and religion. In this course, students gain a thorough understanding of the nonprofit sector and practical knowledge required to work successfully in a nonprofit organization.

**ORGSTUDY 425. Psychology of Organizational Inequality and Conflict**

*(3). May not be repeated for credit. No credit granted for OS students who have completed or are enrolled in ORGSTUDY 205 or PSYCH 487 (Topic #30: Psychology of Inequality & Prejudice).*

This course examines psychological theories about why intergroup prejudice, discrimination, and inequality are so ubiquitous. We also consider possible paths

forward to greater equality and inclusion (in organizations and in society more broadly).

**ORGSTUDY 430. Corporate Social Responsibility: Emergence, Practices, and Critiques**

*(3). May not be repeated for credit.*

Corporations today have a greater impact on their social and natural environments than ever before in human history. This course investigates calls for corporations to behave in "socially responsible" ways as well as critiques of the concept and practices of "corporate social responsibility."

**ORGSTUDY 435. Managing People and Strategic Change in Organizations**

*(3). May not be repeated for credit.*

Grounded in organizational behavior research and theory, this course provides practical understanding and skills to manage human resources in the context of strategic change. Topics include: thinking strategically, culture, job analysis and design, recruitment and selection, training and development, performance management, and incremental and transformational approaches to change.

**ORGSTUDY 440. Organizations in the Developing World**

*(3). May not be repeated for credit.*

This course focuses on the relationship between developing countries and the organizations within them, and between developmental outcomes and organizations in the developing world. It draws out lessons from both public sector organizations (bureaucracies) and business organizations, as well as from the manners in which they interact with one another.

**ORGSTUDY 450. Technological Innovation**

*(3). May not be repeated for credit. No*

*credit granted to those who have completed ORGSTUDY 206.*

What conditions actually engender or inhibit innovation? Focusing on innovation in the business world, this course examines what business-level characteristics make some better able to develop technologies than others, and what social, political, bureaucratic characteristics help make some regions more innovative than others.

**ORGSTUDY 490. Advanced Research Team**

*Consent of instructor required. STATS course recommended. (3 - 4).*

*(EXPERIENTIAL). May be elected three times for credit. May be elected more than once in the same term.*

Students work in small collaborative teams with faculty and graduate students to assist with faculty research projects.

**ORGSTUDY 495. Special Topics in Organizational Studies**

*(3). May be elected six times for credit. May be elected more than once in the same term.*

This course investigates topics relating to structure and function of organizations. Topics vary by section and term.

**ORGSTUDY 497. Senior Honors Research I**

*Consent of department required. Must be accepted into the OS Honors program by review of proposal. (3 - 4).*

*(INDEPENDENT). May not be repeated for credit. F.*

Honors level independent research in the field of Organizational Studies with a designated faculty member.

**ORGSTUDY 498. Senior Honors Research II**

*Consent of department required. Must be accepted into the OS Honors program by*

*review of proposal. (3 - 4).  
(INDEPENDENT). May not be repeated for credit. W.*

Honors level independent research in the field of Organizational Studies with a designated faculty member.

**ORGSTUDY 499. Independent Study**  
*Consent of instructor required. (1 - 4).  
(INDEPENDENT). May be repeated for a maximum of 8 credits. No more than six credits of independent study credit may count toward an Organizational Studies concentration. F, W.*

Independent research in the field of Organizational Studies with a designated faculty member, which may be completed in conjunction with an internship experience.

## **Performing Arts Technology (PAT)**

**PAT 200. Introduction to Electronic Music Production**  
*May not be repeated for credit.*

This course is for students not majoring in Performing Arts Technology who are interested in developing a contextually-informed artistic practice in the area of electronic music composition, production, and performance. Through a series of composition exercises, students build skills in sequencing, audio and MIDI recording and editing, mixing, sound synthesis, sampling, effects processing, and live electronic music performance with real-time controllers.

## **Persian (PERSIAN)**

**PERSIAN 101. Elementary Persian I**  
*(4). May not be repeated for credit. No credit granted to those who have completed or are enrolled in PERSIAN 103 (AAPTIS 143).*

An introduction to Persian, this course sets out to equip students with a basic understanding of Persian grammar, pronunciation, vocabulary, and culture.

**PERSIAN 102. Elementary Persian II**  
*PERSIAN 101 (AAPTIS 141). (4). May not be repeated for credit. No credit granted to those who have completed or are enrolled in PERSIAN 103 (AAPTIS 143).*

**PERSIAN 201. Intermediate Persian I**  
*PERSIAN 102 (AAPTIS 142) or PERSIAN 103 (AAPTIS 143). (4). May not be repeated for credit.*

This is an intermediate to advanced level course in Persian, emphasizing oral fluency, reading comprehension, and written expression.

**PERSIAN 202. Intermediate Persian II**  
*PERSIAN 201 (AAPTIS 241). (4). (Lang Req). May not be repeated for credit.*

**PERSIAN 404. Singing Revolution: Poetry and Politics in Modern Iran**  
*At least two years of Persian or its equivalent are required to enroll. (3). May not be repeated for credit.*

This upper-level course introduces students to the aesthetically rich and politically charged world of modern Persian poetry.

**PERSIAN 409. Readings in Persian**  
*Consent of instructor required. (1 - 2).  
(INDEPENDENT). May be elected four times for credit. May be elected more than once in the same term.*

This course is intended for Persian language students who wish to take an independent study that requires them to read texts in Persian.

**PERSIAN 410. Topics in Persian Language**

*Advanced proficiency in Persian or permission of instructor. (3). May be elected three times for credit.*

This course is aimed at undergraduate and graduate students with advanced Persian language proficiency. Topics will vary, focusing on aspects of culture, linguistics, literature, music, religion, film, history, etc. All material will be in Persian, and the class will be taught in Persian.

**PERSIAN 499. Independent Study in Persian**

*Consent of department required. (1 - 4). (INDEPENDENT). May be elected three times for credit. May be elected more than once in the same term.*

An independent study course in the area of Persian language. The intended language of instruction is Persian. Approval from the department is required.

**PERSIAN 504. Modern Persian Fiction**  
*PERSIAN 202 (AAPTIS 242). (3). May be elected twice for credit.*

An exploration of modern Persian fiction. This course introduces students to great works and notable authors. All texts are in Persian.

**PERSIAN 505. Modern Persian Nonfiction**

*PERSIAN 202 (AAPTIS 242). Taught in Persian. (3). May be elected twice for credit.*

An exploration of modern Persian non-fiction. This course introduces students to

great works and notable authors. All texts are in Persian.

## **Philosophy (PHIL)**

**PHIL 101. Introduction to Philosophy**  
*(4; 2 in the half-term). (HU). May not be repeated for credit. No credit granted to those who have completed or are enrolled in PHIL 181, 182, 202, 231, 232, or 297.*

An introductory survey of philosophical puzzles, topics and methods. Topics covered may include the theory of knowledge, the nature of reality, and questions of ethics and values.

**PHIL 151. Philosophical Dimensions of Personal Decisions**

*(3; 2 in the half-term). (HU). May not be repeated for credit. Students are strongly advised not to take more than two Philosophy Introductions.*

We can all imagine ways our lives might be better, and ways they might be worse. So too, we can imagine better and worse ways for our lives to end. And it's obvious that the choices we make affect the quality of our lives. In this course, we will examine a variety of philosophical perspectives on these issues.

**PHIL 152. Philosophy of Human Nature**  
*(3; 2 in the half-term). (HU). May not be repeated for credit. Students are strongly advised not to take more than two Philosophy Introductions.*

A study of philosophical conceptions of human nature and its uniqueness, and of their implications for morality and human knowledge.

**PHIL 153. Philosophy and the Arts**  
*(3; 2 in the half-term). (HU). May not be repeated for credit. Students are strongly*

*advised not to take more than two  
Philosophy Introductions.*

This course serves as an introduction to philosophy of art or aesthetics. Students should note that this is not a class that will look into issues about the history of art but rather one that is trying to answer fundamental philosophical questions about art itself.

**PHIL 154. Science Fiction and Philosophy**

*(3; 2 in the half-term). (HU). May not be repeated for credit.*

This course explores a variety of philosophical topics through appeal to thought experiments from important works of science fiction.

**PHIL 155. The Nature of Science**

*(3; 2 in the half-term). (HU). May not be repeated for credit.*

This course aims to provide a broad overview of the main issues in the philosophy of science, including the character of scientific reasoning, the empirical method and our knowledge of the external world, the nature of experimentation, the confirmation of scientific hypotheses by empirical data, theory choice, the realism/anti-realism debate, and the question of what differentiates science from non-science.

**PHIL 157 / CLCIV 157. Introduction to Ancient Philosophy**

*(3). (HU). May not be repeated for credit.*

Many of the central questions in Western philosophy were first formulated by thinkers in ancient Greece and Rome. This course provides an introduction to those questions and a wide range of answers, as well as to the methods ancient philosophers used to address them. We will read key ancient texts, including some by the early

Greek thinkers, such as Democritus; several dialogues of Plato; selected passages from Aristotle's ethics, psychology, and natural science; and works by Epicureans and Stoics, whose schools of thought were influential in the Hellenistic and Imperial periods.

**PHIL 160. Moral Principles and Problems**

*(4; 3 in the half-term). (HU). May not be repeated for credit.*

This course introduces students to moral philosophy and its application to the real world. Lectures introduce the fundamental concepts of morality, as well as the methods of philosophical inquiry and the major historical and contemporary moral theories. Sections are designed to enable students to apply moral philosophy to concrete ethical problems in specific areas of current interest.

**PHIL 162. The University of Michigan: A Moral Institution?**

*(4; 3 in the half-term). (HU). May not be repeated for credit.*

This course examines moral dimensions of the University and its faculty, students, and staff in their roles as citizens of an academic community by applying classic moral theories to ethical issues arising in higher education, such as academic freedom, plagiarism, divestment, and affirmative action.

**PHIL 180. Introductory Logic**

*(3; 2 in the half-term). (BS). (QR/1). May not be repeated for credit. Credit is granted for only one of PHIL 180 or 201. F, W, Su.*

This is a combination of formal and "informal" logic. It covers diagramming argument structures, fallacy theory, Mill's methods, intensional vs. extensional definitions, syllogistic logic, and propositional logic.



**PHIL 181. Philosophical Issues: An Introduction**

(3; 2 in the half-term). (HU). May not be repeated for credit. No credit granted to those who have completed or are enrolled in PHIL 101 (234), 182, 202, 231, 232, or 297. F, W, Sp, Su.

A problems-based introduction to philosophy, which may focus on topics in epistemology, metaphysics, and/or ethics broadly construed.

**PHIL 183. Critical Reasoning**

(3; 2 in the half-term). (HU). May not be repeated for credit.

This course deals with methods and strategies of critical thinking, including: the construction of arguments, the use and misuse of statistics, the role of presuppositions and frameworks, fact and value, cost-benefit analysis, interpretation, objectivity, ideology, approaches of the special disciplines, the use of alternative hypotheses, methods of quantitative and qualitative research.

**PHIL 196. First Year Seminar**

Enrollment restricted to first-year students, including those with sophomore standing. (3). (HU). May not be repeated for credit.

**PHIL 202. Introduction to Philosophy**

(3; 2 in the half-term). (HU). May not be repeated for credit. No credit granted to those who have completed or are enrolled in PHIL 101 (234), 181, 182, 231, 232, or 297.

An introductory survey course in philosophy, which may proceed through a focus on topics or on historical philosophers.

**PHIL 210. Experimental Philosophy**

(3). (ID). May not be repeated for credit.

This course provides the opportunity to grapple with core questions in philosophy from the perspective of a new field called 'Experimental Philosophy'. This sub-field within philosophy addresses traditional questions about important philosophical ideas (such as knowledge and free will) using methods and statistical techniques derived from psychology.

**PHIL 224. Global Justice**

(4; 2 in the half-term). (ID). (R&E). May not be repeated for credit.

This interdisciplinary course on global justice integrates approaches from political philosophy and political economy. Foundations of development economics and theories of global justice are introduced and applied to specific issues such as immigration, free trade, and sweatshops.

**PHIL 230 / ASIAN 230 / RELIGION 230. Introduction to Buddhism**

(4). (HU). May not be repeated for credit.

**PHIL 232. Problems of Philosophy**

(4; 2 in the half-term). (HU). May not be repeated for credit. No credit granted to those who have completed or are enrolled in PHIL 101 (234), 181, 182, 202, 231, or 297.

A problem-focused introductory survey of philosophy, which may focus on topics concerning religion, reality, language, knowledge, or values and ethics.

**PHIL 240 / ENVIRON 240.**

**Environmental Ethics: Philosophical Underpinnings**

(3; 2 in the half-term). (HU). May not be repeated for credit.

This course introduces students to environmental ethics, which concerns the value and moral status of the environment and its nonhuman elements. Topics may

include theories about which parts of nature have intrinsic value, duties to future generations, the significance of wilderness, sustainability, and environmental policy and economics.

**PHIL 250. Changing the World**

*(4; 3 in the half-term). (HU). May not be repeated for credit.*

How can we best contribute to solving the most important global problems? This class will focus on global health and poverty, animal welfare, environmental preservation, and the long-term survival of human civilization. The goal is to provide students with the conceptual resources to evaluate which global causes matter most, and how they can most effectively make a difference.

**PHIL 262 / RELIGION 262.**

**Introduction to the Philosophy of Religion**

*(4; 3 in the half-term). (HU). May not be repeated for credit.*

This course covers, among other topics: traditional arguments for the existence of the God of the world's major monotheistic religions; the problem of evil; the relation of religion and morality; and the question of religious tolerance.

**PHIL 263 / ASIAN 263. Introduction to Chinese Philosophy**

*(3). (HU). May not be repeated for credit.*

This course focuses on the major philosophical schools of Classical China from the Warring States period (453-221 BCE) to the end of the Qing dynasty (1644-1911 CE). Special consideration is given to the ethical, religious and political thought of Confucian, Mohist, Daoist schools in early China, and the Neo-Confucian developments in later imperial periods.

**PHIL 275. Moral Puzzles, Inner Conflicts**

*(4; 3 in the half-term). (HU). May not be repeated for credit.*

In this course, we will explore several moral issues, focusing, in particular, on the tensions in our own views about these issues. The two main aims of the course are (i) to gain some insight into the extent and scope of our moral obligations and (ii) to develop the skills that enable us to clarify and evaluate our own moral beliefs. Each issue we consider will force us to confront how difficult it is for us to reach a fully coherent position -- and how much we can learn from struggling to attain this goal.

**PHIL 286. Second Year Seminar in Philosophy**

*(3; 2 in the half-term). (HU). May not be repeated for credit.*

An intensive introduction to philosophy in small group format for second year students. Topics will vary from term to term.

**PHIL 288 / CLCIV 288. Ancient Greek and Roman Philosophy**

*(4; 3 in the half-term). (HU). May not be repeated for credit.*

This course is a survey of ancient Greek & Roman philosophy, one of the foundations of the Western philosophy, exercising an influence still felt today. We will examine a selection of writings from Presocratics, Sophists, Socrates, Plato, Aristotle, Cyrenaics, Cynics, Epicureans, Stoics, and Sceptics.

**PHIL 289. Descartes to Kant**

*(4; 3 in the half-term). (HU). May not be repeated for credit.*

The 17th and 18th centuries are together an important formative period in early modern Western philosophy. Writings of a selection of the following are studied: Descartes,

Spinoza, Leibniz, Locke, Berkeley, Hume, and Kant.

**PHIL 294. Honors Core in Philosophy**  
*Consent of department required. (4). (HU). May be elected twice for credit. May be elected more than once in the same term.*

As part of the Honors Core Curriculum, this course introduces Honors students to the fields, questions and meta-questions, and methodologies of the Humanities; in this case, Philosophy. The course uses both contemporary technology and time-honored methodologies to examine theoretical concepts, problems, and case studies; the course uses a variety of formats and strategies.

**PHIL 295. Honors Core Writing in Philosophy**  
*Consent of department required. (4). (HU). May be elected twice for credit. May be elected more than once in the same term.*

As part of the Honors Core Curriculum, this course introduces Honors students to the fields, questions and meta-questions, and methodologies of the Humanities; in this case, Philosophy. The course uses both contemporary technology and time-honored methodologies to examine theoretical concepts, problems, and case studies; the course uses a variety of formats and strategies.

**PHIL 296. Honors Introduction to Logic**  
*Honors students or permission of instructor. (3; 2 in the half-term). (MSA). (BS). (QR/1). May not be repeated for credit. No credit granted to those who have completed or are enrolled in PHIL 303 or 414.*

An introduction to the study of modern formal logic, with attention to its mathematical development and to its philosophical foundations and applications.

### **PHIL 297. Honors Introduction to Philosophy**

*Honors students or permission of instructor. (3; 2 in the half-term). (HU). May not be repeated for credit. No credit granted to those who have completed or are enrolled in PHIL 101 (234), 181, 182, 202, 231, or 232.*

An introduction to philosophy for honors students. May focus on historical topics or on philosophical problems.

**PHIL 298. Topics in Philosophy**  
*(3; 2 in the half-term). (HU). May not be repeated for credit.*

This course provides a basic introduction to one or more specific philosophical issues. Topics will vary each term and may focus on a family of philosophical problems or on the philosophical thought of one or more historical figures.

### **PHIL 303. Introduction to Symbolic Logic**

*(4; 3 - 4 in the half-term). (MSA). (BS). (QR/1). May not be repeated for credit. No credit granted to those who have completed or are enrolled in PHIL 296 or 414. F, W, Sp.*

An introduction to formal logic with emphasis on truth-functional languages and monadic predicate logic with identity. The course will cover the metatheory of truth-functional logic in detail, and also basic concepts of the proof theory and model theory for first-order languages.

**PHIL 305. Introduction to Formal Philosophical Methods**  
*(4; 3 in the half-term). (MSA). (BS). (QR/1). May not be repeated for credit.*

This course introduces formal techniques widely used across subfields of analytic philosophy. Philosophical applications of these techniques are discussed.

**PHIL 320. The World-View of Modern Science**

(4; 3 in the half-term). (HU). May not be repeated for credit.

A philosophical examination of the relation between our "common-sense" conception of reality and the worldview presented by modern science, especially physics. This course will explore such topics as the impact of relativistic physics on our views about space and time, the impact of quantum mechanics on our views about causation, chance, and free will. No scientific background is presupposed as non-technical expositions of the theories will be presented in the course.

**PHIL 322. The Methods of Science**

(3; 2 in the half-term). (ID). May not be repeated for credit.

This course is an introduction to the philosophy of science intended for sophomores and juniors. It will focus on "epistemological" issues that arise in science: the nature of the experimental method, the limits of observation, inductive inference, and statistical reasoning. Points will be illustrated using examples from the history of science, particularly astronomy and astrophysics.

**PHIL 323. The Scientific Revolution**

(3). (HU). May not be repeated for credit.

This course offers an examination of a pivotal period in the history of philosophy and science that involves a transition from an astronomy and physics based on the views of the ancients to a more modern outlook. This course is intended for undergraduates, preferably with at least one course in philosophy.

**PHIL 334. Post-Biblical Jewish Philosophy**

(3; 2 in the half-term). May not be repeated for credit.

**PHIL 340. Minds and Machines**

(4; 2 in the half-term). (HU). May not be repeated for credit.

This course explores theories of the human mind and their relation to models of computation. As an introduction to the foundations of cognitive science, it draws material from Philosophy, Psychology, and Computer Science, especially Artificial Intelligence.

**PHIL 345. Language and Mind**

One philosophy course with at least a C-. (Prerequisites enforced at registration.) (4; 3 in the half-term). (HU). May not be repeated for credit.

This course studies the structure of language, the psychological mechanisms underlying language, the nature of meaning, and the relations among language, thought, and the world.

**PHIL 349 / ASIAN 349. Confucianism: Reinventions of Tradition**

ASIAN 220 or ASIAN 263/PHIL 263. (3). (HU). May not be repeated for credit.

This course explores some of the key concepts in Confucianism through studying the foundational texts of Confucianism. It also examines the subsequent unfolding of the Confucian tradition in different cultural milieu and in relation to different audiences.

**PHIL 350. Real World Ethics: Exploring Moral Problems Beyond the Classroom**

Consent of department required. (4). (HU). May not be repeated for credit.

Real World Ethics gives students the opportunity to apply ethical theories to real-world ethical problems. It introduces students to these problems, and to the theories that will enable them to analyze these problems. It trains them to share what they have learned with high school students

who are participating in the Ethics Bowl program.

**PHIL 351. Real World Ethics II**

*PHIL 350. (Prerequisites enforced at registration.) (2 in the half-term). (HU). May not be repeated for credit.*

This is a half semester, two-credit course for students who have already taken Real World Ethics. Real World Ethics gives students the opportunity to apply ethical theories to real-world ethical problems. It introduces students to these problems, and to the theories that will enable them to analyze these problems. It trains them to share what they have learned with high school students who are participating in the Ethics Bowl program.

**PHIL 353. The Rights And Wrongs Of Business Practices**

*(4; 3 in the half-term). (HU). May not be repeated for credit.*

This course will explore the moral issues raised by capitalist economies generally and for-profit corporations specifically. In addition to being introduced to moral theory, students will study the political, legal, and economic background of contemporary debates about business practices and regulations. Class periods will comprise both lecture and small-group discussion of real-world case studies.

**PHIL 355. Contemporary Moral Problems**

*(4; 3 in the half-term). (HU). (R&E). May not be repeated for credit. No credit granted to those who have completed or are enrolled in PHIL 455.*

The purpose of this course is to explore the moral issues confronting us in our daily lives and in our special disciplines. The topics discussed may include abortion, sex and sexual perversion, drugs, death and suicide, civil disobedience, punishment,

pacifism, war, problems in medical ethics (eugenics, euthanasia, sanctity of life, organ transplants, defining death), environmental ethics, and the ethics of scientific research.

**PHIL 356. Issues in Bioethics**

*No prerequisites; one philosophy introduction is recommended. (4; 3 in the half-term). (HU). May not be repeated for credit.*

An examination of various ethical issues having to do with biology, medicine, and human and animal life in general, such as abortion, euthanasia, the idea of the rights of animals, medical care and the rights and obligations involved in it.

**PHIL 359. Law and Philosophy**

*(4; 2 in the half-term). (HU). (R&E). May not be repeated for credit.*

A philosophical analysis of legal institutions. Topics include: the nature of law, the source of legal authority, legal interpretation, equality and discrimination, democracy and voting rights, property rights and distributive justice, social control and liberty, the justification of punishment, and criminal responsibility.

**PHIL 361. Ethics**

*One philosophy course with at least a C-. (Prerequisites enforced at registration.) (4; 3 in the half-term). (HU). May not be repeated for credit. F.*

An introduction to fundamental issues in moral philosophy.

**PHIL 366. Introduction to Political Philosophy**

*One Philosophy course or PPE 300; with at least C-. (Prerequisites enforced at registration.) (4; 2 in the half-term). (HU). May not be repeated for credit.*

This is a historical introduction to political philosophy, which will concentrate on

classic texts in the period from the Renaissance to the Enlightenment.

**PHIL 367. 19th Century Social and Political Philosophy**

*One philosophy course, PPE 300, or POLSCI 101 with at least a C-. (Prerequisites enforced at registration.) (4; 3 in the half-term). (HU). May not be repeated for credit.*

This course explores European social and political philosophy from 1776-1914 through works by thinkers such as Smith, Burke, Mill, Wollstonecraft, Hegel, Marx, Weber, and Durkheim. Themes include the transformation of labor, poverty, liberal democracy, nationalism, feminism, and the rise of the social sciences.

**PHIL 371. Phenomenology and Existential Philosophy**

*One philosophy course (completed with a minimum grade of C- or better). (Prerequisites enforced at registration.) (3; 2 in the half-term). (HU). May not be repeated for credit.*

Survey of post-1800 continental philosophy, with an emphasis on existentialism and phenomenology. Readings from Kierkegaard, Dostoyevsky, Nietzsche, Kafka, Husserl, Heidegger, Jaspers, Sartre, Merleau-Ponty. Most reading will be taken from philosophical texts rather than literary ones.

**PHIL 375. Nietzsche's Philosophical Thought**

*(3; 2 in the half-term). (HU). May not be repeated for credit.*

An in-depth critical study of the philosophical writings of Friedrich Nietzsche and their impact on subsequent philosophical thinking.

**PHIL 376 / ENVIRON 376. Environmental Ethics-Living Well with**

**Nature**

*(3). (HU). May not be repeated for credit.*

This course explores what we do and why we do what we do to the world around us. Without ignoring the theoretical, this course will focus on ethics as it bears on practical, everyday things: using energy, eating food, building houses, flying to far-away destinations, hiking in wild places, watching birds .... Our effects are far reaching: climate change, industrial agriculture and CAFOs, pollution and ecological restoration, biodiversity and species extinctions, wilderness, genetic engineering of plants and animals. We will ask "what is a good way to live in nature?"

**PHIL 381. Science and Objectivity**

*One Philosophy course completed with a minimum grade of C- or better. (Prerequisites enforced at registration.) (4; 3 in the half-term). (HU). May not be repeated for credit.*

This course explores central philosophical questions concerning knowledge and reality as they arise in philosophy of science. Topics may include: causation, explanation, conceptual change and scientific revolutions, knowledge of the unobservable, the objectivity of scientific knowledge.

**PHIL 383. Knowledge and Reality**

*One Philosophy course (completed with a minimum grade of C- or better). (Prerequisites enforced at registration.) (4; 3 in the half-term). (HU). May not be repeated for credit.*

An introduction to contemporary epistemology and metaphysics through an examination of such central topics as skepticism and the possibility of knowledge, the structure of epistemic justification, perceptions as a source of knowledge of the world, a prior knowledge,

the persistence of persons and objects, the nature of causality, and the modes of existence.

**PHIL 384. Applied Epistemology: Race, Ethnicity and Knowledge**

*(4; 3 in the half-term). (HU). (R&E). May not be repeated for credit.*

This course surveys philosophical theories of knowledge and rationality in order to examine the implications of these theories for our thinking about race, ethnicity, and racism in the United States today. The practical applications of material covered in this course include the epistemology of racial profiling, racial and ethnic disparities in our criminal justice system, the epistemic value of first-personal reports about experiences of discrimination on the basis of race or gender or disability status, definitions of race and ethnicity, and finally, what we should believe when confronting disagreement between different religious or cultural or political views. In short, this course is about epistemology - and yet at the same time, it is about how you should live your life as an agent governed not only by epistemic norms, but also by legal, political, cultural, social, and ethical norms.

**PHIL 386. Topics in Early Modern Philosophy**

*(3; 2 in the half-term). (HU). May not be repeated for credit.*

This course offers students an in-depth examination of philosophers and topics from the early modern period, that is, the 17th and 18th centuries. The philosophers covered and topics addressed may change from year to year.

**PHIL 387. Early Modern Feminist Philosophers**

*(3; 2 in the half-term). (HU). May not be repeated for credit.*

This course focuses on a neglected aspect of 17th and 18th century philosophy, namely, the contribution of women philosophers. Women in fact responded in creative ways to intellectual developments during this time. We will begin with a consideration of issues concerning metaphysics, philosophy of mind and philosophy of science in the writings of Princess Elisabeth, Margaret Cavendish, Anne Conway and Emile du Chatelet. Then we will turn to issues in moral/political philosophy and the philosophy of education in the writings of Marie de Gournay, Anna Maria van Schurman, Mary Astell and Mary Wollstonecraft.

**PHIL 388 / CLCIV 388. History of Philosophy: Ancient**

*One philosophy course with a grade of at least a C-. (Prerequisites enforced at registration.) Knowledge of Greek or Latin is not required. (4; 2 in the half-term). (HU). May not be repeated for credit. Taught in English. F.*

Western philosophy from its historical beginning through the Hellenistic period and including the pre-Socratics, Plato, Aristotle, Epicurus, Stoicism, and Scepticism.

**PHIL 389. History of Philosophy: Seventeenth and Eighteenth Centuries**

*One philosophy course with at least a C-. (Prerequisites enforced at registration.) (4; 2 in the half-term). (HU). May not be repeated for credit. W.*

The 17th and 18th centuries are together an important formative period in modern Western philosophy. Writings of most or all of the following are studied: Descartes, Spinoza, Leibniz, Locke, Berkeley, Hume, and Kant. The course is planned with the needs of philosophy majors in mind and focuses on metaphysical and

epistemological issues. There may be some attention to the moral philosophy of the period.

**PHIL 391 / CLCIV 367. Plato**

*One philosophy class. (3; 2 in the half-term). (HU). May not be repeated for credit.*

This course offers students an in-depth examination of Plato's philosophy by focusing on a particular theme or set of works (which may change from year to year).

**PHIL 392 / CLCIV 368. Aristotle**

*(3; 2 in the half-term). (HU). May not be repeated for credit.*

This course offers students an in-depth examination of Aristotle's philosophy by focusing on a particular theme or set of works (which may change from year to year).

**PHIL 393 / CLCIV 369. Post-Aristotelian Philosophy**

*(3; 2 in the half-term). (HU). May not be repeated for credit.*

This course offers students an in-depth examination of some of the philosophical movements and figures after Aristotle, including Epicureans, Stoics, Sceptics, and Neoplatonists, by focusing on a particular school or theme (which may change from year to year).

**PHIL 399. Independent Study**

*Consent of instructor required. One philosophy introduction and permission of instructor. (1 - 4). (INDEPENDENT). May be elected twice for credit. F, W, Sp.*

**PHIL 401. Undergraduate Honors Seminar**

*Open to Honors concentrators in Philosophy and others by permission of instructor. (3; 2 in the half-term). May not be repeated for credit. Continuing Course.*

*Y grade can be reported at end of the first-term to indicate work in progress. At the end of the second term, the final grade is posted for both term's elections. F.*

This seminar is designed to prepare students for writing an Honors thesis in Winter term. Students will choose a thesis topic and select the texts they plan to read. These form the basis of their written assignments and related class presentations, culminating in a thesis prospectus and chapter as the foundation for PHIL 499, the thesis-writing course.

**PHIL 406. Aristotle**

*One Philosophy course (completed with a minimum grade of C- or better); OR graduate standing. (Prerequisites enforced at registration.) (3; 2 in the half-term). May not be repeated for credit.*

A systematic study of Aristotle's philosophy.

**PHIL 413. Formal Philosophical Methods**

*Satisfaction of QR/1 with either 2nd semester calculus, an advanced course in logic, a course in statistics above STATS 265, or a course in economics. (3; 2 in the half-term). (BS). May not be repeated for credit.*

This course surveys the formal tools used in contemporary philosophy. It covers elements of propositional and quantified modal logic, formal semantics, counterfactuals, probability theory, and decision theory. Each class begins with an introduction to formal material and ends with a contemporary philosophical paper that presupposes that material.

**PHIL 414. Mathematical Logic**

*One PHIL or MATH course. (3; 2 in the half-term). (BS). (QR/1). May not be repeated for credit. F.*



This course is an advanced introduction to symbolic logic, intended to provide a foundation for understanding current research in philosophical logic and related areas of cognitive science.

**PHIL 423. Problems of Space and Time**  
*One logic introduction and either one other philosophy course or 12 credits of science. (3; 2 in the half-term). (BS). May not be repeated for credit.*

**PHIL 424. Philosophy of Quantum Mechanics**  
*One course is Philosophy and one in Mathematics or Physics. (3; 2 in the half-term). (BS). May not be repeated for credit.*

An introduction to the philosophy for quantum mechanics, focusing on quantum non-locality and the measurement problem ("Schrodinger cat paradox"). While some background in physics would be useful for this course, it is not essential. Relevant formalisms are introduced along with the philosophical questions they help to frame.

**PHIL 426 / LING 426. Philosophy and Linguistic Theory**  
*One philosophy introduction, one logic introduction, or concentration in Linguistics. (3; 2 in the half-term). May not be repeated for credit.*

When people say things, they usually mean something. This course will concentrate on theories of meaning, with special emphasis on theories that bear on the role of meaning in conversation.

**PHIL 429. Ethical Analysis**  
*PHIL 361, 366, 367 or PPE 300, (completed with a minimum grade of C- or better); OR Graduate standing. (Prerequisites enforced at registration.) (3; 2 in the half-term). May not be repeated for credit.*

This course discusses questions about the nature, object, forms, basis, and justifications of morality and about the relation of morality to the good life.

**PHIL 430. Topics in Ethics**  
*PHIL 361, 366, 367 or PPE 300 (completed with a minimum grade of C- or better); or Graduate standing. (Prerequisites enforced at registration.) (3; 2 in the half-term). May be repeated for a maximum of 6 credits.*

Course will focus on a topic in the study of ethics.

**PHIL 439. Aesthetics**  
*One philosophy introduction. (3; 2 in the half-term). May not be repeated for credit.*

**PHIL 440. Philosophy of Film**  
*One of the following: a philosophy course at the 300-level or above, one course in History of Art, one course in Screen Arts and Cultures, or permission of instructor. (3; 2 in the half-term). May not be repeated for credit.*

Since the invention of the Edison box, reflection on film has come from philosophy, criticism, sociology, history and politics--but also from within films themselves. The course will be about the philosophical character of films, relying both on the written word, and on films, for this exploration.

**PHIL 442. Topics in Political Philosophy**  
*PHIL 361, 366, 367, or PPE 300 (completed with a minimum grade of C- or better); OR Graduate standing. (Prerequisites enforced at registration.) (3; 2 in the half-term). May not be repeated for credit.*

Taking one of the following ideas as a central theme, this course examines fundamental philosophic issues related to

human rights, liberty, democracy, justice, or alienation.

**PHIL 443. Foundations of Rational Choice Theory**

*Two courses in Philosophy, Economics, or Psychology (or some combination thereof) and satisfaction of the Quantitative Reasoning requirement; or permission of instructor. (4; 3 in the half-term). May not be repeated for credit.*

This course introduces students to the modern theory of rational choice and explores some of its philosophical implications.

**PHIL 444. Groups and Choices**

*(4). May not be repeated for credit. Rackham credit requires additional work.*

This course discusses the theory of choice in groups. We start with game theory, focusing on how thinking about how others will choose, and how others will think about one, affects the best choice. Then we move on to social choice theory, looking at the ways to best combine individual choices into a group choice. Finally, we look at whether groups have beliefs and desires, and make choices, and if they do, how this relates to the beliefs, desires and choices of members of the group.

**PHIL 446. Social and Political Philosophy of Language**

*One philosophy course, graduate standing, or permission of the instructor. (Prerequisites enforced at registration.) (3). May not be repeated for credit.*

This course develops tools that help us investigate language's capacity to harm and to affect thought and discourse, from a philosophical point of view. We assess abstract theories by discussing concrete examples like slurs, hate speech, sexist and racist essentializing language, 'dogwhistles,'

metaphors, obfuscatory political language, and propaganda

**PHIL 456. Interpreting the Zhuangzi**

*(3; 2 in the half-term). May not be repeated for credit.*

This course is a survey of different interpretations of the early Daoist classic, Zhuangzi. We will examine both traditional and modern interpretations, but we will focus on modern interpreters and approaches.

**PHIL 458. Philosophy of Kant**

*PHIL 389 (completed with a minimum grade of C- or better); OR Graduate standing. (Prerequisites enforced at registration.) (3; 2 in the half-term). May not be repeated for credit.*

An intensive study of Kant's philosophy centered on The Critique of Pure Reason. Kant's major works on ethics and aesthetics may also be considered.

**PHIL 460. Medieval Philosophy**

*One philosophy introduction. (3; 2 in the half-term). May not be repeated for credit.*

A survey of medieval philosophers in the Western tradition, covering figures such as Augustine, Boethius, Anselm, Maimonides, Averroes, Thomas Aquinas, Duns Scotus and William Ockham. The readings may be oriented around a theme, such as the problem of evil, free will, divine foreknowledge, proofs for God's existence, and universals.

**PHIL 463. Topics in the History of Philosophy**

*One Philosophy course (completed with a minimum grade of C- or better). (Prerequisites enforced at registration.) PHIL 388 or 389, or permission of instructor. (3). May not be repeated for credit.*

An intensive critical study of selected texts and issues from the history of Western philosophy, dealing with material that is not usually covered in the department's regular basic offerings in the history of philosophy.

**PHIL 467. The Enlightenment and Skepticism**

*One Philosophy course or graduate standing. (Prerequisites enforced at registration.) (3). May not be repeated for credit.*

An introduction to the philosophy of the Enlightenment, considering its views on reason, skepticism, the critique of religion, theories of human nature, science, and politics. Attention will also be paid to counter-Enlightenment thinkers. Readings will focus on original works but also include contemporary commentaries.

**PHIL 475. Topics in 20th Century Philosophy**

*One introductory Philosophy course and one 300-level Philosophy course or permission of the instructor. Consent of instructor required. (Prerequisites enforced at registration.) (3; 2 - 3 in the half-term). May not be repeated for credit.*

This course addresses significant philosophical developments in the 20th century.

**PHIL 480. Philosophy of Religion**

*One introduction to Philosophy. (3; 2 in the half-term). May not be repeated for credit.*

**PHIL 481. Metaphysics**

*PHIL 345, 381, or 383. (3; 2 in the half-term). May not be repeated for credit.*

An examination of some of the central problems in metaphysics such as appearance and reality, time, universals and particulars, causality and freedom, and the nature of metaphysical systems.

**PHIL 482. Philosophy of Mind**

*PHIL 345, 381, or 383. (3; 2 in the half-term). May not be repeated for credit.*

Analysis of mental concepts such as consciousness, perception, thinking, etc. Consideration of philosophical problems concerning the mind such as personal identity, the relation of mind and body, our knowledge of other minds. Attention will be given to the bearing of psychology on these topics.

**PHIL 485. Philosophy of Action**

*Two courses in Philosophy or permission of instructor. (3). May not be repeated for credit.*

**PHIL 498. Senior Honors in Philosophy**

*Consent of instructor required. Permission of department. (3; 2 in the half-term). (INDEPENDENT). May not be repeated for credit. Continuing Course. Y grade can be reported at end of the first-term to indicate work in progress. At the end of the second term of PHIL 499, the final grade is posted for both term's elections. W, Su.*

**PHIL 499. Senior Honors in Philosophy**

*Consent of instructor required. Permission of department. (3; 2 in the half-term). (INDEPENDENT). May not be repeated for credit.*

## Physics (PHYSICS)

**PHYSICS 106. Everyday Physics**

*(3). (NS). (BS). May not be repeated for credit. It is recommended that School of Education students take PHYSICS 420.*

**PHYSICS 107. 20th-Century Concepts of Space, Time, and Matter**

*High school algebra and geometry. (3). (NS). (BS). (QR/1). May not be repeated for credit. F.*

The course is intended to acquaint students with some of the most important conceptual developments in physics in the 20th century.

**PHYSICS 112. Cosmology: The Science of the Universe**

*Although no science courses are required, high school physics would be helpful.*

*Enrollment restricted to first-year students, including those with sophomore standing.*

*(3). (NS). (BS). May not be repeated for credit.*

**PHYSICS 115. Principles of Physics**

*(2). May not be repeated for credit. No credit granted to those who have completed or are concurrently enrolled in PHYSICS 120, 135, 140, 160, 235, 240, or 260.*

This is an introductory course on the foundations of physics tailored for students seeking to be better prepared for success in the core introductory courses (PHYSICS 135, for life/health sciences and Kinesiology, or PHYSICS 140, for science and engineering fields). The course aims to develop skills and abilities needed for problem-solving within the conceptual framework of introductory physics.

**PHYSICS 116. From Quarks to Cosmos**

*(3). (NS). (BS). (QR/1). May not be repeated for credit.*

This course introduces the modern understanding of the physical universe. We discuss the elementary particles that constitute the building blocks for all matter, and we discuss the hot dense beginnings of the universe known as the big bang. We convey the deep connection between the physics of the subatomic domain, and the physics of the cosmos.

**PHYSICS 121. Physics of Architecture and Design**

*High school algebra and trigonometry. (5).*

*(NS). (BS). (QR/1). May not be repeated for credit.*

A comprehensive one-semester introduction to physics in the context of architecture and design. Force and motion, static equilibrium, energy, electricity and circuits, fluids, heat and heat transfer, light and illumination. Examples drawn from architecture, urban planning, and natural forms. Extensive in-class work on problem solving, demonstrations, and experiment.

**PHYSICS 122 / BIOPHYS 120. The Discovery of the DNA Double Helix and its Hidden Mysteries**

*(3). (NS). (BS). (QR/1). May not be repeated for credit.*

Intended for students interested in the natural sciences and medicine, this course uses modern techniques to explore the scientific journey leading to the discovery of the structure of DNA. It presents demonstrations of state-of-the-art biophysical laboratory techniques now widely used in biophysical studies of DNA and other biomolecules, including NMR, single molecule techniques, and X-ray crystallography.

**PHYSICS 135. Physics for the Life Sciences I**

*MATH 115, 120, 185, or 295. Students should elect PHYSICS 136 concurrently.*

*(4). (NS). (BS). (QR/1). May not be repeated for credit. No credit granted to those who have completed or are enrolled in PHYSICS 140 or 160.*

Physics 135 and 235 is the best introductory physics sequence for students planning concentrations in any of the life sciences, as well as students planning to pursue medicine, kinesiology, or the health sciences as a profession. PHYSICS 135 is divided into three main topics: the

mechanics of life, energy and energy flow, and fluid behavior.

**PHYSICS 136. Physics for the Life Sciences Laboratory I**

*Concurrent election with PHYSICS 135 is strongly recommended. (1). (NS). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in PHYSICS 141 or 161.*

PHYSICS 136 is a two-hour weekly laboratory designed to accompany PHYSICS 135. This lab introduces students to experimental methods in science. Students make observations, analyze their data and compare their results to predictions based on theory. The course material is focused on understanding the principles of classical mechanics.

**PHYSICS 140. General Physics I**

*MATH 115, 120, 185 or 295. (4). (NS). (BS). (QR/1). May not be repeated for credit. No credit granted to those who have completed or are enrolled in PHYSICS 135 or 160.*

PHYSICS 140 is the first of a three-term sequence in general physics consisting of PHYSICS 140, 240 and 340. This sequence is primarily for students in the physical sciences and engineering. PHYSICS 140 offers an introduction to classical mechanics, the physics of motion. Topics include: vectors, linear motion, projectiles, relative velocity, circular motion, Newton's laws, particle dynamics, work and energy, linear momentum, torque, angular momentum, gravitation, planetary motion, fluid statics and dynamics, simple harmonic motion, waves and sound.

**PHYSICS 141. Elementary Laboratory I**  
*(1). (NS). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in PHYSICS 136 or 161.*

One two-hour period of laboratory work each week designed to complement PHYSICS 140.

**PHYSICS 160. Honors Physics I**

*MATH 115, 120, 185 or 295. Students should elect PHYSICS 161 or 141 concurrently. (4). (NS). (BS). (QR/1). May not be repeated for credit. No credit granted to those who have completed or are enrolled in PHYSICS 135 or 140.*

PHYSICS 160 covers the fundamental principles of mechanics using a modern perspective. It emphasizes the applicability of these laws in systems ranging from binary stars to nuclear collisions. This course is well suited for students considering a concentration in the physical sciences or mathematics.

**PHYSICS 161. Honors Introductory Mechanics Lab**

*Concurrent election with PHYSICS 160 strongly recommended. (1). (NS). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in PHYSICS 136 or 141.*

PHYSICS 161 is a three-hour weekly laboratory designed to accompany PHYSICS 160. This lab course stresses the connection between physical measurements and theoretical concepts with extensive use of modern computing techniques.

**PHYSICS 169. The Physical Universe: An Introduction to Modern Physics, Astrophysics, and Cosmology**

*High school mathematics. (3). (NS). (BS). (QR/1). May not be repeated for credit. No credit granted for students who are enrolled in or have completed PHYSICS 112.*

This course divides the cosmos into four scales of astrophysical inquiry - the whole universe, galaxies, stars, and planets. Providing windows to view the operations

of nature, these astronomical entities experience life cycles from birth to death. Cosmic evolution is driven by the basic laws of physics.

**PHYSICS 210. Energy for our Future**  
(3). (NS). (BS). *May not be repeated for credit.*

We explore the physics, politics, economics and environmental impact of the production and use of known sources of energy including fossil fuels, nuclear, wind, solar, geothermal and hydroelectric. Students develop a viable energy plan for the future that weighs cost, environmental and human risk, and larger geopolitical impacts.

**PHYSICS 235. Physics for the Life Sciences II**  
*PHYSICS 135; and MATH 115, 120 185, or 295. Students should elect PHYSICS 236 concurrently. (4). (NS). (BS). (QR/1). May not be repeated for credit. No credit granted to those who have completed or are enrolled in PHYSICS 240 or 260.*

PHYSICS 135 and 235 is the best introductory physics sequence for students planning concentrations in any of the life sciences, as well as students planning to pursue medicine, kinesiology, or the health sciences as a profession. PHYSICS 235 is divided into three main topics: electricity and magnetism, waves and imaging, and nuclear physics and astrophysics.

**PHYSICS 236. Physics for the Life Sciences Laboratory II**  
*Concurrent election with PHYSICS 235 is strongly recommended. (1). (NS). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in PHYSICS 241 or 261.*

This course is a two-hour weekly laboratory designed to accompany PHYSICS 235. This lab introduces students to experimental methods in science. Students make

observations, analyze their data and compare their results to predictions based on the standard laws of physics. The course material is focused on understanding the principles of electricity and magnetism, including light and wave phenomena.

**PHYSICS 240. General Physics II**  
*PHYSICS 140 or 160; and MATH 116, 121, 156, 186, or 296. Students should elect PHYSICS 241 concurrently. (4). (NS). (BS). (QR/1). May not be repeated for credit. No credit granted to those who have completed or are enrolled in PHYSICS 235 or 260.*

PHYSICS 240 is a continuation of PHYSICS 140, and covers topics in electricity and magnetism: charge, Coulomb's law, electric fields Gauss' law, electric potential, capacitors and dielectrics, current and resistance, EMF and circuits, magnetic fields, Biot-Savart law, Amperes law, Faraday's Law of Induction, and simple AC circuits.

**PHYSICS 241. Elementary Laboratory II**  
*Concurrent election with PHYSICS 240 or 260 is strongly recommended. (1). (NS). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in PHYSICS 236 or 261. F, W, Sp.*

One two-hour period of laboratory work each week designed to accompany PHYSICS 240.

**PHYSICS 260. Honors Physics II**  
*PHYSICS 140 or 160; and MATH 116, 121, 156, 186 or 296. Students should elect PHYSICS 261 or 241 concurrently. (4). (NS). (BS). (QR/1). May not be repeated for credit. No credit granted to those who have completed or are enrolled in PHYSICS 235 or 240.*

PHYSICS 260 is a continuation of PHYSICS 160 and introduces the theory of

electromagnetic phenomena. This course is well suited for students considering a concentration in the physical sciences or mathematics.

**PHYSICS 261. Honors Electricity and Magnetism Lab**

*Concurrent election with PHYSICS 260 strongly recommended. (1). (NS). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in PHYSICS 236 or 241.*

PHYSICS 261 is a three-hour weekly laboratory designed to accompany PHYSICS 260. This lab course stresses the connection between physical measurements and theoretical concepts through hands-on investigation and data analysis.

**PHYSICS 288. Physics of Music**

*(3). (NS). (BS). (QR/1). May not be repeated for credit. No credit granted to those who have completed or are enrolled in PHYSICS 489. No previous expertise in either physics or music is required.*

**PHYSICS 290 / BIOPHYS 290. Physics of the Body and Mind**

*PHYSICS 125 or 135 or 140 or 160. (Prerequisites enforced at registration.) MATH 115 or equivalent AP credits. (3). (NS). (BS). (QR/2). May not be repeated for credit.*

The course discusses and explores basic physical concepts, and apply them to the human body, organs, and cells. Its aim is to provide understanding of biological function in terms of fundamental physics principles. It is intended for students interested in the application of physics to biology, biochemistry, physiology, psychology, genetics, medicine, bioengineering and related life sciences.

**PHYSICS 340. Waves, Heat, and Light**

*One of: PHYSICS 235 or 240 or 260. (Prerequisites enforced at registration.)*

*One of: MATH 215, 255, 285, or 295. (3). (BS). May not be repeated for credit.*

This is the third term of the introductory physics sequence. The topics covered include thermodynamics, light and optics, the wave equation, and special relativity.

**PHYSICS 351. Methods of Theoretical Physics I**

*One of: Math 215, 255, 285, or 295; and one of: MATH 256 or 316. (3). (BS). May not be repeated for credit.*

This course is required for undergraduate physics majors and should be taken before the theoretical physics core courses. The idea of teaching mathematical physics as a required subject separate from the physics core courses is both to help students appreciate the mathematical basis of physics theories and to acquire the expected level of competence in mathematical manipulations.

**PHYSICS 360. Honors Physics III**

*One of: PHYSICS 235, 240, or 260. (Prerequisites enforced at registration.) One of: MATH 215, 255, 285 or 295. (4). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in PHYSICS 340.*

This is the third term of the introductory physics honors sequence. The topics covered in the course include an in depth study of thermodynamics, light and optics, the wave equation, and special relativity.

**PHYSICS 365 / HONORS 365 / SI 365. Cyberscience: Computational Science and the Rise of the Fourth Paradigm**

*Computing language course (e.g., EECS 183, 280, ENGR 101), Introductory statistics (e.g., Stats 250). (3). (NS). (BS). (QR/2). May not be repeated for credit.*

This course invites students to understand the ways in which data-rich, compute-

intensive, collaborative research drives discovery in the natural and social sciences. Through readings, activities, and discussion with invited guests, students will gain an appreciation of the opportunities and challenges posed by the fast-growing, interdisciplinary subject of data science.

**PHYSICS 370 / BIOPHYS 370 / CHEM 370. Physical and Chemical Principles Behind Biology and Medicine**

*MATH 215 or CHEM 262; and PHYSICS 235, 239 (AP), or 240. (Prerequisites enforced at registration.) CHEM 130 or placement in 210. (3). (NS). (BS). May not be repeated for credit. No credit granted to students who have completed or are enrolled in CHEM 260 or PHYSICS 390. F, W.*

This course is an introduction to the fundamental physical and chemical principles of biophysics. It covers quantum aspects of matter, thermodynamics, kinetics and statistical mechanics in the context of biological applications.

**PHYSICS 390. Introduction to Modern Physics**

*COREQUISITE: PHYSICS 391. (Prerequisites enforced at registration.) PHYSICS 340 or 360 and one of: MATH 216, 256, 286 or 316. (3). (BS). May not be repeated for credit.*

This course is an introduction to quantum mechanics and provides an overview of a number of topics in modern physics research. It follows the historical development of quantum mechanics before introducing applications, including statistical mechanics, condensed matter physics, nuclear physics, particle physics, and cosmology.

**PHYSICS 391. Introduction to Modern Physics Lab**

*Corequisite PHYSICS 390. (Prerequisites enforced at registration.) PHYSICS 340 or*

*PHYSICS 360 and PHYSICS 351. (2). (NS). (BS). May not be repeated for credit.*

Laboratory course to be elected concurrently with PHYSICS 390. Students are provided with hands-on experience of the concepts of introductory modern physics.

**PHYSICS 401. Intermediate Mechanics**

*PHYSICS 351 or graduate standing. (Prerequisites enforced at registration.) PHYSICS 340 or 360 and one of MATH 216, 256, 286, or 316. (4). (BS). (QR/1). May not be repeated for credit.*

Newtonian and Lagrangian mechanics: Kinematics and dynamics in one, two, and three dimensions, vector analysis; motion under gravity, planetary motion; free and forced, damped and undamped harmonic oscillators; the conservation laws of mechanics; inertial and accelerated frames of reference, fictitious forces; rigid body mechanics; coupled oscillators.

**PHYSICS 402. Optics**

*PHYSICS 340 or 360, and one of: MATH 216, 256, 286, 296 or 316: or graduate standing. (Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit. A student can receive credit for only one of EECS 334 or PHYSICS 402.*

Topics studied cover the phenomena of physical optics, reflection, refraction, interference, diffraction, and polarization interpreted in terms of the wave theory of light. Selected topics in contemporary optics, such as adaptive optics, fiber optics, human vision, etc. also will be covered.

**PHYSICS 405. Intermediate Electricity and Magnetism**

*PHYSICS 351 or graduate standing. (Prerequisites enforced at registration.) PHYSICS 340 or 360, and one of: MATH 216, 256, 286, or 316. (4). (BS). May not be repeated for credit.*



This course provides a rigorous introduction to electricity and magnetism, suitable for junior year physics majors or engineering students. Subjects include static electric fields in vacuum, in matter and in vacuum and matter. Also includes time-dependent phenomena, electromagnetic induction and Maxwell's equations.

**PHYSICS 406. Statistical and Thermal Physics**

*(PHYSICS 340 or 360) and PHYSICS 351, or graduate standing. (Prerequisites enforced at registration.) (4). (BS). May not be repeated for credit.*

The course is an introduction to thermal processes, including the classical laws of thermodynamics and their statistical foundations. Topics discussed are: basic probability concepts, statistical description of systems of particles, thermal interaction, microscopic basis of macroscopic concepts such as temperature and entropy, laws of thermodynamics, elementary kinetic theory of transport processes.

**PHYSICS 411. Introduction to Computational Physics**

*PHYSICS 401 and [MATH 216 or 256 or 286 or 296 or 316]. Some familiarity with a computer language. (3). (BS). May not be repeated for credit.*

Introduction to techniques of computational physics with applications in optics, atomic, solid-state, nuclear and particle physics.

**PHYSICS 413 / CMPLXSYS 541.**

**Introduction to Nonlinear Dynamics and the Physics of Complexity**

*PHYSICS 401 or Graduate Standing. (Prerequisites enforced at registration.) An intermediate mechanics course (such as PHYSICS 401) and/or a course in introductory differential equations. (3). (BS). May not be repeated for credit. F.*

An introduction to nonlinear science with an elementary treatment from the point of view of the physics of chaos and fractal growth.

**PHYSICS 415. Undergraduate Research**

*Consent of instructor required. (1 - 6). (INDEPENDENT). May be repeated for a maximum of 8 credits. May be elected more than once in the same term.*

This course emphasizes experimental or theoretical research under the supervision of a faculty member. Generally a small facet of a large research undertaking is investigated in detail.

**PHYSICS 417 / BIOPHYS 417 / CHEM**

**417. Dynamical Processes in Biophysics**

*(MATH 216 or 256 or 286 or 296 or 316 or CHEM 262) and (BIOPHYS 370 or PHYSICS 340 or PHYSICS 360 or PHYSICS 370 or CHEM 463 or CHEM 370). (Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit.*

The physical basis of diffusive processes in biology and biochemistry, and optical spectroscopic means for measuring its rates. Topics include: membrane electrical potentials, nerve impulses, synaptic transmission, the physics of chemoreception by cells, motion and reaction kinetics of membrane components, optical microscopy, visible and UV light absorption, fluorescence and phosphorescence, quasielastic light scattering, mathematics of random fluctuations, and chaotic processes in biology.

**PHYSICS 420. Physics for Educators**

*School of Education concentrators. (3). May not be repeated for credit. No credit granted to those who have completed or are enrolled in PHYSICS 106. W.*

This course is a survey course for students preparing to teach at the elementary classroom level. The goal of the course is to provide a good and practical appreciation of the basic laws that govern our universe. In addition to homework questions there will be a variety of hands-on activities designed to demonstrate the rules of physics in action which might be adapted for use in elementary classrooms.

**PHYSICS 435. Gravitational Physics**

*PHYSICS 390 and 401; or graduate standing. (Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit. F.*

**PHYSICS 438. Electromagnetic Radiation**

*PHYSICS 405. (Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit.*

**PHYSICS 441. Advanced Laboratory I**

*PHYSICS 390 and any 400-level Physics course. (Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit. F.*

**PHYSICS 442. Advanced Laboratory II**

*PHYSICS 441. (Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit. W.*

This is the second semester advanced laboratory course. A wide selection of individual experiments are offered. Students must select 5 experiments from several different areas of physics in consultation with the lab instructor.

**PHYSICS 450 / BIOPHYS 450.**

**Laboratory Techniques in Biophysics**

*BIOPHYS 370 or CHEM 370 or PHYSICS 370; or PHYSICS 390; or CHEM 452 or BIOLCHEM 452; or graduate standing. (Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit. Rackham credit requires additional work.*

This laboratory course teaches essential laboratory skills in biophysics through hands-on experiments, computational work, and a supporting lecture.

**PHYSICS 452. Methods of Theoretical Physics II**

*PHYSICS 351. (3). (BS). May not be repeated for credit.*

This is an advanced course for undergraduate physics majors who need necessary preparation for graduate school. This course is also recommended to the first-year graduate student. The course will cover 1) group theory; 2) Hilbert Spaces; 3) special functions and properties; 4) boundary value problems and Green's function technique; and 5) calculus of variations.

**PHYSICS 453. Quantum Mechanics**

*PHYSICS 351 and PHYSICS 390; or graduate standing. (Prerequisites enforced at registration.) PHYSICS 401 and PHYSICS 405. (4). (BS). May not be repeated for credit.*

This course provides an introduction to quantum mechanics at the advanced undergraduate level. The underlying principles of quantum mechanics are discussed, with an emphasis placed on solutions of both the time-dependent and time-independent Schrodinger equations. Topics covered include quantization of angular momentum and the theory of the hydrogen atom.

**PHYSICS 457. Particle Physics and Cosmology**

*PHYSICS 453; or graduate standing. (Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit. W.*

This course is an introduction to particle physics and cosmology. It covers the following: quarks and leptons and their

interactions; conservation laws and symmetries; gauge theories and the standard model of particle physics; the expanding universe; nucleosynthesis; dark matter; and dark energy in the universe and large scale structure. Students are assumed to have basic knowledge of quantum mechanics and special relativity.

**PHYSICS 460. Quantum Mechanics II**

*PHYSICS 453; or graduate standing.*

*(Prerequisites enforced at registration.) (3).*

*(BS). May not be repeated for credit. W.*

**PHYSICS 463. Introduction to Solid State Physics**

*PHYSICS 453; or graduate standing.*

*(Prerequisites enforced at registration.) (3).*

*(BS). May not be repeated for credit. W.*

**PHYSICS 465. Advanced Topics in Physics**

*(1 - 4). (BS). May be elected three times for credit. May be elected more than once in the same term.*

This advanced topics-based course examines current issues in physics.

**PHYSICS 481 / PUBPOL 481. Science, Technology and Public Policy**

*(3). May not be repeated for credit. May not be included in a concentration plan in Physics.*

How should science and technology be used to solve social and policy problems? What values and assumptions underlie our current understandings of science and technology? Should only experts be involved in science and technology policymaking, or should lay people have a voice? How should policy makers deal with the risks and uncertainties that come from science and emerging technologies (such a biotechnology, nanotechnology, geoengineering)? Through hands-on exercises, organized debate, active participation, and short papers, students will explore these questions while

developing skills to analyze and engage with complex science and technology policy issues. this discussion-based course will bring an interdisciplinary perspective to bear on the most pressing science and technology policy challenges of the day, including the regulation of gene-editing technologies and autonomous vehicles, the Flint water crisis, and the deliberate release of genetically modified mosquitos to fight the Zika virus. We will explore both how science and technology are influenced by politics and public policy and how science and technology are used in policymaking process. This course is intended for upper-level undergraduate students from science, engineering, the humanities, social sciences, and the professional schools. No scientific or technical background is necessary.

**PHYSICS 496. Senior Thesis, I**

*Consent of instructor required. Permission of departmental concentration advisor. (2 - 3). (BS). (INDEPENDENT). May not be repeated for credit. Continuing Course. Y grade can be reported at end of the first-term to indicate work in progress. At the end of the second term of PHYSICS 497, the final grade is posted for both term's elections. F, W, Sp/Su, Sp, Su.*

**PHYSICS 497. Senior Thesis II**

*Consent of instructor required. Permission of departmental concentration advisor. (2 - 3). (BS). (INDEPENDENT). May not be repeated for credit. F, W, Sp/Su, Sp, Su.*

**PHYSICS 498. Introduction to Research for Honors Students**

*Consent of instructor required. Permission of departmental concentration advisor. (2 - 3). (BS). (INDEPENDENT). May not be repeated for credit. Continuing Course. Y grade can be reported at end of the first-term to indicate work in progress. At the end of the second term of PHYSICS 499, the final grade is posted for both term's elections. F, W, Sp/Su, Sp, Su.*

### **PHYSICS 499. Introduction to Research for Honors Students**

*Consent of instructor required. Permission of Physics concentration advisor. (2 - 3). (BS). (INDEPENDENT). May not be repeated for credit. F, W, Sp/Su, Sp, Su.*

## **Physiology (PHYSIOL)**

### **PHYSIOL 201. Introduction to Human Physiology**

*Students must have at least sophomore standing. Prior exposure to introductory chemistry is helpful. (4). (NS). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in PHYSIOL 502. F.*

This course emphasized the basic functions of organs, the interactions and coordination of these diverse functions, and attempts to analyze these functions in terms of physical and chemical processes. It is intended to meet the needs and expectations of many types of students.

### **PHYSIOL 306. Problems**

*Consent of instructor required. PHYSIOL 201. (1 - 4). (BS). (INDEPENDENT). May be repeated for a maximum of 8 credits. F, W, Sp/Su, Sp, Su.*

### **PHYSIOL 405. Research Problems**

*Consent of instructor required. (1 - 4; 1 - 2 in the half-term). (INDEPENDENT). May be repeated for a maximum of 8 credits. F, W, Sp/Su, Sp, Su.*

### **PHYSIOL 502. Human Physiology**

*Introduction to biology and biochemistry. (4). (BS). May not be repeated for credit.*

### **PHYSIOL 541 / ANATOMY 541 /**

### **PSYCH 532. Mammalian Reproductive Physiology**

*PHYSIOL 201 or PHYSIOL 502 or BIOL*

*225. (4). (BS). May not be repeated for credit. W.*

An introduction to the mammalian reproductive physiology for PhD, MS, and senior undergraduate students who are considering a career in the biomedical sciences.

### **PHYSIOL 576. Signal Transduction**

*Two terms of organic chemistry; BIOLCHEM 415 or 451/452. Physical Chemistry is strongly recommended. (1). (BS). May not be repeated for credit. F.*

A review of hormones and neurotransmitter receptors as well as the cellular effectors that are regulated by receptor activation. Oncogene products as signal transducers and the interaction of the known signaling pathways are also covered. The various techniques used to study signal transduction as well as important experimental strategies employing these techniques will also be presented.

## **Polish (POLISH)**

### **POLISH 121. First-Year Polish**

*(4). May not be repeated for credit. May not be repeated for credit. No credit granted to those who have completed or are enrolled in POLISH 123. F.*

Introductory course presenting basic grammatical information and vocabulary. Course is geared toward active language use through oral drills and conversational practice. Conversations and discussions include a cultural component to familiarize students with both Polish language and culture.

**POLISH 122. First-Year Polish**

*POLISH 121. (4). May not be repeated for credit. May not be repeated for credit. No credit granted to those who have completed or are enrolled in POLISH 123. W.*

A continuation of POLISH 121, First-Year Polish aims at establishing reading, writing, listening, and speaking skills. The primary focus is explaining grammar, reading, building vocabulary, and engaging in guided conversation. In addition to learning the language, students are introduced to Polish literature and culture through translation, music, and video presentations.

**POLISH 214 / REES 214. Rock Poetry and Political Protest in Poland**

*(3). (HU). May not be repeated for credit.*

An introduction to Polish history and culture through a detailed analysis of jazz, cabaret, rock, and punk music texts and performance styles and strategies. The course introduces students to rhetorical and contextual reading of verbal and non-verbal texts. It places Polish culture in the larger Central European context.

**POLISH 221. Second-Year Polish**

*POLISH 122. (4). May not be repeated for credit. May not be repeated for credit. F.*

Reading, conversation, and composition.

**POLISH 222. Second-Year Polish**

*POLISH 221. (4). (Lang Req). May not be repeated for credit. May not be repeated for credit. W.*

Reading, conversation, and composition.

**POLISH 314 / FTVM 314. Polish Cinema**

*(3). (HU). May not be repeated for credit.*

Course covers Polish cinema from WWII to the present, tracing the development of film styles in the context of the historical, political, and cultural features of Polish

society, with focus on the use of realist norms, intricate symbolism, and absurdist allegory to critique the loss of civic values under Communism.

**POLISH 321. Third-Year Polish**

*POLISH 222. (3). May not be repeated for credit. May not be repeated for credit. F.*

The course builds on the knowledge of Polish acquired during the first and second years. Equal emphasis will be laid on the development of reading, writing, and speaking skills. Considerable attention will be given to special points of grammar and syntax. Aural comprehension will be enhanced through the use of videotaped films in the Language Laboratory.

**POLISH 322. Third-Year Polish**

*POLISH 321. (3). May not be repeated for credit. May not be repeated for credit. W.*

The course builds on the knowledge of Polish acquired during the first and second years. Equal emphasis will be laid on the development of reading, writing, and speaking skills. Considerable attention will be given to special points of grammar and syntax. Aural comprehension will be enhanced through the use of videotaped films in the Language Laboratory.

**POLISH 325. Polish Literature in the Nineteenth Century: Reading the Stateless Nation**

*(3). (HU). May not be repeated for credit. No credit granted to those who have completed or are enrolled in POLISH 525.*

This course considers how Polish culture's response to statelessness, solidified with the country's Third Partition in 1795, evolved throughout a turbulent nineteenth century. Texts include works by Adam Mickiewicz, Juliusz Slowacki, Boleslaw Prus, Henryk Sienkiewicz, and others.

**POLISH 326. Polish Literature in English: 1890 to Present**

*(3). (HU). May not be repeated for credit. No credit granted to those who have completed or are enrolled in POLISH 526.*

This is a continuation of POLISH 325, although there is no prerequisite. The course covers the period from 1890 until the present. It surveys the development of Polish authors and major literary movements. Individual critical analyses of texts required. A knowledge of Polish is NOT required. All reading in English translation.

**POLISH 331 / HISTORY 331. Poland in the Modern World**

*(4; 3 in the half-term). (HU). May not be repeated for credit.*

The history of Poland from the restoration of independence in 1918 until the present day, including coverage of the Nazi occupation during WWII, the four decades of communism, and the path towards integration with Europe after 1989.

**POLISH 357. Polish Drama in Context**

*(3). (HU). May not be repeated for credit.*

This course examines the theater's role in reflecting and shaping Poland's turbulent, fascinating history. It features a genre-based exploration of the prominent role that theater and dramatic texts continue to play in Polish society. No knowledge of Polish is required.

**POLISH 421. Fourth-Year Polish I**

*POLISH 322. (3). May not be repeated for credit. May not be repeated for credit.*

This course aims at developing both reading and spelling fluency by building idiomatic skills and studying culture as reflected in linguistic patterns and grammatical structures. Readings of specialized texts

selected according to student's academic and professional interests.

**POLISH 422. Fourth-Year Polish II**

*POLISH 421. (3). May not be repeated for credit. May not be repeated for credit.*

This course aims at developing both reading and spelling fluency by building idiomatic skills and studying culture as reflected in linguistic patterns and grammatical structures. Readings of specialized texts selected according to student's academic and professional interests.

**POLISH 450. Directed Polish Reading**

*Consent of instructor required. POLISH 325 and/or 326 and reading knowledge of Polish. (1 - 4). (INDEPENDENT). May be repeated for a maximum of 8 credits.*

Extensive reading of Polish texts in various fields. All reading done in the Polish original.

**POLISH 491. Senior Honors Course**

*Consent of instructor required. Approval of departmental Honors Committee. (3). May not be repeated for credit. Credit is granted for a combined total of six credits of POLISH 491 and 492. Continuing Course. Y grade can be reported at end of the first-term to indicate work in progress. At the end of the second term, the final grade is posted for both term's elections.*

This course is the first half of the Honors course. Students begin work on a thesis of fifty to one hundred pages on a topic in literary, cultural, or linguistic studies, producing a first draft of a portion of the thesis.

**POLISH 492. Senior Honors Course**

*Consent of instructor required. Approval of departmental Honors Committee. (3). May be repeated for a maximum of 6 credits. Credit is granted for a combined total of six credits of POLISH 491 and 492.*

This course is the second half of the yearlong Honors course during which the student produces a draft of a thesis of fifty to one hundred pages on a topic in literary or linguistic studies. In consultation with a thesis supervisor and the Honors advisor, the student writes the final version of the thesis.

## Political Science (POLSCI)

### **POLSCI 101. Introduction to Political Theory**

*Primarily for first and second year students. (4). (SS). May not be repeated for credit. F, W, Sp.*

Inquiry into our assumptions about politics and the words we use to express them. Persistent political questions, such as the nature of power, authority, freedom, and justice, will be discussed in classic and modern contexts.

### **POLSCI 111. Introduction to American Politics**

*Primarily for first and second year students. (4). (SS). May not be repeated for credit.*

### **POLSCI 140. Introduction to Comparative Politics**

*Primarily for first- and second-year students. (4). (SS). May not be repeated for credit. F, W.*

### **POLSCI 160. Introduction to World Politics**

*(4). (SS). May not be repeated for credit. F, W, Su.*

### **POLSCI 190. First-Year Seminar in Political Science**

*Enrollment restricted to first-year students,*

*including those with sophomore standing. (3). (SS). May not be repeated for credit.*

This course is designed to introduce first-year students to political science topics in a seminar format. The content varies, depending on the instructor.

### **POLSCI 195. Special Topics Mini Course**

*Consent of department required. (1 - 2). May be elected twice for credit.*

A mini course focused on a specific topic in political science.

### **POLSCI 230. Honors Core in Political Science**

*Consent of department required. (4). (SS). May be elected twice for credit. May be elected more than once in the same term.*

As part of the Honors Core Curriculum, this course introduces Honors students to the fields, questions and meta-questions, and methodologies of the Social Sciences; in this case, Political Science. The course uses both contemporary technology and time-honored methodologies to examine theoretical concepts, problems, and case studies; the course uses a variety of formats and strategies.

### **POLSCI 240. Honors Core Writing in Political Science**

*Consent of department required. (4). (SS). (FYWR). May be elected twice for credit. May be elected more than once in the same term.*

As part of the Honors Core Curriculum, this course introduces Honors students to the fields, questions and meta-questions, and methodologies of the Social Sciences; in this case, Political Science. The course uses both contemporary technology and time-honored methodologies to examine theoretical concepts, problems, and case studies; the course uses a variety of formats and strategies.

**POLSCI 299. Directed Undergraduate Internship in Political Science**

*Consent of department required. Declared political science concentrator. (1). (EXPERIENTIAL). May be elected twice for credit. Offered mandatory credit/no credit.*

This course allows political science concentrators under the direction of faculty supervision to receive credit for a full-time internship of a least 8 weeks or the equivalent in part-time work (at least 320 hours). The goal of an approved job or internship is to enrich student's academic experience and/or allows them to explore related careers related. Credit MAY NOT be used to satisfy elective credits for the concentration.

**POLSCI 300. Quantitative Empirical Methods of Political Science**

*One Political Science course. (4). (SS). (BS). (QR/1). May not be repeated for credit.*

This course offers an introduction to the methods political scientists use to construct, to estimate, and to evaluate empirical representations of theoretical propositions about politics. The course stresses the formulation of positive political theories and the use of data to estimate the empirical models reflecting and to evaluate the hypotheses derived from the theories.

**POLSCI 301. Development of Political Thought: To Modern Period**

*(3). (SS). May not be repeated for credit.*

This course examines the principal theorists who have influenced political thought and development from the fifth century B.C. to the early seventeenth century A.D.

**POLSCI 302. Development of Political Thought: Modern and Recent**

*POLSCI 101. (3). May not be repeated for credit.*

This course examines the principal theorists who have influenced political thought and development in the period from the seventeenth century to the present.

**POLSCI 306. American Political Thought: Early**

*POLSCI 101 or upperclass standing. (3 - 4; 3 in the half-term). (SS). May not be repeated for credit.*

This course examines the principal American contributions to political theory.

**POLSCI 307. American Political Thought: Late**

*POLSCI 101 or 111. (3 - 4). (SS). May be elected twice for credit. May be elected more than once in the same term.*

This course focuses on specific themes in American political thought. Examples include: a specific historical period in American politics (such as the Colonial Era, early Republic, Reconstruction, Progressive Era); or a particular theme (race, development of rights or the state, inequality). The course serves as a bridge between the general study of American politics and political theory.

**POLSCI 309 / ENVIRON 307.**

**Theoretical Perspectives on Environmental Change**

*POLSCI 101. (3 - 4). (SS). May be elected twice for credit.*

This course draws upon concepts from Western political theory to examine the political and ethical issues posed by environmental change.

**POLSCI 310. The Politics of Public Policy**

*POLSCI 111. (Prerequisites enforced at registration.) (4). May not be repeated for credit. No credit granted to those who have completed or are enrolled in PUBPOL 320.*



This course provides students with an introduction to the policymaking process. The goal is to understand how policies are created and why we get the specific policies that we have. To this end, our focus will be on the factors that affect the creation of public policies, rather than on an assessment of how well these policies are working. In other words, we will focus on the policy process, rather than on policy outcomes.

**POLSCI 311. American Political Processes**

*POLSCI 111 or upperclass standing. (3). (SS). May not be repeated for credit.*

This course is a survey of mass public and elite behavior and the interaction between masses and elites. Topics discussed include public opinion and electoral behavior, political parties and interest groups, relations between office-holders and the public, and alternative models for describing the American political system.

**POLSCI 312. Persuasive Politics: Voters, Campaigns and Communication Strategies**

*(4). (SS). May not be repeated for credit.*

In this course, we will accomplish two things. First, we will become familiar with the logic of running a political persuasion campaign. For this purpose, we will study current research on persuasion as well as current research on campaigns. Second, each student will participate in the design of a persuasion campaign. Throughout the semester, we will discuss how to design the campaign. In the last two weeks of the class, every student will take part in a presentation for the entire class. They will then take questions from the class about the content and strategy of the presentation.

**POLSCI 315. Media and Public Opinion**  
*POLSCI 111 or upperclass standing. (4; 3*

*in the half-term). (SS). May not be repeated for credit.*

This course discusses the effects of the media on the beliefs, values, and choices of ordinary citizens. It examines evidence of media influence in evaluations of government; attitudes toward war and foreign policy; formation of group identities and stereotypes; and learning about and choosing candidates in elections, among other topics.

**POLSCI 316 / HISTORY 235. History of Law and Social Justice**

*(3 - 4; 3 in the half-term). (SS). May not be repeated for credit.*

This course examines the evolution of cause lawyering in the United States. Students will learn how some lawyers have used law as an instrument of social change, challenging the idea of law and legal practice as neutral or scientific. We will explore the ethical obstacles to this practice. We will see how clients, communities, and activists have influenced the practice of law. Students will become familiar with the instruments of legal advocacy: the brief, the oral arguments, the amicus curiae, and the judicial opinion. We will end with a critical rethinking of cause lawyering and how the interests of lawyers and legal organizations may sometimes be at odds with the clients they represent.

**POLSCI 317. Constitutional Law: Cases and Controversies**

*One course in Political Science. (3). May not be repeated for credit.*

This course explores major cases in U.S. Constitutional Law. Students will brief cases and evaluate whether they follow precedent and are supported by constitutional materials. Through other disciplines, we discuss how these decisions impacted the socio-legal culture. The so-

called "Culture Wars" provide "cases and controversies" to explore that topic.

**POLSCI 318. American Constitutional Politics**

*POLSCI 111. (3). May not be repeated for credit.*

This course examines Supreme Court interpretations of the Constitution and the political implications of these interpretations. Court cases and interpretive essays are among the readings.

**POLSCI 319 / HISTORY 411. The Politics of Civil Liberties and Civil Rights**

*POLSCI 111. (4). (R&E). May not be repeated for credit.*

This course examines a number of Supreme Court decisions in the field of civil liberties and civil rights. In addition to delineating the political significance of the decisions, some emphasis is also placed on the dynamics of compliance with the Court's stated policy.

**POLSCI 320. The American Presidency**

*POLSCI 111 or upperclass standing. (Prerequisites enforced at registration.) (4; 3 in the half-term). (SS). May not be repeated for credit.*

This course surveys the development of the office and functions of the chief executive and an analysis of the sources and nature of executive power in American national and state government. Primary attention is given to the presidency.

**POLSCI 321. Political Strategy and Debate**

*Not available for students who have completed POLSCI 389, Topic = Political Strategy and Debate (Topic Id # = 47). (Prerequisites enforced at registration.) POLSCI 111 and Junior or Senior standing. (3). May not be repeated for credit.*

In this class, we examine strategies that transform individual desires into government actions. We learn how to use data and evidence to engage politics more effectively.

**POLSCI 323 / ENVIRON 324.**

**Introduction to Water Law and Policy**

*Previous course in Environment, Political Science, or Public Policy. (3). (SS). May not be repeated for credit.*

This course will survey the history, politics and cultural contexts that inform United States water law and policies of prior appropriation, riparian, federal reserve, and groundwater rights. In addition, the course will examine the role of population growth, energy and climate change in formulating current and future water policy.

**POLSCI 324 / AAS 418. Black Americans and the Political System**

*One course in Political Science and AAS 201. (3). May not be repeated for credit.*

This course focuses on the status of Blacks in the American political system. Students analyze the capacity and the capability of the political system for negotiating internal conflicts involving Black/White relationships.

**POLSCI 326. American State Government**

*POLSCI 111 or upperclass standing. (Prerequisites enforced at registration.) (3). (SS). May not be repeated for credit.*

This course examines processes; administrative functions; personnel and fiscal problems; nation-state, interstate, and state-local relations; and the future of the states in the federal system.

**POLSCI 328 / COMM 328. Media and Democracy**

*COMM 101 or COMM 102 strongly*

*recommended. (4). May not be repeated for credit.*

Modern representative democracy depends on mass media. This course focuses on the complex roles that both traditional and social media play in increasing (or decreasing) citizens' knowledge of public affairs, and enhancing (or diminishing) political representation.

**POLSCI 329 / COMM 329. Mass Media and Political Behavior**

*(4). (SS). May not be repeated for credit.*

Focuses on the role and importance of mass media in the political process. Topics include: how news is made; political advertising; relations between Congress, the President and the media; and the role of mass media in political campaigns. These topics are examined through a systematic review of research in both mass communication and political science.

**POLSCI 331 / ENVIRON 345 / SOC 380. Environmental Public Opinion Analysis**

*One of the following: AP STATS 180, STATS 250, STATS 280, or SOC 210. (3). (SS). May not be repeated for credit.*

This course examines trends in environmental public opinion, influences on people's concerns about the environment, the depth and strength of concerns, and how environmental concerns affect personal behaviors and the political process. It also introduces students to useful statistical concepts and procedures for analyzing and interpreting public opinion data.

**POLSCI 332. The Politics of America's Economic Inequality**

*Not available for students who have completed POLSCI 389, Topic = Politics of Inequality in U.S. (Topic Id # = 73). (Prerequisites enforced at registration.) Some coursework in U.S. politics is*

*recommended but not required. (4). (SS). May not be repeated for credit.*

This course first explores the causes and consequences of the recent, sharp rise in economic inequality (in terms of income and wealth) in the United States. It then assesses whether inequality should be considered a problem, and - if so - what, if anything, could be done to reduce it.

**POLSCI 333. Comparative Elections and Election Reform**

*POLSCI 111 or POLSCI 140. (3). May not be repeated for credit. No credit granted to those who have previously completed or are enrolled in POLSCI 389: Elections and Election Reform" with Professor Allen Hicken.*

This course examines the problem of how politicians and policies are selected by citizens. The mechanics of elections (rules, procedures) have enormous impact on what sorts of choices voters are offered, what sorts of coalitions politicians form, whose interests get represented in the policymaking process, and, ultimately, what policies are chosen.

**POLSCI 334 / ANTHRCUL 317 / HISTORY 228 / REEES 397 / SLAVIC 397 / SOC 317. Communism and Capitalism in Eastern Europe**

*(4). (SS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in REEES 396 or SLAVIC 396 or POLSCI 396 or HISTORY 333 or SOC 393.*

An overview of East Central Europe from 1945 to the present. The first half of the course explores the workings of state socialism from an anthropological perspective (with particular focus on political economy and material culture) from the Stalinist 1950s to the more diversified decades of the 1960s to 1980s.

The second half covers the "revolutions" of 1989 and contemporary social, cultural, economic and political processes, including struggles over membership to the E.U.

**POLSCI 336. Energy Politics**

*One course in Political Science. (3). (SS). May not be repeated for credit.*

Meeting the surging energy needs of their citizens represents one of the most daunting challenges facing governments across the world. This course examines the politics of electricity provision, the impacts of natural resource wealth, and environmental politics in both democratic and non-democratic settings, with a special focus on the developing world.

**POLSCI 337. State and Market in Contemporary China**

*(4). May not be repeated for credit.*

Introduction to the political economy of China since the beginning of market reforms, with a focus on the role of the government in the reform process.

**POLSCI 338. The Constitution Outside of the Courts**

*(3). May not be repeated for credit.*

What is the history and value of a politics of constitutional interpretation outside of the courts? A first aim of the class is to expose students with interests in law to the major controversies in US history whose resolution happened through non-judicial means. Cases we study may include the Constitution's ratification, post-war Reconstruction, the labor movement, the creation of the United Nations, the 1964 Civil Rights Act, the Iran-Contra scandal, and contemporary judicial confirmation hearings. A second aim is to consider what these politics suggest about core themes in the field of law and courts: for example, issues around partisanship and constitutional interpretation; the

establishment of judicial review; the role of a constitution in resolving conflict.

**POLSCI 339 / ASIAN 428. China's Evolution Under Communism**

*Upperclass standing. (4; 3 in the half-term). May not be repeated for credit.*

This course is an analysis of developments since 1949 with particular emphasis on the evolution of political control, economic development, and social change and their relationship to ideology.

**POLSCI 340. Governments and Politics in Western Europe**

*POLSCI 140 or upperclass standing. (4). (SS). May not be repeated for credit.*

This course analyzes the political systems of France, Great Britain, Germany, and Italy. Emphasis is placed on the nature and source of political conflict. Students devote special attention to one or more of the countries discussed.

**POLSCI 342 / ANTHRCUL 343. Eastern Europe: Revolution, Reaction, and Reform**

*POLSCI 140 or upperclass standing. (3). (SS). May not be repeated for credit.*

This course is a survey of the political and social development of Eastern Europe under socialism. Major themes include the political cultures of the area, communist accession to power, totalitarianism and its erosion, elite-mass relations, the role of public opinion and interest groups, and economic and political change.

**POLSCI 348. Political Economy of Development**

*(3). May not be repeated for credit.*

This course provides an introduction to the study of states, markets, and prosperity in developing countries.

**POLSCI 350 / JUDAIC 451. The Politics and Culture of Modern East European Jewry**

*A course in East European and/or Jewish history, and Comparative Politics is recommended. (3). May not be repeated for credit.*

The course emphasizes the inter-relationships between the communal institutions of East European Jews and the ways in which this ethnic and religious minority developed the means of dealing with states and the larger societies.

**POLSCI 352. How to be an Autocrat**

*(4). (SS). May not be repeated for credit. No credit granted to those who have completed POLSCI 389: Coercion in Autocracies with Mai Hassan.*

Autocrats are in a precarious position - facing threats from the population who wants greater democratization and other regime elites who want to replace them. How do autocrats navigate these threats? In this course, we study how to be an autocrat. After understanding the different nature of threats that autocrats face, we then move into the different ways that autocrats design their regimes to temper these threats including coup-proofing their security apparatus, discriminate and indiscriminate violence against the population, and co-optation. The last big theme is how authoritarian regimes are held accountable for their actions.

**POLSCI 353. The Arab-Israeli Conflict**

*(4). May not be repeated for credit.*

After providing background information about Israel and the Arab world, including the Arabs of Palestine, the course will trace the historical development of the Israeli-Palestinian conflict from its origins in the 19th century until the present. The course will also examine the most important issues

associated with the conflict, giving special attention to the competing territorial claims advanced by Israelis and Palestinians and to the rights of self-determination asserted by each. In discussing controversial issues, the course will strive for objectivity and balance and will provide opportunities for the expression of differing points of view.

**POLSCI 354 / SEAS 354. Governments and Politics of Southeast Asia**

*One course in Political Science or upperclass standing. (3). (SS). May not be repeated for credit.*

This course analyzes political developments in the countries of Southeast Asia defined in terms of Vietnam, Cambodia, Thailand, Laos, Burma, Malaysia, Singapore, Indonesia, and the Philippines.

**POLSCI 355 / AAS 356. Democracy and Development in Africa**

*(4). May not be repeated for credit.*

This course investigates the deep historical and more contemporary explanations for these diverse political and economic outcomes, through case studies of political development in particular countries, analyses of broader patterns for the continent as a whole, and consideration of Africa in the context of the broader developing world.

**POLSCI 359 / AAS 359. African Politics**

*AAS 200. (3 - 4; 3 in the half-term). May not be repeated for credit.*

A comparative survey of the African states and territories, with primary emphasis on the process of decolonization, the continued dependent status of African states, obstacles to change, and alternative strategies of development.

**POLSCI 362 / HISTORY 312. History of European Integration**

(4; 3 in the half-term). (ID). May not be repeated for credit.

This course aims to introduce students from humanistic and social scientific backgrounds to the study of European integration and trans-national identity formation, viewed as contested and contingent historical processes.

**POLSCI 368. Modern Warfare**

No credit given to students who took this as a topics course under POLSCI 389 topic ID #79. (Prerequisites enforced at registration.) POLSCI 160. (4). (SS). May not be repeated for credit.

This course offers an introduction to the study of war in the modern world. The lectures and readings are organized into three modules: (1) why wars begin, (2) how wars are fought, and (3) how wars end. In the first module, we will cover major theories of war from international relations, and use them to explain the outbreak of a number of major international and civil conflicts. In the second module, we examine why some states are better at fighting wars than others, and explore the basics of military strategy in land, air and naval warfare, as well as counterinsurgency. The third module will turn our focus to conflict resolution, particularly the role of military intervention, peacekeeping, and negotiation. Cases considered in this course include World War I, World War II, the Arab-Israeli conflict, and a variety of contemporary civil and interstate wars.

**POLSCI 369. Politics of International Economic Relations**

POLSCI 101, 111, 140 or 160. (4; 3 in the half-term). (SS). May not be repeated for credit.

The course deals with the manner in which politics and economics interact in three areas of world politics; the relations

between the industrialized nations of the West, the Cold War and detente, and North-South relations. Specialized topics such as the political determinants of the terms of trade, the transnational corporation and the politics of international monetary relations are integrated into the course.

**POLSCI 371. The American Foreign Policy Process**

One course in Political Science. (3). May not be repeated for credit.

This course analyzes the processes by which contemporary United States foreign policies are made and implemented.

**POLSCI 380 / ENVIRON 312 / PUBPOL 312. Environmental Politics and Policy**

(3). May not be repeated for credit.

This course is an advanced offering on environmental politics and the environmental policy-making process. The course will consider both processes of policy formation and implementation, placing particular emphasis on the development of alternatives to conventional regulatory practices at federal, state, and local levels of government.

**POLSCI 381. Political Science Research Design**

(3). (SS). May not be repeated for credit.

This course aims to (1) expose students to conducting research in political science and (2) give student tools for identifying a problem, designing a methodology for investigating the problem, and proposing an outline for an argument. Required for students applying to the Political Science honors program.

**POLSCI 383. Political Science Research Opportunity**

Consent of instructor required. (1 - 3). (INDEPENDENT). May be repeated for a

*maximum of 6 credits. May be elected more than once in the same term.*

Opportunity for students to participate in a research project.

**POLSCI 384. Directed Studies**

*Consent of instructor required. (1 - 3). (INDEPENDENT). May be repeated for a maximum of 6 credits. May be elected more than once in the same term.*

A directed study on any subject agreed upon by a student and an advising instructor that does not duplicate a regular course. Students wishing to enroll for a directed study course must work out the details of before the start of the term with a supervising faculty member.

**POLSCI 385. Political Science Special Topics Mini Course**

*(1 - 2). May be elected twice for credit. May be elected more than once in the same term.*

A mini course focused on specific topics in Political Science.

**POLSCI 386 / GERMAN 379 / SOC 379. Sports, Politics, and Society**

*One introductory course in sociology or political science. (3). (SS). May not be repeated for credit. No credit for those who have completed SOC 212/GERMAN 212.*

This course embraces broadly-based theories of society and politics to comparatively examine sports in the U.S. and Europe. Sports are closely tied to societal values on both sides of the Atlantic and furnish an excellent example for the study of popular attitudes and behavior.

**POLSCI 387. Comparative Analysis of Government Institutions**

*Two courses in political science or junior standing. (3 - 4). (SS). (QR/2). May not be repeated for credit.*

This course addresses the large institutional questions in comparative politics. It explores the differences between presidentialism vs. parliamentarism, two vs. multiparty systems, disciplined vs. weak parties, unicameralism vs. bicameralism, and the role of bureaucrats vs. the judiciary.

**POLSCI 388 / ASIAN 389. Culture in East Asian Business, Past and Present**

*At least one Asian culture course on history, economics, politics, or popular culture. (4). (ID). May not be repeated for credit.*

This course examines the historical and cultural contexts of business in Asia (China, Japan, Korea, Hong Kong, Taiwan, India, and Thailand).

**POLSCI 389. Topics in Contemporary Political Science**

*One course in Political Science. (3 - 4). (SS). May be repeated for a maximum of 10 credits. May be elected more than once in the same term.*

Contemporary topics in Political Science; content and number of credits varies by term and instructor.

**POLSCI 390. Ottawa Internship Credit**

*Consent of department required. (3). (EXPERIENTIAL). (INDEPENDENT). May not be repeated for credit.*

This course is for students who participate in the Ottawa Internship Program through UM-Dearborn and want to receive credit through the Political Science department at UM-Ann Arbor.

**POLSCI 391 / CMPLXSYS 391. Introduction to Modeling Political Processes**

*One course in Political Science. (4). (SS). (BS). (QR/1). May not be repeated for credit.*

An introduction to constructing, manipulating, and evaluating logical and mathematical models of social and political processes. Topics to be considered may include rational choice, game theory, learning processes and exchange processes.

**POLSCI 392. Michigan in Washington: Preparatory Seminar**

*Consent of department required. Admission to Michigan in Washington Program. (2). May be elected twice for credit. Continuing Course. Y grade can be reported at end of the first-term to indicate work in progress. At the end of the second term, the final grade is posted for both term's elections. Offered mandatory credit/no credit.*

This course prepares students for the Michigan in Washington semester. The fundamental guiding principle for the class is to cover whatever a student needs in order to have a successful internship in Washington, D.C. and conduct meaningful original research in the research seminar.

**POLSCI 393. Inside Washington, D.C.**

*Consent of instructor required. (1). (EXPERIENTIAL). May not be repeated for credit. Offered mandatory credit/no credit.*

For participants in the Michigan in Washington (MIW) undergraduate internship program. Students attend eight speeches, discussions, panels, or presentations on the history, politics, society, economics, and culture of Washington, and its role as the nation's capital. Speakers include government officials, leaders of corporations and non-profit organizations, scientists, journalists, museum curators, musicians, and artists.

**POLSCI 395 / HISTORY 332 / REEES 395 / SLAVIC 395 / SOC 392. Russia and the Soviet Union: Reform, Revolution, and the Socialist Experiment**

*(4; 3 in the half-term). (SS). May not be repeated for credit. May not be counted in a Slavic Department academic minor. F.*

This interdisciplinary course explores the extraordinary history of the Russian Empire, later the Soviet Union, and now Russia and fourteen other states, among them Ukraine, the "stans" of Central Asia, Armenia, Georgia, and the Baltic republics.

**POLSCI 396 / REEES 396 / SLAVIC 396 / SOC 393. East Central Europe: Nationalism, Socialism, Democracy**

*(3 - 4). (SS). May not be repeated for credit. May not be counted in a Slavic Department academic minor.*

This interdisciplinary course explores the extraordinary history of the Russian Empire, later the Soviet Union, and now Russia and fourteen other states, among them Ukraine, the "stans" of Central Asia, Armenia, Georgia, and the Baltic republics.

**POLSCI 398. Michigan In Washington: Internship**

*Consent of department required. (2). (EXPERIENTIAL). May not be repeated for credit. Offered mandatory credit/no credit.*

This course is intended to give credit for internship work that enhances the academic progress of students participating in the Michigan in Washington program. Under the direct supervision of an MIW faculty member, students participate in internship work 32 hours a week during the MIW semester.

**POLSCI 399. Advanced Internship in Political Science**

*Consent of instructor required. Political Science majors who have completed at least two-upper-level POLSCI courses. (3). (EXPERIENTIAL). May be elected twice for credit.*



Directed internship programs or field study in international, national, state, or local government agencies.

**POLSCI 401 / WGS 422.**

**Feminist Political Theory**

*Junior standing. (3). May not be repeated for credit.*

**POLSCI 402. Liberalism and Its Critics**

*POLSCI 101 or 302. (3). May not be repeated for credit.*

This course examines liberalism, still the dominant political tradition of the West, and of its chief rivals: conservatism, Marxism, Fascism, communitarianism, and feminism.

**POLSCI 406. Democratic Theory**

*POLSCI 101 or 302. (3). May not be repeated for credit.*

This course studies the competing conceptions of democracy: Rousseau, Toqueville, Mill and includes critiques from economists and sociologists. Selected policy issues are included in judicial review, representative ethics, the connection between capitalism and democracy and the rationality of voting.

**POLSCI 407. Marxism and 20th-Century Radicalism**

*POLSCI 101 or 302. (Prerequisites enforced at registration.) (3). May not be repeated for credit.*

**POLSCI 410. Washington Experience Seminar**

*Consent of instructor required. (2). (EXPERIENTIAL). May not be repeated for credit. Offered mandatory credit/no credit.*

The goal of this course is to prepare participants in the Michigan in Washington Program for a semester in the nation's capital. Students review the basic principles of American national government, both structure and process. The course readings

are designed to give students a more "hands-on" understanding of politics in D.C. than other usual courses.

**POLSCI 411. Michigan In Washington: National Capital Research Project**

*Consent of department required. (4). May not be repeated for credit.*

This course explores how to identify good research questions and credible research methods. Students are expected to formulate a question or hypothesis, write an extensive literature review, develop a research design, and insofar as possible, execute the research and write the results in a paper.

**POLSCI 421. Law and Gender**

*Not available for students who have completed POLSCI 496, Topic = Law and Gender (Topic Id # = 11). (Prerequisites enforced at registration.) Senior standing. (3). May not be repeated for credit.*

This course examines legal constructions of gender and the distributions of opportunities and constraints tied to those constructions. Focusing on rights claims and the legal regulation of gender in the areas of marriage/divorce, employment, and sexual violence, the course has a historical dimension and explores theoretical approaches to gender equality.

**POLSCI 427. Race and the Shaping of American Politics**

*Not available for students who have completed POLSCI 496, Topic = Race and Shaping of American Politics (Topic Id # = 34). (Prerequisites enforced at registration.) Senior standing. (3). May not be repeated for credit.*

Race has surged powerfully through American politics, shaping the unfolding of politics and party contests over time. This course examines race as an evolving ideology and system of power, "decoding"

the ways in which race has infused the politics of labor, immigration, housing, drugs, welfare, crime, mass incarceration, and policing.

**POLSCI 432. Law and Public Policy**

*Two courses in Political Science, including POLSCI 111 or its equivalent. (4; 3 in the half-term). May not be repeated for credit.*

Courts are policy makers. Judges are called upon to "apply" the law to specific disputes that are brought before them, and this process is anything but mechanical. Judges create the law as they resolve specific disputes, often disguising their own creativity. Throughout the course, we inquire into the techniques judges use to make policy and consider whether the courts are up to the task of policy making which confronts them with every decision.

**POLSCI 434 / HISTORY 434.**

**Russia/USSR in the 20th and 21st Centuries: War, Revolution, and Reform**  
*(4). May not be repeated for credit.*

History of the political, social, economic and intellectual forms of Bolshevism, as they developed in pre-revolutionary Russian society, and as they applied in domestic and foreign policies after 1917.

**POLSCI 435. Research Seminar on the Israeli-Palestinian Conflict**

*Consent of instructor required. (3). May not be repeated for credit.*

This course will examine the Israeli-Palestinian conflict through the lens of disciplinary political science research. It seeks to increase familiarity both with political science scholarship on the Israeli-Palestinian conflict and with the logic and methodology of political science research. Topics to be covered include Israeli politics and society, Palestinian politics and society, and important actions, attitudes, and events

associated with the conflict between Israelis and Palestinians.

**POLSCI 436. Research Seminar on Middle East Politics and Society**

*Consent of instructor required. (3). May not be repeated for credit.*

This course will examine politics and society in the Middle East and North Africa through the lens of disciplinary political science research. It seeks to increase familiarity both with political science scholarship on MENA politics and society and with the logic and methodology of political science research. Topics to be covered include governance, political processes and institutions, and politically-salient considerations pertaining to religion, gender, the economy, and international affairs.

**POLSCI 455. Democratization in Sub-Saharan Africa After the End of the Cold War**

*(3). May not be repeated for credit.*

In the years immediately following the fall of the Berlin Wall, democratization spread to sub-Saharan Africa. The number of countries there that held multi-party elections rose from 9 to more than 30; today, nearly all countries in sub-Saharan Africa now hold elections. This course investigates sub-Saharan Africa's shift towards democracy, the subsequent authoritarian back-sliding of many countries, and the impact of electoral competition on different aspects of political life.

**POLSCI 464. Advanced Public International Law**

*POLSCI 160. (3). May not be repeated for credit.*

This seminar will consider advanced questions in international law: When is it rational for states to leave certain aspects of

international agreements informal? How do treaties evolve to accommodate changing circumstances? Under what conditions is secrecy useful for treaty negotiations? Finally, when is leadership necessary for international cooperation and who will provide it?

**POLSCI 485. Election Forensics**

*Political Science major. (3). (QR/2). May not be repeated for credit.*

Did the official winner of an election really win? The 2000 election for president in the United States raised that question sharply, when many claimed the wrong man took office. This course reviews these methods - everything from analyzing precinct and voting machine election returns to post-election audits.

**POLSCI 486. Public Opinion, Political Participation, and Pressure Groups**

*One course in Political Science. (Prerequisites enforced at registration.) (3). May not be repeated for credit.*

**POLSCI 489. Advanced Topics in Contemporary Political Science**

*Seniors only. (3 - 4). May be repeated for a maximum of 9 credits. May be elected more than once in the same term.*

A senior level course taught by faculty on advanced topics in political science.

**POLSCI 490. Game Theory and Formal Models**

*(4). May not be repeated for credit.*

An introduction to game theory and other kinds of formal modeling, with an emphasis on models of political systems.

**POLSCI 491. Michigan in Washington: Advanced Topics**

*Consent of instructor required. Two courses in Political Science and permission of instructor and the Director of Undergraduate Studies. (3). May be*

*repeated for a maximum of 8 credits. POLSCI 491 and 492 may be elected for a combined maximum of eight credits. No more than four credits of directed study credit may be elected as part of a concentration program in Political Science. F.*

Advanced topics in Political Science taught by faculty as part of the Michigan in Washington Program.

**POLSCI 492. Michigan in Washington: Advanced Topics**

*Consent of instructor required. Two courses in Political Science and permission of instructor and the Director of Undergraduate Studies. (3). May be repeated for a maximum of 8 credits. POLSCI 491 and 492 may be elected for a combined maximum of eight credits. No more than four credits of directed study credit may be elected as part of a concentration program in Political Science. W.*

Advanced topics in Political Science taught by consortium faculty as part of the Michigan in Washington Program.

**POLSCI 493. Senior Honors Proseminar**

*Open only to senior Honors concentrators. (4). (INDEPENDENT). May not be repeated for credit. No more than four Honors credits may be elected as part of a concentration plan in Political Science. Continuing Course. Y grade can be reported at end of the first-term to indicate work in progress. At the end of the second term (POLSCI 494), the final grade is posted for both term's elections. F.*

**POLSCI 494. Senior Honors Proseminar**

*Open only to senior Honors concentrators. (4). (INDEPENDENT). May not be repeated for credit. No more than four Honors credits may be elected as part of a concentration plan in Political Science. W.*

**POLSCI 495. Undergraduate Seminar in Political Theory**

*One of the following: POLSCI 101, 301, 302, 307, 309; or PHIL 366; or GTBOOKS 191 or 192. (Prerequisites enforced at registration.) (3 - 4; 3 in the half-term). May be elected twice for credit. May be elected more than once in the same term.*

Selected topics in political theory.

**POLSCI 496. Undergraduate Seminar in American Government and Politics**

*Senior standing; primarily for seniors concentrating in Political Science. (3 - 4). May be elected twice for credit. May be elected more than once in the same term.*

Selected topics in American government.

**POLSCI 497. Undergraduate Seminar in Comparative and Foreign Government**

*Senior standing; primarily for seniors concentrating in Political Science. (3 - 4). May be elected twice for credit. May be elected more than once in the same term.*

Selected topics in comparative and foreign governments.

**POLSCI 498. Undergraduate Seminar in International Politics**

*Senior standing; primarily for seniors concentrating in Political Science. (3 - 4). May be elected twice for credit. May be elected more than once in the same term.*

Selected topics in international politics.

**POLSCI 499. Survey Design and Analysis**

*(3). May not be repeated for credit.*

The course will deliver best practices for survey construction (questionnaire building, question wording, sampling, and data analysis). We will agree on a topic and build the public opinion survey in that domain. We will collect the data, test

hypotheses, and prepare reports which will serve as the final thesis papers.

**POLSCI 514. The Use of Social Science Computer Programs**

*Consent of instructor required. POLSCI 599/equivalent or permission of instructor. (2). May not be repeated for credit.*

## Portuguese (PORTUG)

With over 250 million speakers, Portuguese is the seventh most widely spoken language in the world. It's also one of the half dozen most understood languages on Earth. It is the language of Brazil and Portugal, as well as the official language of Angola, Mozambique, Cape Verde, Guinea-Bissau, Macao, São Tomé and Príncipe, and East Timor.

**Placement Test.** Students who intend to continue a language begun in high school or another college or university must take the Placement Test to determine the language course in which they should enroll. Please note that students may not take the Portuguese placement test more than one time. To schedule a Portuguese placement test with the instructor, please contact the RLL main office at (734) 764-5344 for more information.

**PORTUG 101. Elementary Portuguese**

*(4). May not be repeated for credit. No credit granted to those who have completed or are enrolled in PORTUG 100 or 415.*

**PORTUG 102. Elementary Portuguese**

*PORTUG 101 completed with a minimum grade of C- or better. (Prerequisites enforced at registration.) Students who have not taken PORTUG 101 at UM must schedule a placement exam with the instructor. (4). May not be repeated for*

*credit. No credit granted to those who have completed or are enrolled in PORTUG 100 or 415.*

Oral practice, grammar, and reading.

**PORTUG 231. Second-Year Portuguese**  
*PORTUG 102, completed with a minimum grade of C- or better. (Prerequisites enforced at registration.) Students who have not taken PORTUG 102 at UM must schedule a placement exam with the instructor. (4). May not be repeated for credit. No credit granted to those who have completed or are enrolled in PORTUG 230.*

**PORTUG 232. Second-Year Portuguese**  
*PORTUG 231 (C- or better) or PORTUG 415 (C- or better). (Prerequisites enforced at registration.) Students who have not taken PORTUG 231 at UM must schedule a placement exam with the instructor. (4). (Lang Req). May not be repeated for credit. No credit granted to those who have completed or are enrolled in PORTUG 230.*

This theme course reviews specific topics and focuses on cultural awareness. Students practice and improve reading, writing, listening, and speaking skills that characterize the intermediate mid/high levels of proficiency. Students also discuss issues of relevance to the Brazilian society, while expressing their own personal opinions, reactions, conclusions, and possible outcomes of contemporary issues. Grammar and vocabulary are integrated into the content. Materials include newspaper and magazine articles, crônicas, cultural readings, videos, films, songs, Internet explorations, and computer resources.

**PORTUG 280. Portuguese for Speakers of Romance Languages**  
*One of: SPANISH 275, 276, 277, or 278; or RCLANG 324; or FRENCH 235; or ITALIAN 230, 232, or 233. Valid prerequisite options also include the following study abroad equivalents*

*(registration student groups): SP27 (completed SPANISH 277 abroad) and F235 (completed FRENCH 235 abroad) as well. (Prerequisites enforced at registration.) (3). May not be repeated for credit. No credit granted to those who have completed or are enrolled in PORTUG 100, 101, or 102.*

Accelerated Portuguese course providing knowledge of grammatical structure, speaking, listening, reading and writing skills.

**PORTUG 283. Portuguese for the Professions**  
*PORTUG 232 or 280. (Prerequisites enforced at registration.) (3). May not be repeated for credit.*

Intermediate-advanced Portuguese language course designed for students interested in working in the realms of business, international relations, and the medical profession in connection to the Portuguese-speaking world (Brazil, Portugal, and/or Lusophone Africa, Angola, Cape Verde, Guinea-Bissau, Mozambique, and Sao Tome and Principe).

**PORTUG 287. Advanced Portuguese Conversation and Composition**  
*PORTUG 232 or 280 or 415. (Prerequisites enforced at registration.) (3). May not be repeated for credit.*

An intensive advanced review of the Portuguese language in all skills (speaking, writing, reading, and comprehension).

**PORTUG 290. Conversation through Film and Popular Music**  
*PORTUG 232, PORTUG 280, or PORTUG 415; or equivalent (POR4 student group). (Prerequisites enforced at registration.) (3). May not be repeated for credit.*

A course for students interested in contemporary Portuguese-speaking

societies. It is aimed at increasing students' oral communication skills and their knowledge of current affairs in Brazil, Portugal, and/or Lusophone Africa.

**PORTUG 301. Topics in Afro-Luso-Brazilian Cultures**

*PORTUG 287. (3). May be repeated for a maximum of 9 credits. May be elected more than once in the same term.*

Issues related to one or more Portuguese-speaking nations studied through a multi-disciplinary lens including written, visual, sonic, or media culture.

**PORTUG 315. Contemporary Issues in the Portuguese- and Spanish-Speaking Worlds**

*PORTUG 280 or its equivalent to prove advanced proficiency in the Portuguese language. (3). May be repeated for a maximum of 6 credits.*

Comparative study of socio-political and historical issues as reflected in contemporary cultural production across the Portuguese- and Spanish-speaking worlds (including Brazil/Spanish-speaking Latin America, Portugal/Spain, and/or Lusophone Africa).

**PORTUG 342. Culture, Power, and Politics in Brazil**

*PORTUG 280 or its equivalent to prove advanced proficiency in the Portuguese language. (3). May be repeated for a maximum of 6 credits.*

The study of historical and contemporary Brazil through an examination of the political dimensions of various cultural movements and the cultural dimensions of important political struggles. The course helps students consider how Brazilian actors have contested or defended power relationships through cultural practices. Taught in Portuguese.

**PORTUG 350. Independent Study**

*Consent of instructor required. PORTUG 232. (1 - 3). (INDEPENDENT). May be repeated for a maximum of 6 credits.*

Independent study in Portuguese language (advanced), or introductory level literature of civilization. Projects may seek to combine language instruction with an initiation to research in civilization or literature. Intended primarily to those students to whom no regular classroom instruction is available.

**PORTUG 471. Literature in the Portuguese-Speaking World**

*PORTUG 287 or its equivalent to prove advanced proficiency in the Portuguese language. (3). May not be repeated for credit. Taught in Portuguese.*

This course is an advanced introduction to the study of literature written in Portuguese from Brazil, Portugal, and Lusophone Africa (more specifically Angola, Mozambique, Cape Verde, Guinea-Bissau, and Sao Tome and Principe).

**PORTUG 472. Cinema in the Portuguese-Speaking World**

*PORTUG 287 or its equivalent to prove advanced proficiency in the Portuguese language. (3). May not be repeated for credit.*

This course offers an advanced-level introduction to the film cultures of Brazil, Portugal, and Lusophone Africa (more specifically, Cape Verde, Guinea-Bissau, Mozambique, and Angola).

**PORTUG 473. Popular Music in the Portuguese-Speaking World**

*PORTUG 287 or its equivalent to prove advanced proficiency in the Portuguese language. (3). May not be repeated for credit.*

This course is an advanced introduction to the popular music of Brazil, Portugal, Cape Verde, and Angola, focusing on the emergence of contemporary popular music in a variety of forms while paying close attention to the specific historical, socio-cultural, and political forces that have shaped its formation in these specific countries.

**PORTUG 474. Advanced Topics in Afro-Luso-Brazilian Cultures**

*PORTUG 287 or its equivalent to prove advanced proficiency in Portuguese. (3). May be repeated for a maximum of 6 credits. May be elected more than once in the same term.*

Issues in the arts, humanities and/or social sciences related to one or more Portuguese-speaking nations. Topics are studied through a multi-disciplinary lens including critical theory as well as written, visual, sonic, and/or media cultural expressions.

**PORTUG 499. Advanced Independent Study**

*Consent of instructor required. PORTUG 287 or its equivalent to prove advanced proficiency in the Portuguese language. (1 - 3). (INDEPENDENT). May be repeated for a maximum of 6 credits.*

The focus will be on cultural aspects of the Portuguese-speaking world that may not be covered during a given semester.

## **Philosophy, Politics, and Economics (PPE)**

**PPE 300. Introduction to Political Economy**

*Two introductory courses chosen from at least two disciplines: Philosophy, Political*

*Science, and Economics. (4; 2 in the half-term). (ID). May not be repeated for credit.*

An introduction to the integrated study of the relationships of government, politics, and economic institutions, stressing the analysis of collective action problems and assessment of diverse solutions to these problems from the standpoint of the interests and progress of humanity.

**PPE 400. Seminar in Political Economy**

*PPE 300 with at least a C-. (Prerequisites enforced at registration.) Completion of distribution requirements for PPE concentration. (3; 2 in the half-term). May not be repeated for credit.*

Capstone seminar for non-Honors students in the Philosophy, Politics, and Economics concentration.

**PPE 402. Senior Honors Thesis**

*Honors standing and permission of instructor. (1 - 3). May not be repeated for credit. Continuing Course. Y grade can be reported at end of the first-term to indicate work in progress. At the end of the second term, the final grade is posted for both term's elections.*

Students work with an advisor to develop their ideas into a thesis of appropriate length. They defend their thesis at an oral exam, conducted by their advisor and a second reader from a different PPE-affiliated department. The level of honors (honors, high honors, highest honors) is determined on the basis of thesis and defense.

## **Psychology (PSYCH)**

**PSYCH 111. Introduction to Psychology**

*(4). (SS). May not be repeated for credit. No credit granted to those who have completed*

*or are enrolled in PSYCH 112, 114, or 115. PSYCH 111 may not be included in a major in Psychology or a major in Biopsychology, Cognition, and Neuroscience. Students in PSYCH 111 are required to spend five hours outside of class participating as subjects in research projects. F, W, Sp, Su.*

**PSYCH 112. Introduction to Psychology as a Natural Science**

*(4). (NS). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in PSYCH 111, 114, 115, or 116. PSYCH 112 may not be included in a major in Psychology or a major in Biopsychology, Cognition, and Neuroscience. Students in PSYCH 112 are required to spend five hours outside of class participating as subjects in research projects.*

**PSYCH 114. Honors Introduction to Psychology**

*LSA Honors Students. (Prerequisites enforced at registration.) Non-honors students must obtain permission of instructor. (4). (SS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in PSYCH 111, 112, or 115. May not be included in a major in Psychology or a major in Biopsychology, Cognition, and Neuroscience. Students in PSYCH 114 are required to spend three hours outside of class participating as subjects in research projects.*

A general introduction to the basic concepts and problems of psychology as a behavioral science.

**PSYCH 119 / WGS 119. Gender, Sex, and Sexuality in Science and Medicine**

*First year students only. (Prerequisites enforced at registration.) (3). (NS). (BS). May not be repeated for credit.*

This first year seminar explores current bioscientific research (e.g. neuroscientific, biomedical, evolutionary, etc.) on gender, sex, and sexuality, as well as ongoing feminist insights into how scientists and the public come to develop and understand this body of knowledge.

**PSYCH 120. First-Year Seminar in Psychology as a Social Science**

*Enrollment restricted to first-year students, including those with sophomore standing. (3). (SS). May not be repeated for credit. Does not count toward the requirements for the Psychology major nor the major in Biopsychology, Cognition, and Neuroscience.*

A small seminar, which will introduce entering students to the topic of Psychology and issues which are important in the field of psychology. Through this seminar, students will be able to develop an understanding of how various theories and applications of the discipline of psychology may be helpful in understanding the world.

**PSYCH 121. First-Year Seminar in Psychology as a Natural Science**

*Enrollment restricted to first-year students, including those with sophomore standing. (3). (NS). (BS). May not be repeated for credit. Does not count toward the requirements for the Psychology major nor the major in Biopsychology, Cognition, and Neuroscience.*

A small seminar which will introduce entering students to the topic of Psychology and issues which are important in the field of psychology. Through this seminar, students will be able to develop an understanding of how various theories and applications of the discipline of psychology may be helpful in understanding the world.

**PSYCH 122 / ALA 122 / SOC 122. Intergroup Dialogues**



*Consent of instructor required. (3). (R&E). May be repeated for a maximum of 6 credits. May not be used as a prerequisite for, or included in a major in Psychology. Does not count toward the requirements for the major in Biopsychology, Cognition, and Neuroscience.*

In a multicultural society, discussions about issues of conflict and community are needed to facilitate understanding between social/cultural groups. In this intergroup dialogue, students will participate in semi-structured face-to-face meetings across social identity groups. Students will discuss relevant reading material and will explore group experiences in various social and institutional contexts. Participants will examine narratives and historical, psychological, and sociological materials. Students will participate in exercises that will be debriefed in class and in weekly journals. Students will learn about pertinent issues facing the participating groups on campus and in society. The goal is to create a setting in which students engage in open and constructive dialogue, learning, and exploration concerning issues of intergroup relations, conflict, and community.

**PSYCH 200. Independent Study in Psychological Issues**

*Consent of instructor required. One of the following: PSYCH 111, 112, 114, 115, 120, or 121. (1 - 4). (INDEPENDENT). May be repeated for a maximum of 4 credits.*

This independent study course allows students to work closely with a faculty member to study a topic of interest beyond the classroom setting. Students work closely with faculty to design their independent study project.

**PSYCH 211. Project Outreach**

*Prior or concurrent enrollment in an introductory Psychology course. (3). (EXPERIENTIAL). May be repeated for a*

*maximum of 6 credits. May be elected more than once in the same term. This course may only be repeated if a different section is selected. All sections of Outreach count as an experiential lab for the Psychology major; they do not count as a lab for the Biopsychology, Cognition, and Neuroscience major.*

A variety of projects exhibiting the application of psychological principles in natural settings. Lectures, discussions, field work, weekly journals and mid-term and final papers and exam.

**PSYCH 213 / ALA 220 / SOC 218.**

**Foundations of Intergroup Relations**

*No credit granted if you've already taken UC 218, ALA 220, SOC 218, or PSYCH 218 with the topic "Foundations in Intergroup Relations (#2). (Prerequisites enforced at registration.) (3). (SS). May not be repeated for credit.*

This introductory course examines the theory behind how social identity groups form, how bias develops (prejudice, stereotyping, and discrimination), and how people come to understand their own social identity group membership in the context of a society where privilege and power exist. Students can expect to participate in class through individual and group projects as well as class discussion.

**PSYCH 218. Sophomore Seminar in Psychology as a Social Science**

*An introductory course in psychology or similar social science. (3 - 4). (SS). May not be repeated for credit. Does not count toward the requirements for the Psychology major.*

This seminar introduces students to topics of interest in the field of psychology. Content includes material drawn from current research and scholarship on topics specific to faculty research interests. The

goal is to help students understand how theory and methods of the Social Science disciplines are applied to particular issues in psychology.

**PSYCH 220. Introduction to Biopsychology, for Non-BCN or Non-Neuroscience majors**

(4). (NS). (BS). May not be repeated for credit.

This introductory course for non-majors covers a wide range of topics in Biopsychology from the structure and function of a neuron and neural transmission, to integrating sensory information, to the output of behavior.

**PSYCH 223 / ALA 223. Entrepreneurial Creativity**

No credit is granted for students who previously took UC 270 with the topic "Entrepreneurial Creativity" (#27). (Prerequisites enforced at registration.) (3). May not be repeated for credit. Does not count toward the requirements for the Psychology or Biopsychology, Cognition, and Neuroscience majors.

This class was created to serve as the LS&A core course for the Entrepreneurship minor, and explores the relation between creativity, innovation, and problem-solving processes. We will consider the elements of creative thinking, explore insights from a variety of perspectives, and engage in projects designed to foster students' own creativity and innovation.

**PSYCH 225 / WGS 225. Psychology of Human Sexuality**

(3). (SS). May not be repeated for credit. Does not count as a breadth course for Psychology or BCN majors.

This course addresses social and psychological aspects of sexuality, including sexual orientations, sexual adjustment and satisfaction, alternative

sexualities, sexually transmitted infections, sexual disorders, sex work and the social construction of sexuality.

**PSYCH 226. Undergraduate Research in Psychology**

Consent of instructor required. (1 - 4). (EXPERIENTIAL). May be repeated for a maximum of 8 credits. Credit is granted for a combined total of 8 credits in any UROP research course.

This two term course offers research experience to first- and second-year students in an area of mutual interest to the student and to faculty members from the Psychology Department. This course is administered through the Undergraduate Research Opportunity Program. Apply at: <http://www.lsa.umich.edu/urop>

**PSYCH 230. Introduction to Behavioral Neuroscience**

(PSYCH 111 or 112 or 114 or 115) or (BIOLOGY 171 or 172 or 174 or 192 or 195). (Prerequisites enforced at registration.) Basic familiarity with biology and chemistry. (4). (NS). (BS). May not be repeated for credit.

Introduces the kinds of questions traditionally addressed by physiological and comparative psychologists. Biopsychology is the study of how psychological processes relate to the brain and to evolution. A major focus is on how brain processes cause psychological events and behavior, and how psychological events are encoded in the brain (physiological psychology or behavioral neuroscience).

**PSYCH 240. Introduction to Cognitive Psychology**

PSYCH 111 or 112 or 114 or 115 or 116. (Prerequisites enforced at registration.) (4). (NS). (BS). May not be repeated for credit.

This is a general introduction to cognitive psychology. Topics covered include

perception, learning, memory, language, imagery, reasoning, problem-solving and decision making. In covering these topics, relevant methods, data and theory will be reviewed. Historical and interdisciplinary aspects of many of these topics will be touched upon.

**PSYCH 242 / COGSCI 209 / LING 209.  
Language and Human Mind**

*Not available to students who have completed LING 103 (courseID 020035), Topic: Language and Mind, (Topic #6). (Prerequisites enforced at registration.) (4; 3 in the half-term). (ID). May not be repeated for credit. Does not count toward the requirements for the Psychology major.*

This course introduces students to the fascinating "cognitive revolution" in contemporary language study, illuminating the Chomskyan shift away from speech behavior or "languages" as the objects of inquiry to the experimental and theoretical study of the biological/cognitive and mechanisms underlying our unique human capacity for language.

**PSYCH 250. Introduction to  
Developmental Psychology**

*One of the following: PSYCH 111, 112, 114, or 115. (Prerequisites enforced at registration.) (4). (SS). May not be repeated for credit.*

This course provides an overview of the milestones of human development from conception to death. The physical, cognitive, social, and emotional growth of children, adolescents, and adults are examined, as are the various factors (e.g., genetics, parenting, peer groups, schooling, and the media) that influence development. The goal is to provide an introduction to the main issues, central theories, and dominant research methods in development psychology.

**PSYCH 270. Introduction to  
Psychopathology**

*One of the following: PSYCH 111, 112, 114, or 115. (Prerequisites enforced at registration.) (4). (SS). May not be repeated for credit.*

This course will introduce students to the field of clinical psychology and abnormal and deviant behavior. It will have a life span coverage, beginning with problems of life span infancy, childhood, adolescence, adult development and the elderly. It will survey bio-psychosocial perspectives with respect to the problems described.

**PSYCH 280. Introduction to Social  
Psychology**

*One of: PSYCH 111 or 112 or 114 or 115 or 116. (Prerequisites enforced at registration.) (4). (SS). May not be repeated for credit.*

An introductory study of the interrelationships of the functioning of social systems and the behavior and attitudes of individuals.

**PSYCH 290. Introduction to the  
Psychology of Personality**

*One of: PSYCH 111 or 112 or 114 or 115 or 116. (Prerequisites enforced at registration.) (4). (SS). May not be repeated for credit.*

This course is an introduction to the study and science of personality - consistencies in people's thoughts, feelings, and behavior over time and across situations. The focus is on current empirical research and modern theories of personality.

**PSYCH 291 / WGS 291.  
Introduction to the Psychology of  
Women and Gender**

*PSYCH 111, 112, 114, 115, 116 or WGS 220. (Prerequisites enforced at registration.) (4). (SS). (R&E). May not be repeated for credit.*

This course focuses on feminist theories and empirical findings on the psychology of women and gender. Specifically, the lived experiences of women, the social construction of gender, the gendered nature of social institutions, and the way that gender intersects with race/ethnicity, sexual orientation, social class, and other social categories.

**PSYCH 296 / HISTORY 296 / WGS 296. Gender, Sex Differences, and Addiction: Girls Gone Wild**  
(3 - 4; 3 in the half-term). (SS). May not be repeated for credit.

This course will unpack the concepts of sex differences, gender, and addictions and place current scientific findings in a historical perspective. Focusing on the U.S., we will look at examples of compulsive behaviors from the colonial era to the present, tracing how they and ideas about gender have changed over time.

**PSYCH 297 / WGS 297. Promoting Equity and Inclusion in the University and the Workplace**  
(3). (SS). (R&E). May not be repeated for credit.

The course enlists students in advancing diversity, equity and inclusion. Students explore how diversity, equity and inclusion arise in particular settings, the academy, corporate, government, laboratory, and non-governmental organizations. We examine the impact of social identities, inclusion/belonging, unconscious bias and stereotypes, the role of allies, community engagement, and leadership.

**PSYCH 302. Research Methods in Cognitive Neuroscience**  
One of STATS 250 OR STATS 280; and one of the following: PSYCH 220, 230, or 240. (Prerequisites enforced at registration.) (3).

(BS). May be repeated for a maximum of 6 credits.

The goal of this course is to train students in the methods of cognitive neuroscience, with a particular focus on cognitive psychology and functional MRI.

**PSYCH 303. Research Methods in Psychology**  
One of STATS 250, STATS 280, STATS 425, or MATH 425; and one of PSYCH 230, 240, 250, 260, 270, 280, or 290. (Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit.

This writing-intensive course provides an overview of the how's and why's of research in psychology, covering such topics as library resources, design, ethics, APA-style writing, and statistics and such a general strategies as case studies and qualitative research, observations and field studies, surveys and questionnaires, quasi-experiments, experiments of nature, and laboratory experiments. It consists of a weekly lecture, in which general ideas about research will be presented, and a weekly lab/discussion in which research projects will be planned and presented.

**PSYCH 304. Practicum in Teaching and Leading Groups**  
Consent of instructor required. One of the following: PSYCH 111, 112, 114, or 115 and permission of instructor. (2 - 4). (EXPERIENTIAL). May be repeated for a maximum of 6 credits. A maximum of 12 credits may be elected through PSYCH 304, 305, 306, 307, and 308. A total of six credits of Psychology letter-graded experiential courses may be counted for the Psychology concentration.

**PSYCH 305. Practicum in Psychology**  
One of the following: PSYCH 230, 240, 250, 260, 270, 280, or 290. (1 - 4). (EXPERIENTIAL). May be repeated for a maximum of 6 credits. May be elected more

than once in the same term. A maximum of 12 credits may be elected through PSYCH 304, 305, 306, 307, and 308. A total of six credits of PSYCH letter-graded experiential courses may be counted for the Psychology concentration. PSYCH 305 must be taken for at least three credits to count as an experiential lab in the Psychology concentration.

Students will participate in a class which includes participation in a practicum setting as well as classroom lecture and discussion as well as completion of readings, journals, projects, papers and examinations as required.

**PSYCH 306. Project Outreach Group Leading**

*Consent of instructor required. PSYCH 211 and one of the following: PSYCH 111, 112, 114, or 115 and permission of instructor. (3). (EXPERIENTIAL). May be repeated for a maximum of 6 credits. A maximum of 12 credits may be elected through PSYCH 304, 305, 306, 307, and 308. A total of six credits of Psychology letter-graded experiential courses may be counted for the Psychology concentration.*

**PSYCH 307. Directed Experiences with Children**

*Consent of instructor required. One of the following: PSYCH 111, 112, 114, or 115 and permission of instructor. (3 - 4). (EXPERIENTIAL). May be repeated for a maximum of 7 credits. A maximum of 12 credits may be elected through PSYCH 304, 305, 306, 307, and 308. A total of six credits of Psychology letter-graded experiential courses may be counted for the Psychology concentration. F, W, Sp/Su, Sp, Su.*

**PSYCH 308. Peer Advising Practicum in Psychology**

*Consent of instructor required. Admission by application. At least junior standing in the Psychology or Brain, Behavior and*

*Cognitive Sciences concentration. (2 - 3). (EXPERIENTIAL). May be repeated for a maximum of 6 credits. A maximum of 12 credits may be elected through PSYCH 304, 305, 306, 307, and 308. A total of six credits of Psychology letter-graded experiential courses may be counted for the Psychology concentration.*

**PSYCH 309 / WGS 309.**

**Psychology of Social Change: Gender & Global Feminisms**

*One course in either Women's Studies or Psychology. May not be repeated for credit.*

In this course we will consider how individuals generally and feminists in particular, are shaped by changing political and economic conditions, especially during times of upheaval and rapid social transformation. We will also examine how this is different for individuals who are not raised to adulthood in such times. Second, we will examine how and why some individuals become engaged in creating social change (and others do not).

**PSYCH 310 / ALA 320 / SOC 320. Processes of Intergroup Dialogues Facilitation**

*Admission by application. Previous participation in UC 122/PSYCH 122/SOC 122 strongly encouraged. (3). (R&E). May not be repeated for credit. May be used as an experiential lab in the Psychology concentration. A total of six credits of Psychology letter-graded experiential courses may be counted for the Psychology concentration.*

Designed to give students a foundation in the skills and knowledge needed to facilitate multicultural group interactions, including structured intergroup dialogues. Topics include: basic group facilitation skills and their applications to multicultural settings; social identity group development;

prejudice and stereotyping and their effects on groups; etc.

**PSYCH 311 / ALA 321 / SOC 321.**

**Practicum in Facilitating Intergroup Dialogues**

*PSYCH 310/SOC 320 and permission of instructor. (4). (EXPERIENTIAL). May not be repeated for credit. A total of six credits of Psychology letter-graded experiential courses may be counted for the Psychology concentration.*

This practicum follows PSYCH 310 or SOC 320, and requires applied work in facilitating intergroup dialogues. Students also participate in weekly supervision seminars to discuss their work in the dialogue groups. They also discuss theory and practice of group observation, in-out group conflict intervention skills, intergroup communication, and community building.

**PSYCH 312 / ALA 228 / SOC 375.**

**Intergroup Conflict and Coexistence: Religion, Ethnicity and Culture**

*(3). May not be repeated for credit.*

This course examines examples of social conflict based on religion, ethnicity and culture, interdisciplinary theories that help to understand the nature of such conflict, and current coalition building and coexistence work among various religious, ethnic and cultural groups. Experiential activities enhance learning about intergroup conflict and coexistence work.

**PSYCH 314. Positive Psychology**

*One of the following: PSYCH 111, 112, 114. (Prerequisites enforced at registration.) (3). (SS). May not be repeated for credit.*

This seminar concerns itself with the basics of positive psychology. Positive psychology calls for as much focus on strength as on weakness, as much interest in building the best things in life as in repairing the worst,

and as much attention to fulfilling the lives of healthy people as to healing the wounds of the distressed.

**PSYCH 316 / AAS 331. The World of the Black Child**

*One course in Psychology or Afro-American and African Studies. (3). May not be repeated for credit.*

**PSYCH 318 / COMM 318. Media and Violence**

*COMM 281 strongly recommended. (4). May not be repeated for credit. No credit granted to students who have completed COMM/PSYCH 481, Media & Violence (Crse ID #019987).*

This course examines the psychological causes of aggressive violent behavior and the theoretical and empirical connections between violence in society and portrayals of violence in the mass media. It surveys the research on the physiological, psychological, and environmental factors implicated in the development of habitual aggressive and violent behavior and examines the theories that explain how exposure to violence in the mass media adds to the effects of these other factors causing aggressive and violent behavior.

**PSYCH 321 / HISTORY 305. American Addictions**

*(4; 3 in the half-term). (ID). May not be repeated for credit.*

Our subject is addiction. What is it? Why does it matter? This course explores how certain kinds of behavior (and people) have been studied, understood, and treated under the rubric of "addiction" in the United States. We will focus on how theories of addiction and its treatment have embodied different views of personhood, agency, and ethics. One aim of the course is to combine humanistic and scientific ways of thinking, including through individual and collaborative writing projects that bring past

and present understandings of addictive substances and behaviors into conversation. This approach is essential to grappling with the political, philosophical, and personal consequences of how we study and stigmatize particular ways of life. Our focus on crucial texts in the history of science and medicine means that we will engage with technical material from psychology, psychiatry, and neuroscience, while our approach to this work will draw on methods from across the humanities. Given recent and ongoing events surrounding opioid use and dependency as well as the intersections of race, gender, and class with addiction and its treatment, we will consistently return to the uses of history in the present.

**PSYCH 322. Field Practicum in Research Techniques for Psychology as a Natural Science**

*Consent of instructor required. One of the following: PSYCH 230, 240, 250, 260, 270, 280, or 290, and permission of instructor. (1 - 4). (BS). (EXPERIENTIAL). May be repeated for a maximum of 6 credits. Credit is granted for a combined total of six credits of PSYCH 322, 323, 326, 327. Credits may not be counted in the Psychology or BCN major. Offered mandatory credit/no credit.*

This field practicum course offers an opportunity to apply academic knowledge in natural science within the context of a research setting. Credit is granted for a combined total of twelve credits of PSYCH 404, PSYCH 405, PSYCH 322 and PSYCH 323, and for a maximum of fifteen credits for PSYCH 211, PSYCH 404, PSYCH 405, PSYCH 322 and PSYCH 323. This course may be taken for a maximum of two terms and/or four credits with the same instructor. These credits do not count towards the Psychology concentration.

**PSYCH 323. Field Practicum in Research Techniques for Psychology as a**

**Social Science**

*Consent of instructor required. One of the following: PSYCH 230, 240, 250, 260, 270, 280, or 290, and permission of instructor. (1 - 4). (EXPERIENTIAL). May be repeated for a maximum of 6 credits. Credit is granted for a combined total of six credits of PSYCH 322, 323, 326, 327. Credits may not be counted in a concentration plan in Psychology. Offered mandatory credit/no credit.*

This field practicum course offers an opportunity to apply academic knowledge in social science within the context of a research setting. The course provides experience and education in research techniques. The student works with the instructor on various aspects of psychological research, completes readings, keeps a journal and completes a paper which integrates the readings and experiences in the research setting.

**PSYCH 324 / ALA 322 / SOC 324. Advanced Practicum in Intergroup Relations**

*Consent of instructor required. UC 320/PSYCH 310/SOC 320. (1 - 4). (EXPERIENTIAL). May be repeated for a maximum of 8 credits. A total of six credits of Psychology letter-graded Research-based courses may be counted towards the Psychology concentration.*

This course is for students doing advanced applied work in intergroup relations.

**PSYCH 325 / AMCULT 321. Detroit Initiative**

*One of the following: PSYCH 111, 112, 114, or 115. (1 - 4). (EXPERIENTIAL). May be elected three times for credit. A total of six credits of PSYCH letter-graded experiential courses may be counted for the Psychology major. PSYCH 325 must be taken for at least three credits to count as an experiential lab in the Psychology*

*major. No more than 6 credits of directed readings/internships may be counted toward the American Culture major.*

In this experiential field course students are assigned to work with community-based organizations on a variety of community education projects. Internships are supervised by the instructor and program staff.

**PSYCH 326. Faculty Directed Early Research for Psychology as a Natural Science**

*Consent of instructor required. One of: PSYCH 230, 240, 250, 260, 270, 280, or 290 with at least a grade of C. (1 - 4). (BS). (INDEPENDENT). May be repeated for a maximum of 6 credits. May be repeated for a maximum of 6 credits. A student may elect a combined maximum of 6 credits of PSYCH 322, 323, 326 and 327. A total of six credits of Psychology letter-graded Research-based courses may be counted towards the Psychology concentration.*

The student works with the instructor on various aspects of psychological research, completes readings, collects and analyzes data and produces a written report as directed by the instructor.

**PSYCH 327. Faculty Directed Early Research for Psychology as a Social Science**

*Consent of instructor required. One of: PSYCH 230, 240, 250, 260, 270, 280, or 290 with at least a grade of C. (1 - 4). (INDEPENDENT). May be repeated for a maximum of 6 credits. May be repeated for a maximum of 6 credits. A student may elect a combined maximum of 6 credits of PSYCH 322, 323, 326 and 327. A total of six credits of Psychology letter-graded Research-based courses may be counted towards the Psychology concentration.*

The student works with the instructor on various aspects of psychological research, completes readings, collects and analyzes data and produces a written report as directed by the instructor.

**PSYCH 330. Topics in Biopsychology**  
*PSYCH 230. (Prerequisites enforced at registration.) (3). (NS). (BS). May be elected twice for credit. May be elected more than once in the same term.*

This course presents topics of special interest to students and faculty. Topics will vary according to the current research trends within this discipline of biopsychology.

**PSYCH 331. Research Methods in Brain, Behavior, and Cognitive Science**

*Consent of instructor required. Admission by application. Completion of STATS 250 or STATS 280 or STATS 425 or MATH 425; and one of the following: PSYCH 230, 240, 335, or 345. (4). (BS). May not be repeated for credit. Satisfies a Psychology research-based laboratory requirement.*

This course introduces students to selected research methods used in the field of biopsychology (brain and behavior and animal behavior) or cognitive science.

**PSYCH 333. Affective Neuroscience**  
*PSYCH 230. (Prerequisites enforced at registration.) (3). (NS). (BS). May not be repeated for credit.*

This course examines fundamental questions such as, how is pleasure generated in the brain? How does fear relate to desire? Can an emotion ever be truly unconscious? How is real behavior produced by brains?

**PSYCH 334. Neuroscience of Learning and Memory**  
*PSYCH 230 or BIOLOGY 225.*



*(Prerequisites enforced at registration.) (3). (NS). (BS). May not be repeated for credit.*

This course surveys molecular, synaptic, and neural mechanisms of learning and memory. Topics will span many levels of biological organization from genes to behavior. The course will present an integrative picture of the organization and function of learning/memory systems in simple and complex nervous systems.

**PSYCH 335. Evolution and Animal Behavior**

*One of the following: PSYCH 111, 112, 114, 115, BIOLOGY 162, 163, 171, 172, 195 or ANTHRBIO 161. (Prerequisites enforced at registration.) (4). (NS). (BS). May not be repeated for credit.*

This course studies the evolution of animal behavior and the mechanisms underlying behavior. We explore the why and how questions using classic and contemporary studies in animal behavior, and cover basic theory as well as some of the endocrine, genetic, and neurological bases of behavior.

**PSYCH 336. Drugs of Abuse, Brain and Behavior**

*PSYCH 230 or BIOLOGY 225. (Prerequisites enforced at registration.) (BIOLOGY 162 or 163 or 172 or 195) and a CHEM course. (3). (NS). (BS). May not be repeated for credit.*

Basic introduction to the neuropsychopharmacology of drug abuse and addiction.

**PSYCH 337. Hormones and Behavior**

*PSYCH 230. (Prerequisites enforced at registration.) (3). (NS). (BS). May not be repeated for credit.*

This course will discuss hormonal influences on animal behavior. The relations between hormones, brain and behavior will be discussed in a variety of

species. Behaviors to be discussed include hormonal influences on sexual behavior, courtship behavior, parental behavior, aggression, learning and memory, thirst, feeding, cognitive functions, and stress responses.

**PSYCH 338 / ANTHRBIO 368. Primate Social Behavior I**

*(4). (NS). (BS). May not be repeated for credit. F.*

This course describes and explains primate societies and is first in a sequence of two. The course investigates sex, aggression, cooperation, social development and group structure.

**PSYCH 339. Biopsychology of Cooperation**

*PSYCH 230 or 335. (Prerequisites enforced at registration.) (3). (NS). (BS). May not be repeated for credit.*

This course will provide an in depth look at the evolution and neuroscience of cooperation.

**PSYCH 340. Topics in Cognition and Cognitive Neuroscience**

*PSYCH 240. (Prerequisites enforced at registration.) (3). (NS). (BS). May be elected twice for credit. May be elected more than once in the same term.*

This course presents topics of special interest to students and faculty. Topics will vary according to the current research trends within this discipline of cognition and cognitive neuroscience.

**PSYCH 341. Advanced Laboratory in Cognitive Psychology**

*PSYCH 240 or 245 or 345; and one of the following: STATS 250, STATS 280, STATS 425, or MATH 425. (Prerequisites enforced at registration.) (3). (NS). (BS). May not be repeated for credit. Satisfies a Psychology research-based laboratory requirement.*

This course is designed to acquaint psychology concentrators with the methods applicable to the scientific study of behavior, with the primary focus on methods used in cognitive psychology. Students will learn the logic of experimentation, gain experience with technical writing, and learn to critically evaluate research findings.

**PSYCH 343. Cognitive Neuroscience of Learning and Memory**

*PSYCH 230 or 240. (Prerequisites enforced at registration.) (3). (NS). (BS). May not be repeated for credit.*

This course covers basic aspects of human memory, as well as advanced topics such as autobiographical memory, emotion and memory, repressed memory, and eye-witness testimony. These topics will be covered from multiple perspectives including behavioral laboratory research, cognitive neuroscience, and practical applications.

**PSYCH 344 / ELI 351 / LING 351.**

**Second Language Acquisition**

*LING 111 or 210. (3). (BS). May not be repeated for credit.*

This is an introductory course in Second Language Acquisition (SLA). How adults learn, or fail to learn, a second language is a fascinating question. It involves much of what we know about human cognition, psychology, and language. How best to help learners acquire a second language is an equally important educational issue. In addition to all of the factors which play a role in child language acquisition, SLA also involves effects of variation in second language educational, social and usage environments, ages of acquisition, levels of learner cognitive and brain development, motivation, and language transfer.

**PSYCH 345. Introduction to Human Neuropsychology**

*One of the following: PSYCH 111, 112, 114, 115, or 116. (Prerequisites enforced at registration.) (4). (NS). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in PSYCH 634.*

**PSYCH 346. Learning and Memory**

*PSYCH 240 or 345. (Prerequisites enforced at registration.) (3). (NS). (BS). May not be repeated for credit.*

A survey of the general principles of learning and memory and an introduction to learning theory.

**PSYCH 347. Perception**

*PSYCH 230, 240 or 345. (Prerequisites enforced at registration.) (3). (NS). (BS). May not be repeated for credit.*

This course provides an analysis of basic perceptual processes and theories. It aims to integrate neuroscientific, psychophysical and cognitive approaches to the problems of perception.

**PSYCH 349 / LING 347. Talking Minds**

*At least one of: LING 111 or 210, or PSYCH 111, 112, 114, or 115. (3). (BS). May not be repeated for credit.*

Human minds are unique in their capacity for language, yet other animals and computers also have communication systems. This course introduces students to theoretical issues in the cognitive processes of language and memory, conversation, and compare "primitive language" in young humans, non-human animals, and computers.

**PSYCH 350. Current Topics in Developmental Psychology**

*PSYCH 250. (Prerequisites enforced at registration.) (3). May be elected twice for*

*credit. May be elected more than once in the same term.*

**PSYCH 351. Advanced Laboratory in Developmental Psychology**

*PSYCH 220 or 230 or 240 or 250 or 270 or 280 or 290 or 291; AND one of: STATS 250 or STATS 280 or STATS 425 or MATH 425. (Prerequisites enforced at registration.) (3). May not be repeated for credit. Satisfies a Psychology research-based laboratory requirement. F, W, Sp.*

This course provides students with training in the skills necessary for designing, conducting, evaluating, and communicating research on human development. The class is a combination of lecture, discussion of research issues and methodology, activity-based laboratory sessions, and the implementation of individual, group, and class research projects.

**PSYCH 352 / LING 352. Development of Language and Thought**

*PSYCH 250. (3). (SS). May not be repeated for credit.*

A consideration of the main theoretical positions on the relationships between language and thought with an emphasis on the universal processes underlying language acquisition, environmental influences.

**PSYCH 353. Social Development**

*PSYCH 250. (3). (SS). May not be repeated for credit.*

This course examines social and personality development from childhood through adolescence. Research findings describing several aspects of socialization, gender role development, attachment, and academic achievement will be discussed. Key theories explaining paths and outcomes and the forces that help shape and socialize children and adolescents, including the family, peers, schools, and the media will be examined.

**PSYCH 355. Cognitive Development**

*PSYCH 250. (3). (NS). (BS). May not be repeated for credit.*

The development of intellectual and cognitive processes from infancy to maturity. Emphasis on contemporary theories and experimental research related to memory, language, conceptual understanding, and information processing strategies.

**PSYCH 356. Educational Psychology**

*PSYCH 250. (4). (SS). May not be repeated for credit.*

This course provides a survey of major issues in educational psychology including theoretical, empirical, and practical perspectives. This course is appropriate for students who may work in fields related to education or for students who want to consider graduate study or research in education. The course provides a scholarly foundation for such careers as well as knowledge of future parents and informed citizens. Material emphasizes psychological approaches to teaching, learning, motivation, and assessment that are grounded in theory and research.

**PSYCH 358. Psychology of Adolescence**

*PSYCH 250. (Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit.*

Introduces students to specific effects on human experiences and behavior of adolescence, a period of rapid biological, psychological, and social change; principles of developmental psychology, social psychology, and sociology; and the application of scientific inquiry to a domain of human development.

**PSYCH 360 / ENVIRON 360. Behavior and Environment**

*(3). (SS). May not be repeated for credit.*

Course deals with two central themes: First, environmental problems are people problems, requiring an understanding of how people think, what they care about, and the conditions under which they behave most reasonably. Second, human behavior makes the most sense when studied in the context of the environment, both present and evolutionary. This course builds a model of human nature, based upon research in the field of environmental psychology.

**PSYCH 362 / ENVIRON 361. The Psychology of Environmental Stewardship**

*(3). (SS). May not be repeated for credit.*

This course deals with how to reframe and promote a future with a restrained and austere existence. To meet this challenge, behavior-change tools and strategies are developed. Emphasis is on informational and motivational means of changing behavior in a durable manner.

**PSYCH 370. Topics in Clinical Psychology**

*PSYCH 270. (Prerequisites enforced at registration.) (3). May be elected twice for credit. May be elected more than once in the same term.*

**PSYCH 371. Advanced Laboratory in Psychopathology**

*One of STATS 250, STATS 280, STATS 425, or MATH 425; and one of PSYCH 111, 112, 114, or 115. (Prerequisites enforced at registration.) PSYCH 270. (3). May not be repeated for credit.*

This course is designed to provide students with training in the skills necessary for designing, conducting, evaluating, and communicating about research on psychopathology. Lectures will cover research design, current studies in clinical psychology, methods of assessing

psychiatric symptoms and disorders, and research tools for evaluating psychotherapy outcomes. Lab sessions will encourage students to pursue an area of interest while learning how to design assessments, collect and analyze data, and report findings in a written report that meets APA guidelines.

**PSYCH 372. Clinical Psychology**

*PSYCH 270. (Prerequisites enforced at registration.) (3). (SS). May not be repeated for credit.*

This course presents the academic and clinical activities within the field of clinical psychology. Lecture topics include the history of clinical psychology, the diagnosis and classification of disorders, approaches to psychotherapy, the role of culture in assessment and treatment, contemporary issues related to training, research, and professional ethics.

**PSYCH 373. Child and Adolescent Psychopathology**

*One of the following: PSYCH 111, 112, 114, or 115. (Prerequisites enforced at registration.) (3). (SS). May not be repeated for credit.*

This course is designed to provide a broad survey of the field of child and adolescent psychopathology. The primary emphasis is on understanding how and why disorders of childhood and adolescence initially develop and persist across time. Major topics include development of childhood conduct disturbances, attention deficit hyperactivity disorders, anxiety disorders, depression, autistic spectrum disorders, responses to traumatic stress, and eating disorders. We also consider approaches to treatment and prevention of these disorders.

**PSYCH 374. Culture and Mental Health**

*PSYCH 270. (Prerequisites enforced at registration.) (3). (SS). May not be repeated for credit.*

This seminar will examine the cultural foundations of mental health research and intervention, attending to the significant implications of a substantive cultural analysis for the cross-cultural assessment and treatment of psychopathology.

**PSYCH 380. Topics in Social Psychology**

*PSYCH 280. (Prerequisites enforced at registration.) (3). (SS). May be elected twice for credit. May be elected more than once in the same term.*

**PSYCH 381 / SOC 472. Advanced Laboratory in Social Psychology**

*STATS 250, STATS 280, STATS 425, or MATH 425; and one of the following: PSYCH 111, 112, 114, or 115.*

*(Prerequisites enforced at registration.)*

*PSYCH 280. (3). May not be repeated for credit. Satisfies a Psychology research-based laboratory requirement. F, W, Su.*

This course provides a hands-on exploration of social psychological research methods. Students are introduced to different research methods and concepts, learn to collect and analyze survey data, and conduct an original, experimental research project. In this project (topic varies), students design the study, collect and analyze the data, and write a written APA style report.

**PSYCH 385. Sex and Survival**

*PSYCH 280. (Prerequisites enforced at registration.) (3). (SS). May not be repeated for credit.*

This class teaches the fundamental principles of evolution and how these principles provide insights into human social behavior. Topics include motivation, sexual attraction, family life, cooperation, aggression and protection, prejudice, and status-seeking.

**PSYCH 386. Culture and Evolution**

*PSYCH 280. (Prerequisites enforced at*

*registration.) (3). (SS). May not be repeated for credit.*

Evolutionary and cultural perspectives represent two big-picture frameworks for understanding thinking and social behavior. Although often considered to offer separate or opposing views, we will integrate the two to explore evolutionary origins of culture and, conversely, cultural influences on the evolution of human psychology.

**PSYCH 387. Topics in Applied Social Psychology**

*PSYCH 280. (Prerequisites enforced at registration.) (3). (SS). May be elected twice for credit. May be elected more than once in the same term.*

**PSYCH 388. Negotiation**

*PSYCH 111 or 112 or 114 or 115.*

*(Prerequisites enforced at registration.) (3). (SS). May not be repeated for credit.*

Merging theory and practice, this course aims to provide students with the theoretical perspective and practical skills they need to become effective negotiators.

**PSYCH 389. Psychology and Law**

*PSYCH 111 or 112 or 114 or 115 or 116.*

*(Prerequisites enforced at registration.) (3). (SS). May not be repeated for credit.*

Examines implications of psychological theory and methods for the law and the criminal justice system. Topics include specific legal issues (e.g., confession, eyewitness testimony, jury decision making, homicide, aggression, the prison system) and more general social debates, as well as the role of psychologists in the legal system.

**PSYCH 390. Topics in Personality and Social Contexts**

*PSYCH 280 OR PSYCH 290. (Prerequisites enforced at registration.) (3). (SS). May be*

*elected twice for credit. May be elected more than once in the same term.*

**PSYCH 391. Advanced Laboratory in Personality**

*One of STATS 250, STATS 280, STATS 425, MATH 425; and one of PSYCH 111, 112, 114, or 115. (Prerequisites enforced at registration.) PSYCH 290. (3). May not be repeated for credit. Satisfies a Psychology research-based laboratory requirement.*

Students are introduced to experimental, survey, and archival strategies of data collection and hypothesis testing, diverse instruments for the assessment of personality, and statistical approaches to analyzing data that involves measures of personality.

**PSYCH 393. Political Psychology**

*Introductory Psychology. A prior course or interest in History or Political Science is useful, though not required. (3). (SS). May not be repeated for credit.*

Survey of how psychological factors affect political behavior, and vice versa: leadership, war and peace, political socialization, ideology, political cognition, mass media, political commitment and voting, rebellion, terrorism, and negotiation-mediation.

**PSYCH 394 / WGS 394. Sex, Sexuality, and Public Policy**

*PSYCH 111 or any WGS course.(3). (SS). May not be repeated for credit.*

This course examines a series of U.S. policies that aim to shape the sexual lives of young people and adults. We examine policies concerning how we learn about sex, engage in sex, and form families. Topics include HPV vaccines, sex education, school-based bullying, same-sex marriage, contraception, and abortion.

**PSYCH 395. Organizational Psychology**

*One of: PSYCH 111 or 112 or 114 or 115 or 116. (Prerequisites enforced at registration.) (4). (SS). May not be repeated for credit.*

Organizations are complex networks of social relationships between individuals, within groups, and between groups. This course examines individual, interpersonal, group and cultural behaviors in organizations. We show that leaders are effective managers of these different types of social relationships.

**PSYCH 401. Special Problems in Psychology as a Social Science**

*One of the following: PSYCH 111, 112, 114, or 115. (Prerequisites enforced at registration.) (1 - 4). May be repeated for a maximum of 12 credits. May be elected more than once in the same term. Only 6 credits of PSYCH 400, 401, 402 combined may be counted toward a concentration plan in Psychology, and a maximum of 12 credits may be counted toward graduation.*

This course examines selected problems in psychology. Consult the schedule of classes for specific topics and credits each term.

**PSYCH 402. Special Problems in Psychology**

*One of the following: PSYCH 111, 112, 114, or 115. (Prerequisites enforced at registration.) One of the following: PSYCH 230, 240, 250, 260, 270, 280, or 290. (2 - 4). (BS). May be repeated for a maximum of 12 credits. Only 6 credits of PSYCH 400, 401, 402 combined may be counted toward a concentration plan in Psychology, and a maximum of 12 credits may be counted toward graduation.*

**PSYCH 404. Field Practicum**

*Consent of instructor required. One of the following: PSYCH 230, 240, 250, 260, 270, 280, or 290, and permission of instructor. (1 - 4). (EXPERIENTIAL). May be repeated*

*for a maximum of 8 credits. Credit is granted for a combined total of fifteen credits elected from Experiential lab courses. May be used as an experiential lab in the Psychology major but not the major in Biopsychology, Cognition, and Neuroscience; credits may not be used toward either major. F, W, Sp/Su, Sp, Su. Offered mandatory credit/no credit.*

Students may make arrangements to work in an agency where psychological principles may be observed and utilized. This is often an internship or volunteer opportunity. The faculty member and the student develop an academic component (e.g. paper, reading list) that will pertain to the student's placement. The faculty member and the student have regular contact to monitor progress. It is recommended that the student have already completed at least one psychology breadth course.

**PSYCH 405. Field Practicum in a University Setting**

*Consent of instructor required. One of the following: PSYCH 230, 240, 250, 260, 270, 280, or 290, and permission of instructor. (1 - 4). (EXPERIENTIAL). May be repeated for a maximum of 4 credits. Credit is granted for a combined total of fifteen credits elected from Experiential lab courses. May be used as an experiential lab in the Psychology major but not the major in Biopsychology, Cognition, and Neuroscience; credits may not be used toward either major. F, W, Sp/Su, Sp, Su. Offered mandatory credit/no credit.*

Students may make arrangements to work in university settings where psychological principles may be observed and utilized.

**PSYCH 411 / ALA 429 / SOC 471. IGR Senior Capstone: Social Justice in the Real World**

*Consent of instructor required. UC/SOC 320/321/PSYCH 310/311 or CASC*

*Foundations and 2 related courses in social movements or activism. (3). May not be repeated for credit.*

The focus is on strategies for social justice and change. The class explores alternative meanings of social justice, theories and strategies for social change, roles of change agents in traditional careers, the assessment of personal skills and resources, discussions with local social justice advocates and practice in multicultural teamwork.

**PSYCH 413. A History of Modern Psychology**

*Psych or BBCS or Neuroscience concentrator. (Prerequisites enforced at registration.) (3). May not be repeated for credit. Rackham credit requires additional work.*

This course reviews the philosophical underpinnings and precursors of scientific and academic study of psychology, the development of cognitive psychology and psychological neuroscience, as well as the history of applied, social and clinical areas of psychology. Finally, the course covers the history of the University of Michigan Psychology Department.

**PSYCH 414 / WGS 452. Sexuality and Science**

*One of: PSYCH 111 or PSYCH 112 or any WGS course. (Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit. Rackham credit requires additional work.*

This interdisciplinary course focuses on sexuality and science from two perspectives. We discuss current biological and neuroscientific research about sexuality, as well as feminist scholarship on these topics and critical responses to this research. Topics cover the intersections between biology, sexuality, and

feminist/critical scholarship about this research.

**PSYCH 418 / RELIGION 448.**

**Psychology and Spiritual Development**

*One of the following: PSYCH 111, 112, 114, or 115, and permission of instructor. (3). May not be repeated for credit.*

This course explores the contributions of transpersonal psychology in examining direct spiritual experience, the division to work within a specific spiritual discipline, and the diversity of lives led in search of life's highest goals.

**PSYCH 420. Faculty Directed Advanced Tutorial Reading for Psychology as a Natural Science**

*Consent of instructor required. Proposal required. Approval of the instructor and Psychology Committee on undergraduate Studies and PSYCH 230, 240, 335, or 345. (1 - 4). (INDEPENDENT). May be repeated for a maximum of 6 credits.*

Arrangements may be made for adequately prepared students to further explore a topic of interest in psychology as a natural science under the direction of a member of the faculty. The course requires a final paper, a copy of which must be given to the undergraduate office. Students are provided with the proper section number by the Psychology undergraduate office after petition has been approved. Students are responsible for properly registering for this course.

**PSYCH 421. Faculty Directed Advanced Tutorial Reading for Psychology as a Social Science**

*Consent of instructor required. Proposal required. Approval of the instructor and Psychology Committee on Undergraduate Studies and one of the following: PSYCH 230, 240, 250, 260, 270, 280, or 290. (1 - 4). (INDEPENDENT). May be repeated for a maximum of 6 credits.*

Arrangements may be made for adequately prepared students to further explore a topic of interest in psychology as a social science under the direction of a member of the faculty.

**PSYCH 422. Faculty Directed Advanced Research for Psychology as a Natural Science**

*Consent of instructor required. Proposal required. Approval of the instructor and Psychology Committee on undergraduate Studies. STATS 250 or STATS 280 or STATS 425; and one of the following: PSYCH 302, 331, 341, or 342. (1 - 4). (BS). (INDEPENDENT). May be repeated for a maximum of 6 credits. A total of six credits of Psychology letter-graded Research-based courses may be counted towards the Psychology concentration.*

Arrangements may be made for adequately prepared students to undertake individual research of their own design under the direction of a member of the faculty. The work of the course must include the collection and analysis of data and a written report, a copy of which must be given to the undergraduate office. Students are provided with the proper section number by the Psychology undergraduate office after petition has been approved. Students are responsible for being properly registered for this course.

**PSYCH 423. Faculty Directed Advanced Research for Psychology as a Social Science**

*Consent of instructor required. Proposal required. Approval of the instructor and Psychology Committee on Undergraduate Studies. STATS 250 or STATS 280 or STATS 425; and one of the following: PSYCH 302, 303, 331, 341, 342, 351, 361, 371, 381, 383, or 391. (3 - 4). (INDEPENDENT). May be repeated for a maximum of 6 credits.*



*of Psychology letter-graded Research-based courses may be counted towards the Psychology concentration.*

Arrangements may be made for adequately prepared students to undertake individual research of their own design under the direction of a member of the faculty.

**PSYCH 424. Senior Honors Research I for Psychology as a Natural Science**

*Consent of instructor required. Acceptance into the Psychology Honors Program, STATS 250, STATS 280, or STATS 425; and prior research experience. (2 - 4). (BS). May not be repeated for credit.*

The primary focus in Senior Honors I is the development of a research plan in collaboration with the Honors Advisor and the writing of an extensive literature review on the honors topic, culminating in an acceptable research proposal.

**PSYCH 426. Senior Honors Research II for Psychology as a Natural Science**

*Consent of instructor required. Permission of the Psychology Honors Program Director, PSYCH 424 and good standing in the Psychology Honors Program. (2 - 4). (BS). May not be repeated for credit.*

The primary focus in Senior Honors is the implementation of a honors research design culminating in your final, acceptable honors thesis.

**PSYCH 428. Senior Thesis I: Research in Psychology/BCN**

*Consent of department required. Senior standing. STATS 250 or STATS 280, and prior research experience. (2 - 4). (BS). (INDEPENDENT). May not be repeated for credit. No credit granted to those who have completed or are enrolled in PSYCH 424, 425, 426, or 427.*

The primary focus in this course is the development of a research plan in

collaboration with the faculty advisor. Students are expected to write an extensive literature review on the research topics, culminating in a final, acceptable senior thesis.

**PSYCH 429. Senior Thesis II: Research in Psychology/BCN**

*Consent of department required. Senior standing. STATS 250 or STATS 280, and PSYCH 428. (2 - 4). (BS). (INDEPENDENT). May not be repeated for credit. No credit granted to those who have completed or are enrolled in PSYCH 424, 425, 426, or 427.*

The primary focus in this course is the development of a research plan in collaboration with the faculty advisor. Students are expected to write an extensive literature review on the research topics, culminating in a final, acceptable senior thesis.

**PSYCH 430. Advanced Topics in Biopsychology**

*PSYCH 230 or PSYCH 335. (Prerequisites enforced at registration.) (3). (BS). May be elected twice for credit. May be elected more than once in the same term. Rackham credit requires additional work.*

This course will, in a seminar setting, present topics of special interest to students and faculty. Topics will vary according to the current research trends within this discipline of biopsychology.

**PSYCH 431. Advanced Topics in Behavioral Neuroscience**

*PSYCH 230. (Prerequisites enforced at registration.) (3). (BS). May be elected twice for credit. May be elected more than once in the same term. Rackham credit requires additional work.*

This course will, in a seminar setting, present topics of special interest to students and faculty. Topics will vary according to

the current research trends within this discipline of behavioral neuroscience.

**PSYCH 432. Advanced Topics in Evolutionary and Comparative Psychology**

*PSYCH 335. (Prerequisites enforced at registration.) (3). (BS). May be elected twice for credit. May be elected more than once in the same term. Rackham credit requires additional work.*

This course will, in a seminar setting, present topics of special interest to students and faculty. Topics will vary according to the current research trends within this discipline of evolutionary and comparative psychology.

**PSYCH 433. Advanced Topics in Neuroscience**

*PSYCH 230 or BIOLOGY 225. (Prerequisites enforced at registration.) (3). (BS). May be elected twice for credit. May be elected more than once in the same term. Rackham credit requires additional work.*

This course will, in a seminar setting, present topics of special interest to students and faculty. Topics will vary according to the current research trends within this discipline of neuroscience.

**PSYCH 434. Neuroscience of Fear and Anxiety**

*PSYCH 230 & one of the following: PSYCH 330, 332, 333, 334, 335, 336, 337, 338, or 339. (Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit. Rackham credit requires additional work.*

This seminar format course will examine the neurobiology of learning with a focus on studies of fear conditioning in animals and humans.

**PSYCH 436. Sleep: Brain and Behavior, From Flies to Humans**

*PSYCH 230 or 335. (Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit.*

The purpose of this course provides students with a comprehensive introduction to sleep, from behavioral, physiological and neurobiological perspectives. Students learn what sleep is and who sleeps, what are the functions of sleep, and which processes and neurobiological mechanisms regulate sleep. Includes discussion of sleep disorders and the negative consequences of poor sleep for physical and mental health.

**PSYCH 438 / ANTHRBIO 478. Primate Behavioral Ecology**

*Consent of instructor required. ANTHRBIO 368. (3). (BS). May not be repeated for credit.*

This advanced undergraduate/graduate course examines the ecology and behavior of non-human primates. Using mainly primary research articles, we explore several themes in primate behavioral ecology including reproductive strategies, sexual selection, behavioral endocrinology, cooperation and conflict, cultural transmission, and primate cognition.

**PSYCH 439 / ANTHRBIO 468. Evolutionary Endocrinology**

*PSYCH 335, PSYCH 337, or EEB 492. (3). (BS). May not be repeated for credit. Rackham credit requires additional work.*

Welcome to Evolutionary Endocrinology! In this course, we will examine the ways in which animals evolve physiological adaptations to the environment in which they live. Using literature that spans across vertebrate taxa from reptiles to birds to mammals, we will focus on exciting new ideas about the evolutionary significance of hormones in shaping life-history evolution, facilitating or constraining adaptation, and

mediating non-genetic inheritance and maternal effects.

**PSYCH 440. Advanced Topics in Cognitive Neuroscience**

*PSYCH 240. (Prerequisites enforced at registration.) (3). (BS). May be elected twice for credit. May be elected more than once in the same term.*

This course, in a seminar setting, presents topics of special interest to students and faculty. Topics vary according to the current research trends within this discipline of cognitive neuroscience.

**PSYCH 441. Neuroscience and Society**

*PSYCH 240. (Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit. Rackham credit requires additional work.*

This seminar course explores the societal, ethical and legal implications of human neuroscience research. Topics include the use of brain technologies to understand traumatic brain injury, consciousness and coma, how such technologies and neural advances can be applied to marketing, cognitive enhancement, assessment of deception, assignment of blame, and how they may ultimately affect our understanding of ourselves and our humanity.

**PSYCH 442. The Neuroscience of Perception**

*PSYCH 220 or 230 or 240 or 345. (Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit.*

This course will provide a comprehensive understanding of the neural mechanisms that support vision, audition, touch, olfaction, and taste, as well as how information from each of these modalities is integrated in the brain.

**PSYCH 443. Creativity**

*PSYCH 240. (Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit. Rackham credit requires additional work.*

Creativity is a large and diverse topic, and what it means to "be creative" may differ across domains. For example, is artistic creativity the same thing as literary, scientific, or design creativity? What do we mean by "creative process?" These are some of the questions we will explore in this seminar. We will consider how to define and measure creativity, how creative thinking does or does not differ from "normal" thinking, and importantly, attempt the creative process ourselves. The major perspective we will consider is from psychological science. However, studies of creativity take place across many disciplines, and our class will benefit from input from the sciences, engineering, and arts. We will examine creative products across domains, and we will expand our views on creativity to investigate its meaning across disciplines.

**PSYCH 444. Cognitive Aging**

*PSYCH 230 OR PSYCH 240. (Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit.*

This course covers the changes in the brain, information processing, and behavior that occur with advancing age. Topics to be covered include the methods used to study such changes, the theories attempting to explain them, and the degree to which these changes are an inevitable consequence of aging versus the result of age-related diseases, including Alzheimer's.

**PSYCH 445 / LING 447. Psychology of Language**

*PSYCH 240. (Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit.*

**PSYCH 446. Altruism**

*PSYCH 240. (Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit.*

Altruism, defined broadly as giving to others at a current cost to the self, has been a topic of great controversy in many fields including philosophy, evolutionary biology, animal behavior, economics, and psychology. This course will review our current, scientific understanding of altruism across domains, with a particular emphasis on biology and neuroscience.

**PSYCH 447. Current Topics in Cognition and Cognitive Neuroscience**

*PSYCH 230, 240, or 345. (Prerequisites enforced at registration.) (3). (BS). May be elected twice for credit.*

This course will, in a seminar setting, present psychology topics of special interest to students and faculty. Topics will vary according to the current research trends within this discipline of Psychology. Students will be responsible for specific readings and will write a final paper on a topic agreed upon by student and faculty.

**PSYCH 448. Mathematical Psychology**

*Sophomore standing or above and a minimum of two courses offered by either MATH (except MATH 105, 110, 127, and 128) or STATS (200 level and above). (Prerequisites enforced at registration.) (3). (BS). (QR/2). May not be repeated for credit.*

**PSYCH 449. Decision Processes**

*One of STATS 250 or STATS 280 or STATS 425 or MATH 425. (3). (BS). May not be repeated for credit.*

Primary goals in this course are to help the student do two things: (a) achieve an understanding of how people--individually and collectively--actually solve decision problems; and (b) develop an understanding

of how people-- including the student him- or herself--could decide better than they would be inclined to decide naturally.

**PSYCH 451. Advanced Research in Adolescent Psychology**

*PSYCH 250 and 358. (Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit.*

The first goal is to familiarize students with the most pressing research questions in adolescent development through a set of conceptual and empirical readings. The second is to undertake a collaborative research project using the newly collected database of our Adolescent Health Risk Behavior Study (AHRB), which includes survey data on risk behavior, psychosocial development, and neurocognitive performance.

**PSYCH 454. Developmental Cognitive Neuroscience**

*PSYCH 250. (Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit.*

This advanced seminar is geared towards the students who are interested in cognitive neuroscience, human development, education and child health. We will cover current issues on how the child's brain learns and develops. The topics will include language, reading, and mathematical development, as well as memory, attention, and social cognition.

**PSYCH 456. Human Infancy**

*PSYCH 250. (3). May not be repeated for credit.*

**PSYCH 457. Current Topics in Developmental Psychology**

*One of the following: PSYCH 111, 112, 114, or 115. (Prerequisites enforced at registration.) PSYCH 250. (3). May be elected twice for credit.*

This course will, in a seminar setting, present psychology topics of special interest to students and faculty. Topics will vary according to the current research trends within this discipline of Psychology.

**PSYCH 459. Psychology of Aging**

*PSYCH 250. (Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit.*

This course discusses topics central to the understanding of adult development and aging: questions about change in cognitive and intellectual functioning, social relationships, personality, well-being, and health. We also consider cultural, historical, and gender contexts of aging and how these contexts shape beliefs and expectations about aging and older persons.

**PSYCH 463 / ANTHRBIO 463 / ENVIRON 473. Statistical Modeling and Data Visualization in R**

*Basic knowledge of statistics (e.g., linear regression). Some prior experience with R is advisable, but not required. (4). (BS). (QR/1). May not be repeated for credit. Rackham credit requires additional work.*

This course is a boot camp in statistical modeling and data visualization using the R computer language. Topics include basic R programming, data exploration, statistical modeling, formal model comparison, parameter estimation and interpretation, and the visual display of quantitative information.

**PSYCH 470. Mood Disorders**

*PSYCH 270. (Prerequisites enforced at registration.) (3). May not be repeated for credit.*

This advanced seminar examines current theory and research on the descriptive, causative and ameliorative aspects of mood disorders. Cognitive, behavioral, and

biological approaches towards unipolar and bipolar disorders are emphasized.

**PSYCH 471. Resilience in Child and Adolescent Development**

*PSYCH 373. (Prerequisites enforced at registration.) (3). May not be repeated for credit.*

This seminar offers an advanced introduction to the study of processes associated with psychopathology and resilience in children and adolescents. The main goal of the course is to help students understand complex processes that underlie the development of diverse developmental outcomes in the context of risk, with an emphasis on theories and models of resilient pathways.

**PSYCH 474. Introduction to Behavior Therapy**

*PSYCH 270. (Prerequisites enforced at registration.) (3). May not be repeated for credit.*

**PSYCH 475. Traumatic Stress**

*PSYCH 270. (Prerequisites enforced at registration.) (3). May not be repeated for credit.*

This course focuses on the study of traumatic stress and Posttraumatic Stress Disorder. It begins with discussion of a range of traumatic events and definitions of trauma symptoms and responses. Next, theoretical frameworks useful for understanding traumatic stress reactions are introduced, including theories that cover social learning, social cognition, evolution, neuropsychology, and psychodynamic models. In addition, assessment, diagnosis, and the evidence for best intervention practices in treating traumatic stress are examined.

**PSYCH 477. Current Topics in Clinical Psychology**

*One of the following: PSYCH 111, 112,*

*114, or 115. (Prerequisites enforced at registration.) PSYCH 270. (3). May be elected twice for credit.*

This course will, in a seminar setting, present psychology topics of special interest to students and faculty. Topics will vary according to the current research trends within this discipline of Psychology.

**PSYCH 478. Addictive Behavior**

*PSYCH 270. (Prerequisites enforced at registration.) (3). May not be repeated for credit.*

We will be exploring the historical and societal understanding of what is considered addictive, the consequences of misunderstanding addiction, the scientific mechanisms underlying our current understanding of addiction, and the current debates about what things are and are not addictive.

**PSYCH 487. Current Topics in Social Psychology**

*One of the following: PSYCH 111, 112, 114, or 115. (Prerequisites enforced at registration.) PSYCH 280. (3). May be elected four times for credit. May be elected more than once in the same term.*

This course will, in a seminar setting, present psychology topics of special interest to students and faculty. Topics will vary according to the current research trends within this discipline of Psychology.

**PSYCH 488 / SOC 465 / WGS**

**465. Sociology of Deviance: From Sin to Sickness**

*One introductory course in sociology. (4; 3 in the half-term). May not be repeated for credit.*

This course is a sociological examination of the social construction of deviant categories and their consequences, using analysis of conventional values and modes of social

control. Students are expected to develop a critical perspective and facilitate reflective thought about deviance.

**PSYCH 494 / WGS 494.**

**Adolescent Sexuality**

*(3). May not be repeated for credit. Rackham credit requires additional work.*

This course addresses a wide range of issues that affect young people and their sexual development. We look at early lessons regarding sexuality as the basis for individuals' attitudes regarding sex and potential sexual/relational partners throughout their lifetime.

**PSYCH 497. Current Topics in Personality and Social Contexts**

*One of the following: PSYCH 111, 112, 114, or 115. (Prerequisites enforced at registration.) PSYCH 290. (3). May be elected twice for credit. May be elected more than once in the same term.*

This course will, in a seminar setting, present psychology topics of special interest to students and faculty. Topics will vary according to the current research trends within this discipline of Psychology.

**PSYCH 531. Advanced Topics in Biopsychology**

*PSYCH 230. (3). (BS). May be repeated for credit. May be elected more than once in the same term.*

This course will, in a lecture setting, present topics of special interest to students and faculty. Current faculty research is addressed. Topics will vary according to the specific faculty research interest.

**PSYCH 532 / ANATOMY 541 /**

**PHYSIOL 541. Mammalian Reproductive Physiology**

*PHYSIOL 201 or PHYSIOL 502 or BIOL 225. (4). (BS). May not be repeated for credit. W.*

An introduction to the mammalian reproductive physiology for PhD, MS, and senior undergraduate students who are considering a career in the biomedical sciences.

**PSYCH 571. Advanced Topics in Clinical Psychology**

*Consent of instructor required. PSYCH 270 and permission of instructor. (3). May be repeated for credit. May be elected more than once in the same term.*

This course will, in a lecture setting, present topics of special interest to students and faculty. Current faculty research is addressed. Topics will vary according to the specific faculty research interest.

## **Public Health (PUBHLTH)**

Courses in the School of Public Health are listed in the *Schedule of Classes* under the School of Public Health.

The following courses count as LSA courses for LSA degree credit.

**PUBHLTH 200 / PUBPOL 210. Health and Society: Introduction to Public Health**

*(4). (SS). (R&E). May not be repeated for credit.*

This course is intended to serve as an introduction to the major issues of health and health care in the United States - what they are, what determines them, and how they can be altered. In so doing, the course surveys the field of public health.

## **Public Policy (PUBPOL)**

**PUBPOL 201. Systematic Thinking About the Problems of the Day**

*ECON 101. (Prerequisites enforced at registration.) One additional introductory social science course. (4). (SS). May not be repeated for credit.*

The main idea that we want to get across is implicit in the title: Systematic thinking - largely from the social sciences, but with the application of scientific methods and knowledge more generally - can make a difference in the way that we approach and solve current problems. The course will consider four or five current problems in some detail, drawing on the expertise of faculty in the relevant areas. The topics change somewhat from year to year due to events in the world and availability of faculty. In fall 2006, we studied globalization and the U.S. Economy; file-sharing and copyright policy; election of the President by popular vote; genetically modified foods; and K-12 education reforms. The course also examines current events to amplify and illustrate its major themes, and stresses the value of constructive disagreement as a tool to improve the quality of both understanding and policy. There is extensive discussion among students and between students and faculty.

**PUBPOL 210 / PUBHLTH 200. Health and Society: Introduction to Public Health**

*(4). (SS). (R&E). May not be repeated for credit.*

This course is intended to serve as an introduction to the major issues of health and health care in the United States - what they are, what determines them, and how they can be altered. In so doing, the course surveys the field of public health.

**PUBPOL 224 / ENVIRON 224 / HISTORY 224. Global Nuclear Proliferation**

*(4; 3 in the half-term). (SS). May not be repeated for credit.*

This course presents a global perspective on the history and politics of nuclear weapons. It examines the science and technology of these weapons; the politics of their growth, spread, and control; environmental and health consequences of their development; and the cultural responses and social movements they have engendered.

**PUBPOL 250 / CMPLXSYS 250 / ENVIRON 250. Social Systems, Energy, and Public Policy**

*(3). (BS). (QR/1). May not be repeated for credit.*

This course introduces global energy problems from the perspectives of how energy technologies shape and are shaped by choices people make as individuals, as members of groups, and as members of society at large. We will examine the present and historical cultural, economic, and political contexts out of which today's energy choices and public policies emerged and how these choices and policies are constrained by fundamental scientific principles.

**PUBPOL 312 / ENVIRON 312 / POLSCI 380. Environmental Politics and Policy**

*(3). May not be repeated for credit.*

This course is an advanced offering on environmental politics and the environmental policy-making process. The course will consider both processes of policy formation and implementation, placing particular emphasis on the development of alternatives to conventional regulatory practices at federal, state, and local levels of government.

**PUBPOL 412 / ENVIRON 412. Environmental Values in Public Policy**

*(3). May not be repeated for credit.*

Public policy embodies an assortment of value systems. While individual value systems express coherent, consistent approaches, public policy expresses an amalgam of values, with corresponding decrease in coherence/consistency. This course explores the relationships between various environmental values and public policy through analysis of policy issues at local, state, and national levels.

**PUBPOL 468 / ENVIRON 468. Oil and Gas Policy in the US**

*May not be repeated for credit.*

Hydraulic fracturing and horizontal drilling have made the United States the world's largest producer of oil and natural gas. What does that mean for the domestic economy, energy prices, foreign policy, climate change, and local environments? This course will begin with an overview of the domestic and global energy system. It will briefly describe the history of oil and gas production in the United States, and how that history has helped shape global energy markets.

**PUBPOL 481 / PHYSICS 481. Science, Technology and Public Policy**

*(3). May not be repeated for credit. May not be included in a concentration plan in Physics.*

How should science and technology be used to solve social and policy problems? What values and assumptions underlie our current understandings of science and technology? Should only experts be involved in science and technology policymaking, or should lay people have a voice? How should policy makers deal with the risks and uncertainties that come from science and emerging technologies (such a biotechnology,



nanotechnology, geoengineering)? Through hands-on exercises, organized debate, active participation, and short papers, students will explore these questions while developing skills to analyze and engage with complex science and technology policy issues. This discussion-based course will bring an interdisciplinary perspective to bear on the most pressing science and technology policy challenges of the day, including the regulation of gene-editing technologies and autonomous vehicles, the Flint water crisis, and the deliberate release of genetically modified mosquitos to fight the Zika virus. We will explore both how science and technology are influenced by politics and public policy and how science and technology are used in policymaking process. This course is intended for upper-level undergraduate students from science, engineering, the humanities, social sciences, and the professional schools. No scientific or technical background is necessary.

**PUBPOL 519 / EAS 574 / RCNSCI 419.  
Sustainable Energy Systems**

*Senior standing; college-level course in Math or Economics or physical science. (3). May not be repeated for credit.*

Assessment of the current energy systems that encompasses resource extraction, conversion processes and end-uses. Sustainability is examined by studying global and regional environmental impacts, economics, energy efficiency, consumption patterns and energy policy.

**RC Fine Arts (RCARTS)**

**RCARTS 268. Introduction to Visual Thinking: Adventures in Creativity**  
*(4). (CE). May not be repeated for credit.*

**RCARTS 285. Photography**

*(4). (CE). May not be repeated for credit.*

**RCARTS 286. Sculpture**

*(4). (CE). May not be repeated for credit.*

**RCARTS 287. Printmaking**

*(4). (CE). May not be repeated for credit.*

**RCARTS 288. Beginning Drawing**

*(4). (CE). May not be repeated for credit.*

**RCARTS 289. Ceramics**

*(4). (CE). May not be repeated for credit.*

**RCARTS 334. Special Topics in the Creative Arts**

*Students cannot elect the same topic twice. (3 - 4). (CE). May be repeated for a maximum of 12 credits. May be elected more than once in the same term. Cannot elect the same topic twice.*

This is a topics course taught by various members of the Creative Arts program faculty. Each version of the course has its own subtitle. Some versions are taught one time only while others are repeated and may evolve into regular courses with their own course number and title.

**RCARTS 385. Advanced Photography**

*RCARTS 285. (4). (CE). May not be repeated for credit.*

An advanced course in photography requiring the application of the medium to problems or ideas in another discipline of the student's choosing.

**RCARTS 389. Ceramics Theory and Criticism**

*RCARTS 289. (4). (CE). May not be repeated for credit.*

**RC American Sign Language (RCASL)**

**RCASL 100. Introduction to Deaf Culture**

*(3). May not be repeated for credit.*

This course introduces students to Deaf culture within the United States, and focuses on the link between culture and language (in this case, American Sign Language).

**RCASL 101. Elementary American Sign Language**

*Prior or concurrent enrollment in RCASL 100, RCCORE 102 (or LING 140). (4). May not be repeated for credit.*

This is a beginning course in American Sign Language (ASL) that introduces students to basic grammatical structures and sign vocabulary through intensive classroom conversational interactions.

**RCASL 102. Elementary American Sign Language II**

*RCASL 101 (or RCCORE 103 or LING 150). (4). May not be repeated for credit.*

This course is a continuation of RCASL 101. Upon completion of RCASL 102, students will be able to observe basic courtesies while making introductions, giving directions, and conversing about past, present, and future events in ASL. Participation in class includes role playing in selected situational activities.

**RCASL 201. Intermediate American Sign Language**

*RCASL 102 (or RCCORE 104 or LING 151). (4). May not be repeated for credit.*

Students in this intermediate course in American Sign Language (ASL) will learn more advanced communicative forms including understanding the essential role of facial communication (non-manual behaviors) in forming expressions. Additional vocabulary including idiomatic expressions will be introduced to expand

students' abilities to understand and converse appropriately in various settings.

**RCASL 202. Intermediate American Sign Language II**

*RCASL 201 (or RCCORE 203 or LING 250). (4). (Lang Req). May not be repeated for credit.*

Students will continue to learn communicative structures of American Sign Language (ASL) and develop further skills in the use of physical space to recognize and express meanings. Vocabulary and idiomatic expressions will be expanded. Upon completion, students will be able to communicate in ASL in a range of conversational interactions.

**RC Core Courses (RCCORE)**

**RCCORE 100. First Year Seminar**

*SWC Writing Assessment. Only first-year students, including those with sophomore standing, may pre-register for First-Year Seminars. All others need permission of instructor. (4). (FYWR). May not be repeated for credit.*

**RCCORE 205. Independent Study**

*Consent of instructor required. Sophomore standing and permission of instructor. (1 - 8). (INDEPENDENT). May be repeated for credit. Offered mandatory credit/no credit.*

Students must submit a written proposal approved by a faculty sponsor outlining the proposed topic, the readings, and the final product of the project. Not open to first semester freshmen.

**RCCORE 206. Independent Study**

*Consent of instructor required. (1 - 4). (INDEPENDENT). May be repeated for a maximum of 8 credits.*

This course is designed to meet the needs of RC students who are pursuing faculty-directed independent studies that will meet concentration requirements. It also will provide instructors with a way to acknowledge independent studies of exceptional depth and quality.

**RCCORE 209. Study Off-Campus**

*Consent of instructor required. Sophomore standing and permission of instructor. (1 - 4). (EXPERIENTIAL). May be repeated for a maximum of 8 credits. Offered mandatory credit/no credit.*

This course is used to grant credit to students engaged in a variety of approved off-campus activities.

**RCCORE 301. Community-Based Internship - Semester in Detroit**

*Consent of department required. (4; 2 in the half-term). (EXPERIENTIAL). May not be repeated for credit. Offered mandatory credit/no credit.*

A project-based engagement experience required as part of the Semester in Detroit curriculum. Students intern for 16 hours per week with a community and/or cultural arts organization in the city of Detroit with close supervision and support provided by on-site program staff and the Semester in Detroit Associate Director.

**RCCORE 302. Community-Based Internship Reflection Seminar**

*Consent of department required. (3; 1 in the half-term). May not be repeated for credit.*

An interactive seminar in which students participate in individual and small group activities to reflect both objectively and subjectively on their internship in Detroit. Special attention is given to the interconnections among students' experiences and how these can foster organizational collaboration in the city.

**RCCORE 305. Independent Study**

*Consent of instructor required. Junior standing and permission of instructor. (1 - 8). (INDEPENDENT). May be repeated for credit. Offered mandatory credit/no credit.*

**RCCORE 306. Independent Study**

*Consent of instructor required. (1 - 4). (INDEPENDENT). May be repeated for a maximum of 8 credits.*

This course is designed to meet the needs of RC students who are pursuing faculty-directed independent studies that will meet concentration requirements. It also will provide instructors with a way to acknowledge independent studies of exceptional depth and quality.

**RCCORE 307. RC Practicum in College Team Teaching**

*Consent of instructor required. Upperclass standing and permission of instructor. (1 - 4). (INDEPENDENT). May be repeated for credit.*

For the student who wishes experience in college teaching. The student-teacher functions as a teaching intern in a course. Regular staff meetings and individual conferences with the person in charge ensures that the intern shares in the overall planning and management of the course. The student may receive credit only once for student-teaching in the same course.

**RCCORE 308. Directed Peer Tutoring**

*Consent of instructor required. (1 - 2). (EXPERIENTIAL). May be repeated for a maximum of 4 credits. Offered mandatory credit/no credit.*

An experiential course for students with advanced competence in the discipline (as determined by the faculty instructor). These students tutor other students with less knowledge and relevant experience enrolled. Under faculty supervision, they also participate in regular meetings with

faculty to discuss discipline-specific pedagogical questions, as well as the progress of those they are tutoring.

**RCCORE 309. Study Off-Campus**

*Consent of instructor required. Junior standing and permission of instructor. (1 - 16). (EXPERIENTIAL). May be repeated for credit. Offered mandatory credit/no credit.*

**RCCORE 334. Special Topics**

*(1 - 4). May be repeated for a maximum of 12 credits. May be elected more than once in the same term.*

This is a topics course taught by various members of the program faculty. Each version of the course has its own subtitle. Some versions are taught one time only while others are repeated and may evolve into regular courses with their own course number and title.

**RCCORE 405. Independent Study**

*Consent of instructor required. Senior standing. (1 - 8). (INDEPENDENT). May be repeated for credit. Offered mandatory credit/no credit.*

**RCCORE 406. Independent Study**

*Consent of instructor required. (1 - 4). (INDEPENDENT). May be repeated for a maximum of 8 credits.*

This course is designed to meet the needs of RC students who are pursuing faculty-directed independent studies that will meet concentration requirements. It also will provide instructors with a way to acknowledge independent studies of exceptional depth and quality.

**RCCORE 409. Study Off-Campus**

*Consent of instructor required. Senior standing. (1 - 16). (EXPERIENTIAL). May be repeated for credit. Offered mandatory credit/no credit.*

**RCCORE 410. Senior Project**

*Consent of instructor required. (1 - 8).*

*(INDEPENDENT). May be repeated for credit.*

An individual project in the field of concentration. Permission of concentration advisor required.

**RCCORE 489. Honors Independent Research**

*Permission of instructor. (1 - 4). (INDEPENDENT). May not be repeated for credit. Continuing Course. Y grade can be reported at end of the first-term to indicate work in progress. At the end of the second term of RCCORE 490, the final grade is posted for both term's elections.*

An independent study under the supervision of an honors thesis advising committee to do preliminary research for a potential honors thesis. A primary purpose of this course is to determine if, in fact, the proposed thesis is feasible.

**RCCORE 490. Honors Thesis**

*Consent of instructor required. (1 - 4). (INDEPENDENT). May be repeated for a maximum of 8 credits.*

## **RC Humanities (RCHUMS)**

**RCHUMS 150 / FTVM 150. Introduction to Film, Television, and Media**

*(4). (HU). May not be repeated for credit.*

This course provides an introduction to film, television, and media. You will learn the critical vocabulary and methods of media analysis, and use this knowledge to make your voice heard in the form of audiovisual essays rather than written papers. The course is designed to build basic video editing and sound recording skills throughout the semester--no prior

experience is needed. With a focus on representations of race, gender, class, and sexual identities, you will learn how to assess film, television, and digital media with an eye (and ear) keenly attuned to the ways that style shapes the meanings of the media that surround all of us in everyday life. We are committed to a model of student-centered learning, so your experience in this course will not resemble a typical, large-lecture format. Instead, we will engage in interactive, peer learning activities such as discussions, debates.

**RCHUMS 201. How to Think (Humanities)**

*(3 - 4). (HU). May not be repeated for credit.*

Different art forms and their disciplines generate different ways of thinking. This course introduces students to the habits of thought and patterns of inquiry that are characteristic of a single Humanities discipline.

**RCHUMS 202. How to Think (Arts)**

*(3 - 4). (CE). May be elected twice for credit. May be elected more than once in the same term.*

Different art forms generate different ways of thinking. This course introduces students to the habits of thought and patterns of inquiry that are characteristic of a single art form, from the practitioner's point of view.

**RCHUMS 218. The Hero as Outsider, Outcast or Outlaw**

*(3). (HU). May not be repeated for credit.*

In this course we try to define the human need for heroes and the (changing) character of heroism by examining the eccentric hero that mainstream society attempts to suppress, dismiss, ignore, or condemn because it regards him or her as perverse, subversive, vicious, or beyond the pale of tolerance: the saint, criminal,

psychotic, visionary, egoist, pervert or monster.

**RCHUMS 220. Narration**

*Consent of instructor required. (4). (CE). May not be repeated for credit.*

Students read collections of short fiction and short novels by established writers. They meet individually with the instructor weekly. In addition to rewriting previous submissions, they also submit approximately five pages of prose fiction every two weeks.

**RCHUMS 221. The Writing of Poetry**

*Permission of instructor. (4). (CE). May not be repeated for credit.*

**RCHUMS 235. Topics in World Dance**

*(3). (HU). May not be repeated for credit.*

Theatrical, religious, popular and social dance traditions will be examined in a variety of cultures. Several comparative issues will be explored. In addition to lectures and readings, the class will feature guest artist lecture demonstrations and viewing of performances both live and on films and videos.

**RCHUMS 237 / AMCULT 237 /**

**HISTART 237. On the Margins of the Art World - Self-Taught Artists in the U.S.**

*(3). (ID). May not be repeated for credit.*

This course surveys a broad range of artists variously known as "Outsider", "Self-Taught", or "Folk" artists. In addition to exploring these artists' work, this course explores boundaries between Fine Art and other creative practices, and explores broader issues regarding creativity, marginality, art, and culture.

**RCHUMS 242. Creative Adaptation**

*Completion of the First-Year Writing Requirement. (4). (CE). May not be repeated for credit. W.*

Students adapt research from various sources into creative forms, e.g., short stories, poetry, drama, film. The course expands students' knowledge in their own fields while offering opportunities for creative expression.

**RCHUMS 249. Foundations of Music**  
(4). (CE). (EXPERIENTIAL). *May not be repeated for credit.*

This musicianship class deals with the foundations of music. It is structured around the three basic elements of music (rhythm, melody, and tonal harmony), exploring them through music reading, analysis, notation and ear-training. Special emphasis is placed on experiential learning through clapping, instrumental play, movement and other creative practices.

**RCHUMS 250. Chamber Music**  
(1 - 2; 1 in the half-term). (CE). *May be repeated for a maximum of 8 credits. May be elected more than once in the same term. Offered mandatory credit/no credit.*

No Audition required. All students who have medium or advanced training who are interested in participating in instrumental ensembles may enroll for one hour or two hours of credit. The second credit is at the discretion of the instructor. Ensembles include mixed ensembles of strings and winds; brass quintet; intermediate recorders; string quartet; woodwind quintet; and other duos and trios, including piano and harpsichord.

**RCHUMS 251. Topics in Music**  
(3 - 4). (HU). *May be repeated for a maximum of 12 credits. May be elected more than once in the same term.*

An in-depth aesthetic, historical, and musical analysis of several significant masterworks from a given period or style of music.

**RCHUMS 252. Topics in Musical Expression**  
(2 - 4). (CE). *May be repeated for a maximum of 12 credits. May be elected more than once in the same term.*

An introduction to performance of a specific style of instrumental music.

**RCHUMS 253. Choral Ensemble**  
(1). (CE). *May be repeated for credit. Offered mandatory credit/no credit.*

**RCHUMS 258. Afro-Cuban Drumming and Styles**  
(4). (CE). *May not be repeated for credit.*

This course teaches the basics of conga playing, clave, and other percussion instruments associated with Afro-Cuban music. Students learn about and play a variety of styles of Cuban music that will culminate in a small concert at the Residential College.

**RCHUMS 259. Musical Improvisation**  
(4). (CE). *May be elected twice for credit.*

This course focuses on the creation and performance of music in real time. Students need not have prior experience in improvisation, but should be comfortably fluent performing on a musical instrument or voice. Every class involves individual improvising and moving through a series of exercises and free play.

**RCHUMS 260 / DANCE 241. The Art of Dance: An Introduction to American and European Dance History, Aesthetics, and Criticism**  
(3). (HU). *May not be repeated for credit.*

The student will get an introduction to dance history as a part of the liberal arts as well as a basic familiarity with the major choreographers and dance styles in Western dance of the past two centuries.

**RCHUMS 272 / HISTART 272. Modern Art: Avant-Garde to Contemporary**  
(4; 3 in the half-term). (HU). *May not be repeated for credit.*

This course surveys the work of major 20th century European and American artists with a focus on two fundamental issues. First, we consider the way in which avant-garde artists have repeatedly interrogated the nature of signification itself, or in other words, how form produces meaning. Second, we explore the avant-garde's ambitious but theoretically controversial relationship to revolutionary politics. The course is designed to help students develop the vocabulary as well as analytical and visual tools necessary in dealing with the great diversity of works and critical debates that constitute the history of 20th century art.

**RCHUMS 273 / ASIAN 273. North Korea: Real and Imagined**  
(4). (ID). *May not be repeated for credit.*

This course acts as an introduction to North Korea, examining this controversial state from the perspective of history, international relations, and contemporary society.

**RCHUMS 275. The Western Mind in Revolution: Six Interpretations of the Human Condition**  
(4). (HU). *May not be repeated for credit.*

This course examines six major reinterpretations of the human condition from the 16th to the 20th centuries generated by the following: intellectual revolutions in astronomy (Copernicus and the heliocentric theory); theology (Luther and the Reformation); biology (Darwin and evolution of the species); sociology (Marx and Communism); psychology (Freud and psychoanalysis); and physics (Einstein and the Theory of Relativity).

**RCHUMS 280 / ENGLISH 245 / THTREMUS 211. Introduction to Drama and Theatre**  
(3; 2 in the half-term). (HU). *May not be repeated for credit. No credit granted to those who have completed or are enrolled in RCHUMS 281.*

This course aims to introduce students to as many basic aspects of the theatre, practical and theoretical, as time allows. It also presents them with a number of key plays from various periods and examines them from the point of view of their dramatic qualities, their theatrical strengths, their social and political contexts, their performance history, and their relevance today.

**RCHUMS 281. Introduction to Comedy and Tragedy**  
(4). (HU). *May not be repeated for credit. No credit granted to those who have completed or are enrolled in RCHUMS 280.*

**RCHUMS 282. Drama Interpretation I: Actor and Text**  
(4). (CE). *May not be repeated for credit.*

**RCHUMS 290. The Experience of Arts and Ideas in the Twentieth Century**  
(4). (HU). *May not be repeated for credit.*

**RCHUMS 291. The Experience of Arts and Ideas in the Nineteenth Century**  
(4). (HU). *May not be repeated for credit.*

**RCHUMS 301 / ENS 405. Beginning Indonesian Orchestra**  
(1). *May be repeated for credit.*

**RCHUMS 302 / ENS 406. Beginning Indonesian Orchestra**  
ENS 405. (1). *May be repeated for credit.*

**RCHUMS 303 / ENS 407. Intermediate Indonesian Orchestra**  
*One semester of gamelan. (1 - 2). May be repeated for credit.*

**RCHUMS 304. Time, History, Arts, and Culture**

(3). (HU). *May not be repeated for credit.*

This interdisciplinary course aims to help students think richly about the past from the perspective of the arts and humanities.

We'll approach time and history as problems worth thinking about by reading philosophy; we'll put that theoretical framework into action in case studies of individual works of literary, visual and musical art.

**RCHUMS 306. History of Writing in the West: The Book and the Body**

(3). (HU). *May not be repeated for credit.*

This class studies the history of writing and reading in the West, putting the distant past in dialogue with more recent pasts and various imagined futures. We'll intertwine the historical study of writing technologies with case studies of reading and writing practices ancient, old, and contemporary.

**RCHUMS 307 / GERMAN 309 / HONORS 309 / JAZZ 309. Imagination**

(3). (HU). *May not be repeated for credit.*

The Romantics made major claims for imagination: that it was both an artistic and cognitive faculty. This seminar will begin by considering both the structure of the Romantic literary imagination and the Romantic theory of knowledge and will conclude by investigating Freud's Interpretation of Dreams as a philosophy of aesthetic imagination. Taught in English.

**RCHUMS 308 / ASIAN 308. Arts and Ideas of Modern South and Southeast Asia**

(3). (HU). (R&E). *May not be repeated for credit.*

How have the countries of South and Southeast Asia re-conceptualized their cultures, accommodating to or rejecting

Western views in the 20th century?

Focusing primarily on India, Thailand and Indonesia, this course examines the aesthetic responses of twentieth century writers, musicians, and dancers as they come into contact with Western ideas.

**RCHUMS 310 / MEMS 310. Pagans, Christians, Barbarians in Late Antiquity and the Early Middle Ages**

(3). (HU). *May not be repeated for credit.*

An introduction to the literature and the visual arts of the Late Antique/Early Christian period. Topics covered include: the Desert tradition and its influence; Augustine's Confessions and its philosophical foundations; Gregory of Tours and the transmission of Roman culture; Beowulf and the art of northern peoples.

**RCHUMS 312 / SLAVIC 312. Central European Cinema**

*A knowledge of Russian is not required.* (3). (HU). (R&E). *May not be repeated for credit. Taught in English.*

During four decades of Communist Party rule, the film industries of Poland, Czechoslovakia, Hungary and the former Yugoslavia were under state control. One positive result of this was ample funding for serious films about social and political topics. In certain thematic areas, particularly those dealing with racial and ethnic intolerance and with the plight of women in patriarchal societies, filmmakers in East Central Europe were often able to be more incisive, frank and provocative than is often the case in profit-driven Hollywood film. Talented and committed filmmakers crafted powerful films which the regimes had no ideological grounds to suppress; this tradition of critical filmmaking has continued into the post-Communist period. The films we study concern the Holocaust, women's lives under state socialism, and the



ethno-nationalism that led to the wars in the former Yugoslavia in the 1990s. We view and discuss fourteen films from East Central Europe dealing with the above issues, considering the artistic structure of the films as well.

**RCHUMS 313 / FTVM 313 / SLAVIC 313. Russian and Ukrainian Cinema**  
(3). (HU). May not be repeated for credit.  
F.

Before the Bolshevik Revolution of 1917, Russian cinema genres resembled those common in Europe at the time. In the 1920s, however, Russian filmmakers, armed with bold new ideas about cinematic art and with a revolutionary political ideology, created theories of "montage" and a decade of acknowledged film masterpieces. In the 1930s, the experimental directions of early Soviet cinema were replaced by the doctrine of "socialist realism," a style closer to that of classical (Hollywood) narrative cinema, with themes intended to foster the political and didactic agenda of the state. After Stalin's death in 1953, however, filmmakers were able to reintroduce personal and even religious and philosophical themes, as well as return to a more 'poetic' style, particularly in Ukrainian film. As censorship ended during the Gorbachev period of glasnost (openness), 1985-91, a more honest and naturalistic cinema emerged, along with renewed stylistic experimentation. In the 1990s and in the first decades of the 21st century Russian cinema has reacted to American-style genre films by adapting those patterns to deal with new pressing concerns, such as ethnic conflict and the economic traumas of the transition to capitalism. We will view, analyze and discuss fifteen films from the 1920s through the 2000s-with an eye both to their intrinsic artistic structure and to the

social and cultural background and the political events with which they deal.

**RCHUMS 314 / MEMS 314. The Figure of Rome in Shakespeare and 16th-Century Painting**  
(3). (HU). May not be repeated for credit.

An interdisciplinary course including literature and the visual arts focused on the figure of "Rome" in four of Shakespeare's Roman plays and in painting by Caravaggio, Mantegna and Titian.

**RCHUMS 318. Critical Approaches to Literature**  
(4). (HU). May be repeated for credit.

The course will offer opportunity for in-depth study and analysis of genre, style, and other aspects of film. (Course content will vary with specific topics and instructors.)

**RCHUMS 320. Advanced Narration**  
*Consent of instructor required. RCHUMS 220.* (4). (CE). May not be repeated for credit.

**RCHUMS 321. Advanced Poetry Writing**  
*Consent of instructor required. RCHUMS 221.* (4). (CE). May not be repeated for credit.

**RCHUMS 325. Creative Writing Tutorial**  
*Consent of instructor required. RCHUMS 320/221.* (4). (CE). May be elected twice for credit.

Tutorials provide an opportunity for students who want to write, no matter how sophisticated their work, to have their efforts recognized with constructive criticism and academic credit. Reading may or may not be assigned, depending upon the background needs of the individual student. Tutorial students meet privately with the instructor each week.

**RCHUMS 326. Creative Writing Tutorial**

*Consent of instructor required. RCHUMS 325 and permission of instructor. (4). May be repeated for credit.*

**RCHUMS 330 / ISLAM 330 / MIDEAST 330 / RELIGION 330. The Arabian Nights**  
(3). (HU). *May not be repeated for credit.*

This course introduces students to the Arabian Nights in translation. Students have an opportunity to discuss the structures and the functions of narratives in society. We also focus on attitudes toward death, madness, and love. The course ends with the reception of the Nights in Euro-American contexts.

**RCHUMS 332 / THTREMUS 334. The Atonement Project**  
*May not be repeated for credit.*

This course will teach students about restorative justice, reconciliation, and atonement. We will explore questions of why and how artistic activity can begin and/or support processes of reconciliation for people who have committed crimes and for crime victims. Students in this class will facilitate weekly arts workshops in adult prisons and community venues where former prisoners, crime victims, and the families of those groups can gather together. Focusing on the themes of acknowledgement, apology, and atonement, the workshops will produce original performances, creative writing, and visual art presented at the end of the semester by both the student facilitators and the members of the workshop. Students and workshop participants who give their consent can contribute their work to the Atonement Project website - an online forum designed by the MIT Media Lab - as a means of starting conversations about atonement with web users. Ultimately this course seeks to identify the best strategies

for using the arts to address crime and those most affected by it.

**RCHUMS 334. Special Topics in the Humanities**  
(3 - 4). (HU). *May be elected twice for credit. May be elected more than once in the same term.*

This course is taught by various members of the program faculty. Each version of the course has its own subtitle, some being offered one time only while others are repeated and may evolve into regular courses with their own course number and title.

**RCHUMS 335 / THTREMUS 335. Theatre and Incarceration**  
*May not be repeated for credit.*

Artistic practice in prisons has occurred since the inception of prisons themselves, though popular thought tends not to connect the idea of the arts with that criminal justice systems. This course surveys the history of performance in prisons through the examination of plays written by and about prisoners as well as narratives which chronicle the process of creating theatre in prisons. The course also interrogates various strategies for creating performances in prisons, questioning the utility and goals of each process of creation and seeking to identify those which are most sustainable and which best serve participants in the process. Students will use some of these strategies in practice as they facilitate their workshops in prisons and juvenile detention centers.

**RCHUMS 337 / ENVIRON 337. Children Under Fire: Narratives of Sustainability**  
(3). (HU). *May not be repeated for credit.*

This seminar examines how children in crisis are portrayed in picture books, Y/A fiction, fairy tales, and film. How are they

represented as killers or consumers, soldiers or refugees? Do empire, frontier and classic war stories still influence narratives today? How do gender, family resilience, and terrorism figure in stories?

**RCHUMS 338. Growing Up Near the Great Lakes: Reading and Writing Landscapes of Childhood**

(3). (HU). May not be repeated for credit.

This course explores how the places where we grow up inform our inner landscapes. What constitutes "home" in picture books, YA fiction, legends and film? While some who enroll in this course will have grown up near the Great Lakes, any region possesses the power to influence us eternally.

**RCHUMS 340. Four Interdisciplinary Studies in 19th- & 20th-Century Intellectual History: Psychoanalysis, Mysticism, Nihilism and Marxism**

Junior/senior standing. (4). (HU). May not be repeated for credit.

This course compares and contrasts the presentation in several disciplines and literary genres of several ideas that have redefined western man's concept of himself: the emergence of "psychological man"; the attack upon science and reason; the decay of Christian morality; the rise of totalitarian states.

**RCHUMS 341. Empowering Community Through the Arts**

(3). (HU). May be elected twice for credit.

The class fosters students' ability to apply the arts as a catalyst for change in issues of social justice, particularly in response to the impact of racism and classism. Students will develop the capacity to formulate creative arts interventions through exposure to engaged-learning practices and at their weekly community-based internship.

**RCHUMS 344 / HISTART 342. Reason and Passion in the 18th Century Europe**

*Sophomore standing. (3). (HU). May not be repeated for credit.*

This course examines significant works of visual art, literature, and philosophy created in Europe and the American colonies in the eighteenth century in light of the questions "what is a person?" and "what is the relation of the individual to society?"

**RCHUMS 346 / HISTART 352. Art and Philosophy in the Renaissance Tradition**

(3). (HU). May not be repeated for credit.

This seminar explores fundamental philosophical and moral issues in European visual art and writing about art from the early modern period (c. 1400-1780). Students learn to unpack the ideas and intellectual agendas of both natural philosophy (science) and moral philosophy (ethics) in several visual and literary genres.

**RCHUMS 347 / RUSSIAN 347. Survey of Russian Literature**

*A knowledge of Russian is not required. No knowledge of Russian literature or history is presupposed. (4). (HU). May not be repeated for credit.*

Russian Literature of the 19th century to c. 1870 with emphasis on Pushkin, Lermontov, Gogol, Goncharov, Turgenev, Dostoevsky, and Tolstoy.

**RCHUMS 350. Creative Musicianship**

(4). (CE). May not be repeated for credit.

This music theory/composition course is designed to give students the skills necessary to understand and to create music as a form of personal expression. Nothing is assumed in the way of musical background; students are guided through a process that enables them to create music of their own.

**RCHUMS 351. Creative Musicianship Lab**

*RCHUMS 350. (1 - 2). (CE). May be repeated for credit.*

**RCHUMS 352. Found Instruments-Building, Design and Performance**  
*(4). (CE). May not be repeated for credit.*

Found instruments are everyday objects, utilized or repurposed as musical instruments. This class identifies not only these everyday objects with which to perform and reconstruct, but also hybrid instruments combining found objects with instruments of old. The class also covers the basics of musicianship, composition, form, improvisation and ensemble playing.

**RCHUMS 353. Fundamentals of Electronic Music**  
*(4). (CE). May not be repeated for credit.*

This course examines the legacy and definition of electronic music from its inception to its unfathomable future. From Muzak to ring tones, the influence of music technology has morphed into a cultural phenomenon that infiltrates the environment of our daily lives. How did this happen and what does it mean?

**RCHUMS 354 / AAS 354 / HONORS 354 / WGS 354. Race and Identity in Music**  
*(3). (HU). (R&E). May not be repeated for credit.*

This course explores the parameters of racial and ethnic identities in music; primarily but not exclusively in Western art music (commonly known as "classical music"). The focus is on understanding how racial and ethnic differences can be portrayed musically. Case studies are drawn from the late eighteenth century through the present with a strong emphasis on the nineteenth century and opera.

**RCHUMS 356. The Symphonic Century: Music and Revolution in the 19th Century**

*(3). (HU). May not be repeated for credit.*

This class examines the symphonies of Haydn, Mozart, Beethoven, Schubert, Berlioz, Tchaikovsky, Dvorak, Brahms, and Mahler. It pays particular attention to musical form and style, composer biography and placement in music history, and contemporary musicological methodologies in a way that engages students from all musical backgrounds.

**RCHUMS 358 / ASIAN 357. Sensuous Pleasures: China's Forbidden Novel, Jin Ping Mei**

*Sophomore standing or higher. (3). (HU). May not be repeated for credit.*

This course explores sensual pleasure in the first realistic novel of everyday life in China - Jin Ping Mei, or The Plum in the Golden Vase. Through close reading and visits to performing arts events, we consider how the experience of reading mimics, captures, and expands upon sensuous experiences.

**RCHUMS 360. Existentialism**  
*Junior/senior standing. (4). (HU). May not be repeated for credit.*

Existentialism is studied as a literary movement united by a number of related themes: 1) theological, e.g. the death of God, the absurdity of life, the void; 2) psychological, e.g. loneliness, anxiety, fear of death; and 3) philosophical, e.g. the absence of a universally valid morality and humankind as the undetermined animal. Texts by Conrad, Tolstoy, Pascal, Kierkegaard, Dostoevsky, Nietzsche, Sartre, and Camus.

**RCHUMS 364. Nietzsche's Last Year: Final Vision and Mental Collapse**  
*(3). (HU). May not be repeated for credit.*

The seminar begins with an intensive study of *The Will to Power* in order to define and summarize Nietzsche's earlier philosophic themes and positions: the advent of nihilism; the death of God and metaphysics; the rise of moral relativity; and his critiques of democracy, modern science and the bourgeois herd. This course concludes with a close examination of Nietzsche's last five works written in 1888: *The Wagner Case*, *The Twilight of the Idols*, *The AntiChrist*, *Nietzsche contra Wagner*, and *Ecce Homo*.

**RCHUMS 365 / RELIGION 360.**

**Experiences of Atheism: A History of Skepticism and Unbelief**

(3). (HU). *May not be repeated for credit.*

An examination of the concepts and expressions of atheism in its historical and social context in four periods in Western Culture: 1) the Greco-Roman world (Thales, Democritus, Lucretius, Cicero); 2) the European Enlightenment (Spinoza, Hume, Darwin); 3) the Founding Fathers (Paine, Jefferson, Madison); and 4) the Modern Period (Marx, Nietzsche, Freud).

**RCHUMS 371. Political Modernism: The Artist in the Nightmare of History: Picasso, Eliot, Orwell**

(3). (HU). *May not be repeated for credit.*

This course will undertake a close reading of T.S. Eliot's major poetry in conjunction with a selection of Picasso's paintings from the early Barcelona period to the majestic and problematic *Guernica*. We will also consider important essays by Walter Benjamin. Our goal will be an understanding of George Orwell's 1984.

**RCHUMS 372. The Subject in the Aftermath of Revolution**

(3). (HU). *May not be repeated for credit.*

Intended to introduce to undergraduates the concept of the "subject" important in recent

critical theory, the course traces shifts from ideas of natural or authentic selfhood to those of the constructed self, situating the change in the context of revolutions and their aftermath, when notions of identity are disrupted. The issue will be addressed in interdisciplinary fashion through sets or groupings in literature and the visual arts, each accompanied by readings in theory or philosophy.

**RCHUMS 373 / ASIAN 373. The Performing Arts in South and Southeast Asia**

(3). (HU). *May not be repeated for credit.*

This course explores how artists put together performances in South and Southeast Asia, through focusing on the ancient Indian epic, *The Ramayana*. We examine ways that identities are performed locally, nationally and internationally and also ways that performers and analysts from that part of the world approach and discuss the phenomenon of performance.

**RCHUMS 374 / ASIAN 356.**

**Contemporary Chinese Performance Culture**

(3). (HU). *May not be repeated for credit.*

This course examines twenty-first century Chinese culture through the lens of performance. Starting with the 2008 Beijing Olympic Opening Ceremonies, the course uses significant works as case studies to examine a range of genres in 21st-century Chinese performance culture.

**RCHUMS 381. Shakespeare on the Stage**

*RCHUMS 280. (4). (HU). May not be repeated for credit.*

**RCHUMS 383. Ibsen and Strindberg**

*Previous acting, Shakespeare course. (4). (HU). May not be repeated for credit.*

**RCHUMS 387. Renaissance Drama**

(4). *May not be repeated for credit.*

Examines common interests and techniques in the works of the major dramatists of the Renaissance, from the Italian Commedia Dell'arte and Spanish Golden Age, through Elizabethan and Jacobean England, to its culmination in the classic theatre of France. Playwrights include Lope de Vega, Ben Johnson, Moliere, Racine, and Shakespeare.

**RCHUMS 389. The Modern Theatre**  
(4). (HU). May be elected three times for credit.

This course is intended to complete the student's overview of the development of drama by outlining major themes, ideas, and characteristics of theatre from approximately 1880 to the present day. The development of drama within one particular country, e.g. France, England, Germany, is covered. The country varies from term to term.

**RCHUMS 390. Special Period and Place Drama**

*Consent of instructor required. RCHUMS 280 and permission of instructor. (4). May be repeated for credit.*

**RCHUMS 425. Creative Writing Tutorial**

*Consent of instructor required. Restricted to RC Creative Writing concentrators. (4). May be elected twice for credit.*

This course is a tutorial in which students work on an individualized basis with a member of the Residential College Creative Writing faculty.

**RCHUMS 426. Creative Writing Tutorial**

*Consent of instructor required. (4). May be repeated for credit.*

**RCHUMS 444. George Balanchine and the Transformation of American Dance**  
*RCHUMS 260 or 235 or DANCE 220;*

*Upperclass standing. (3). May not be repeated for credit.*

This course examines the life and works of George Balanchine, who transformed American popular dance and modern ballet. His life took him from Tsarist Russia to America where he worked on Broadway and in Hollywood and also introduced modern ballet to the United States. Balanchine fused African-American jazz dance with the Franco-Russian classical ballet to create a new kind of American dance style and dancer and went on to found the New York City Ballet.

**RCHUMS 481. Play Production Seminar**  
*Consent of instructor required. (4). May be elected three times for credit.*

This upper-level seminar for drama majors is an intensive study of all the essential activities preparatory to the realization of a single full-length play production. The aim is to engage students thoroughly and cooperatively in the preparation of a dramatic text for production, to discover what the chosen text contains and how it realizes its content in the intended medium, i.e. the theatre.

**RCHUMS 482. Drama Interpretation II: Performance Workshop**

*RCHUMS 280 and either RCHUMS 282 or playwriting. (4). May not be repeated for credit.*

In this hands on workshop, students will learn the essential elements involved in directing a theatre production. They will be assigned a series of exercises on choreography and staging, and will learn techniques for creative collaborative work with actors and designers. Class work will challenge them to explore a range of dramatic material and will give them numerous opportunities to direct, from

improvisations, to scenes, to the final presentation of a one-act play.

**RCHUMS 483. Environmental Theater Production Workshop in the Arboretum**

*Consent of instructor required. Previous acting, Shakespeare courses. (2 - 4 in the half-term). May be elected four times for credit.*

In this course, students explore and develop a dramatic production, usually a Shakespeare play, set in various parts of the University's Nichol's Arboretum. They read, analyze and rehearse the play during the first five weeks of class, followed by a series of public performances.

**RCHUMS 485. Special Drama Topics**

*Consent of instructor required. Sophomore standing. (1 - 2). May be repeated for a maximum of 4 credits. May be elected more than once in the same term.*

Selected drama topics which will vary from term to term depending upon needs of students and Program and depending upon events available from which the course can draw.

## **RC Interdivisional (RCIDIV)**

**RCIDIV 270 / ENVIRON 270.**

**Globalization and its Discontents: Struggles for Food, Water, and Energy**  
*(4). (ID). May not be repeated for credit.*

We will examine sustainable development and globalization through the struggles with food and water scarcity and energy justice. Using lectures, films, discussions, and assignments, this course aims to foster critical thinking about how societies are organized, and to evaluate what we can

contribute to the pursuit of a sustainable and just biosphere.

**RCIDIV 305. The Literature of Environmental and Social Justice**

*(3). (ID). May not be repeated for credit.*

This course introduces students to the history and principles of the Environmental Justice movement through cultural, literary, scientific, and political analysis. Classes include team-based research and reportage contrasting the literature with both scientific and social science approaches. A variety of guest lecturers supplement class assignments.

**RCIDIV 341 / MIDEAST 341. Science and Technology in the Ancient Middle East**

*MIDEAST 200: Introduction to the Middle East. (3). (ID). May not be repeated for credit.*

This course explores the social and intellectual history of science and technology in the ancient Middle East, including writing, agricultural tools, weaponry, mathematics, astronomy, and medicine.

**RCIDIV 350. Special Topics**

*(1). May be repeated for a maximum of 6 credits. May be elected more than once in the same term. Offered mandatory credit/no credit.*

**RCIDIV 351. Special Topics**

*(2). May be repeated for a maximum of 8 credits. May be elected more than once in the same term. Offered mandatory credit/no credit.*

**RCIDIV 390 / ENVIRON 390.**

**Environmental Activism: Citizenship in a Republic**

*It is best to have at least one environmental course prior to this class. (3). (ID). May not be repeated for credit.*

This course defines environmental activism as a social movement designed to affect positive and sustainable environmental change. We will articulate an overarching set of values to which people can respond, as well as a shared set of symbols, heroes, slogans, and other cultural referents.

**RCIDIV 391 / ENVIRON 391.**

**Sustainability and the Campus**

*An introductory course in Environment, Earth, or related field (e.g., ENVIRON 110, 111, 201, 270). (4). (ID). May not be repeated for credit.*

This course will cover the concepts and practices of environmental sustainability as they pertain to the campus of this university. Students will design and conduct projects about managing this campus more sustainably than is currently practiced.

## **RC Languages (RCLANG)**

**RCLANG 190. Intensive French I**

*(8). May not be repeated for credit. No credit granted to those who have completed or are enrolled in FRENCH 100, 101, 102, or 103. Pass/Fail with Narrative Evaluation.*

**RCLANG 191. Intensive German I**

*(8). May not be repeated for credit. No credit granted to those who have completed or are enrolled in GERMAN 100, 101, 102, or 103. Conducted in German. Pass/Fail with Narrative Evaluation.*

A beginning intensive course which provides a basic but solid knowledge of grammatical structures and syntax, a functional vocabulary, familiarity with

intonation and pronunciation, and practice in speaking and writing.

**RCLANG 193. Intensive Russian I**

*Consent of instructor required. (8). May not be repeated for credit. Credit is granted from only one among RUSSIAN 103, 111 123, or RCLANG 193. No credit is granted to those who are enrolled or have completed RUSSIAN 101 or 102. Pass/Fail with Narrative Evaluation.*

This course is designed to introduce Russian language and culture through a variety of reading, listening, written and oral activities, all designed to develop communicative competence. It provides learners with a basic, but solid knowledge of grammar and syntax, a functional vocabulary, familiarity with intonation patterns, and a native pronunciation.

**RCLANG 194. Intensive Spanish I**

*(8). May not be repeated for credit. No credit granted to those who have completed or are enrolled in SPANISH 100, 101, 102, or 103. Pass/Fail with Narrative Evaluation.*

**RCLANG 195. Intensive Latin I**

*(8). May not be repeated for credit. No credit granted to those who have completed or are enrolled in LATIN 195. Pass/Fail with Narrative Evaluation.*

This course meets two hours per day and covers in one semester the equivalent of two semesters in a non-intensive course. Students will learn morphological, grammatical, and syntactical structures of Latin, and become acquainted with significant aspects of Roman culture. Skills will be enhanced through writing, listening and speaking.

**RCLANG 196. Intensive Japanese I**

*Consent of instructor required. (10). May not be repeated for credit. No credit granted to those who have completed or are*



*enrolled in ASIANLAN 124, 125, 126, 127 or 129. Pass/Fail with Narrative Evaluation.*

A thorough grounding is given in all the language skills (speaking, reading, writing, and listening) in this course. The oral component aims to provide students with the speaking and comprehension and skills necessary to function effectively in practical situations. IN the reading/writing component, Hiragana, Katakana, and 145 Kanji are introduced.

**RCLANG 204. Spanish Language Internship Project I**

*Consent of instructor required. (1). (EXPERIENTIAL). May be elected eight times for credit. Offered mandatory credit/no credit.*

SLIP connects Spanish-speaking students with organizations in Washtenaw and Southwest Detroit to provide service learning opportunities in the Hispanic community. From volunteering, students gain insight into cultural, political, and socioeconomic issues affecting this multifaceted ethnic group, while at the same time practicing and improving their Spanish.

**RCLANG 290. Intensive French II**  
*RCLANG 190. (8). (Lang Req). May not be repeated for credit. No credit granted to those who have completed or are enrolled in FRENCH 230, 231, or 232. Pass/Fail with Narrative Evaluation.*

**RCLANG 291. Intensive German II**  
*RCLANG 191 or GERMAN 100, 102, 103, or 221. (8). (Lang Req). May not be repeated for credit. No credit granted to those who have completed or are enrolled in GERMAN 221, 230, 231, or 232. Pass/Fail with Narrative Evaluation.*

The goal of this course is to expand vocabulary and mastery of grammatical

structures and syntax to the level of competency required to pass the Proficiency Exam. The Exam requires communication with some ease with a native speaker in speaking and in writing, and comprehension of the content of both a written and spoken text of a non-technical and non-literary nature.

**RCLANG 293. Intensive Russian II**  
*Consent of instructor required. One of RCLANG 193, RUSSIAN 101 and 102 or RUSSIAN 103. (8). (Lang Req). May not be repeated for credit. Pass/Fail with Narrative Evaluation.*

The goal of the course is to expand vocabulary and to master grammatical structures and syntax to the level of competency required to pass a proficiency exam. This entails developing the ability to communicate with some ease with a native speaker, in spoken and written language. Students must be able to understand the content of texts and lectures of the nontechnical nature, and of a general (non-literary) interest.

**RCLANG 294. Intensive Spanish II**  
*RCLANG 194. (8). (Lang Req). May not be repeated for credit. No credit granted to those who have completed or are enrolled in SPANISH 230, 231, or 232. Pass/Fail with Narrative Evaluation.*

**RCLANG 295. Intensive Latin II**  
*LATIN 102, 103, or 193/504, or RCLANG 195. (8). (Lang Req). May not be repeated for credit. Pass/Fail with Narrative Evaluation.*

This course meets two hours per day and covers in one semester the equivalent of two semesters in a non-intensive course. Through the study texts from a variety of authors and genres, students will develop skills and strategies for reading increasingly complex Latin, and will expand their understanding of the Roman world.

**RCLANG 296. Intensive Japanese II**  
*Consent of instructor required. ASIANLAN 129 or RCLANG 196. (10). (Lang Req). May not be repeated for credit. No credit granted to those who have completed or are enrolled in ASIANLAN 225, 226, and 227. Pass/Fail with Narrative Evaluation.*

Students must have completed the first-year Japanese at the University of Michigan or have equivalent proficiency. The aim of this course is to introduce all the basic grammatical elements with equal emphasis on oral, listening, reading, and writing skills. An additional 165 Kanji are introduced.

**RCLANG 304. PALMA: Spanish in the Community**  
*RC students must have passed the RC proficiency test; non-RC students must have completed Spanish 276. (1). (EXPERIENTIAL). May be elected four times for credit. Offered mandatory credit/no credit.*

PALMA is a community organization that provides college tutors for the Latino/a community, enriching the process of language acquisition and cultural exchange. The course is directed to Spanish students interested in working with the community who want to learn techniques to improve the quality of tutorials. Throughout the experience students learn to understand and improve issues affecting this community.

**RCLANG 306. Spanish Language Internship Project II**  
*Consent of instructor required. (2 - 3). (EXPERIENTIAL). May not be repeated for credit.*

SLIP connects Spanish speaking students with organizations in Washtenaw and southwest Detroit to provide service learning opportunities in the Hispanic community and socioeconomic issues

affecting this multifaceted ethnic group, while at the same time practicing and improving their Spanish.

**RCLANG 310. Accelerated Review-French**  
*Permission of instructor. (4). May not be repeated for credit. Pass/Fail with Narrative Evaluation.*

This course is designed for students with extensive background who are too advanced for second year intensive but who are deficient in a basic skill area which would prevent success in a Language Readings course. Systematic review is presented through discussions, readings, and compositions, and students are prepared to pass the language proficiency exam.

**RCLANG 314. Accelerated Review-Spanish**  
*(4). May not be repeated for credit. Pass/Fail with Narrative Evaluation.*

**RCLANG 320. Readings in French**  
*Consent of instructor required. Successful completion of the RC French Proficiency, FRENCH 235 or instructor permission. (4). May be elected three times for credit.*

This is the capstone course for the Residential College French program.

**RCLANG 321. Readings in German**  
*Consent of instructor required. Proficiency test. (4). May be repeated for credit. May be elected more than once in the same term.*

Language skills are used and improved by reading, writing, and discussing topics dealing with literature, culture, politics, and other socio-cultural areas. Classes are conducted in German and are usually on an informal lecture-discussion basis. Students are encouraged to participate fully in class discussions, which enables them to exchange ideas upon which their papers are based.

**RCLANG 323. Russian Readings**  
*Proficiency in Russian (by RC standards).*  
*(4). May not be repeated for credit.*

This course, taught in Russian, will offer readings in Russian on topics that will vary from year to year.

**RCLANG 324. Readings in Spanish**  
*Consent of instructor required. Proficiency test. (4). May be repeated for credit.*

**RCLANG 325 / LATIN 325. Readings in Latin Drama: From Text to Performance**  
*One of RCLANG 295, LATIN 194, 195, 232, or 233, or permission of instructor.*  
*(4). May be elected twice for credit.*

Students study selected Latin dramas from a variety of perspectives: literary, linguistic, historical, cultural, performative, etc. The course culminates in a public performance.

## **RC Natural Sciences (RCNSCI)**

**RCNSCI 110 / BIOLOGY 110 /  
CLIMATE 171 / EARTH 171 /  
ENVIRON 110. Introduction to Global  
Change: The Science Behind  
Sustainability**  
*(4). (NS). (BS). May not be repeated for credit.*

Students learn about the evolution of the universe, Earth, our changing environment and our planets living organisms. Global Change I, which is part of the GC curriculum, assumes no prior science background. Homework and laboratories use computer-based systems modeling and analysis, and includes a group presentation.

**RCNSCI 202 / ENVIRON 201. Ecological Issues**

*(4). (NS). (BS). May not be repeated for credit.*

How have you interacted with your environment today? The environment impacts your life in more ways than you might think! This course involves lectures and discussions on ecological principles and concepts underlying the management and use of natural resources. The class emphasizes the importance of interdisciplinary approaches to matters concerning the allocation of natural resources and the quality of our environment. We will track production and use of products we use every day to issues regarding biodiversity, endangered species, climate change, tropical deforestation, agriculture, air and water pollution, energy production and use, waste disposal, and the role of politics and economics in environmental issues.

**RCNSCI 419 / EAS 574 / PUBPOL 519.  
Sustainable Energy Systems**  
*Senior standing; college-level course in Math or Economics or physical science. (3). May not be repeated for credit.*

Assessment of the current energy systems that encompasses resource extraction, conversion processes and end-uses. Sustainability is examined by studying global and regional environmental impacts, economics, energy efficiency, consumption patterns and energy policy.

## **RC Social Sciences (RCSSCI)**

**RCSSCI 211 / ENVIRON 211. Social Sciences and Environmental Problems**  
*(4). (SS). May not be repeated for credit.*

This course introduces a variety of social sciences and how they can contribute to

understanding and addressing environmental problems. The first half of the course surveys the social sciences using environmental case studies. The second half applies concepts and tools from the social sciences to address a specific environmental problem.

**RCSSCI 220 / SOC 220. Political Economy**

(4). (SS). *May not be repeated for credit.*

**RCSSCI 230. Alternative Approaches to Economic Development**

(4). (SS). *May not be repeated for credit.*

**RCSSCI 260. Theorizing Knowledge in the Social Sciences**

(3). (SS). *May not be repeated for credit.*

This course introduces methods of inquiry commonly used to answer questions having to do with connections between power and knowledge. Using a broad thematic focus and a series of "real world" questions to structure readings and activities, the key concern is with how knowledge is acquired in social science research.

**RCSSCI 275 / HISTORY 285. Science, Technology, Medicine, and Society**

(4). (SS). *May not be repeated for credit.*

Political, social, and cultural aspects of science, technology and medicine. Using case studies drawn from agriculture, information technology, medicine, and other fields, this course provides an introduction to major theories, methods, concepts, and approaches used in the field of Science, Technology, and Society.

**RCSSCI 290. Social Science Basic Seminar**

(1). *May not be repeated for credit. Offered mandatory credit/no credit.*

This seminar is designed for students (especially sophomores) who are seriously considering a social science concentration

in the Residential College. It is taught by various members of the RCSSCI staff. The content varies, but the basic format remains the same. The seminar is a prerequisite to concentration.

**RCSSCI 301 / SOC 313. Social Science Theory I: From Social Contract to Oedipus Complex**

*At least one 200-level social science course.*

(4). (SS). *May not be repeated for credit. F.*

This course explores the origins and early development of social science thinking, focusing on political economy, sociology, and psychology. The course provides students with an introduction to the theoretical foundations of social science thinking and how all such thinking is shaped and limited by its social and historical context.

**RCSSCI 327 / ANTHRCUL 327 / WGS 307. Critical Theory in Medicine and Healing**

*One course in ANTHRCUL or RCSSCI or WGS 240 or WGS with an*

*SS designation. (4). (SS). May not be repeated for credit.*

This course introduces students to the critical anthropological analysis of illness, health, healing, and medicine. We explore current and past medical anthropological approaches--political economic, phenomenological, symbolic, feminist, post-structural--in order to evaluate how well these frameworks convey the lived experience of bodies in their local worlds.

**RCSSCI 330 / AAS 330. Urban and Community Studies I**

(4). *May not be repeated for credit.*

An interdisciplinary course using faculty and community resources to provide a broad exposure to urban settings and the forces at work within them.

**RCSSCI 343 / AAS 347 / SOC 335.**

**Urban Inequality in America**

*One course in introductory sociology. (4; 3 in the half-term). (SS). May not be repeated for credit. No credit granted to students who are enrolled in or have completed SOC 435 or SOC 535.*

This course examines three questions: (1) Why are American cities and suburbs so racially and economically segregated? (2) What are the consequences of living apart? (3) What are the challenges of living together? The role of race and policy is interrogated. The class focuses primarily on Black and White communities.

**RCSSCI 346 / AAS 345 / ASIAN 345.**

**Genocide and Trauma in Southeast Asia, Africa, and Europe in the Twentieth Century**

*(3). (HU). May not be repeated for credit.*

This course begins with an introduction to the study of memory, history, and trauma that draws primarily on materials that concern cases of mass violence and its remembrance during the Holocaust before turning to modern examples of genocide in Southeast Asia and Africa.

**RCSSCI 350 / ENVIRON 350. The Built Environment: Introduction to Landscape Change**

*(3). (ID). May not be repeated for credit.*

This course is an introduction to the role of humans in shaping the built environment. It explores physical design and cultural meaning at various scales and contexts in the landscape. We explore the power of physical design and planning to enrich the human spirit, provide functional needs, interpret cultural history, and sustain natural systems.

**RCSSCI 357 / HISTORY 345. History and Theory of Punishment**

*(4). May not be repeated for credit.*

This course traces and analyzes the changing theories and practices of punishment in Europe and the United States. It focuses in particular on the evolution of the penitentiary and the changing conceptions of crime and criminals that informed penal practices in the 19th and 20th centuries. Through the use of selective comparisons, it seeks to develop a theoretical and historical context for understanding the strategies of punishment at work in the U.S. today.

**RCSSCI 360. Social Science Junior Seminar**

*Upperclass standing. (3 - 4). (SS). May be repeated for a maximum of 12 credits. May be elected more than once in the same term.*

This is a topics course taught by various members of the program faculty. Each version of the course has its own subtitle. Some versions are taught one time only while others are repeated and may evolve into regular courses with their own course number and title.

**RCSSCI 365. Excellence, Equity, and the Politics of Education**

*(4). (SS). May not be repeated for credit.*

This course focuses on educational equity and American schooling: (1) the social distribution of educational resources, opportunities and outcomes; (2) the role of schooling in reproducing prevailing economic, political, and social relationships; and (3) the contradictions between the societal functions of schooling and the professed goals of educators.

**RCSSCI 371 / ASIAN 371. Natural Disasters in East Asia**

*(3). (SS). May not be repeated for credit.*

This course examines natural disasters in East Asia from a sociopolitical, historical, and comparative perspective. Students are

asked to consider the influence of class, ethnicity, education, and power on the making and outcome of such natural disasters.

**RCSSCI 390 / EDUC 390 / ELI 390 / LING 390. Community-Engaged Learning in ESL Teaching Contexts**  
(3). (*EXPERIENTIAL*). *May be elected three times for credit.*

This course focuses on communicative language teaching and learning in community contexts. It prepares participants to teach ESL in local communities and provides them with hands-on teaching practice experiences in local service organizations. Participants explore the overall theme of "Language and Community" as they learn ESL teaching methods & techniques.

**RCSSCI 395 / AMCULT 361 / EDUC 395 / ELI 395 / LATINOAM 361 / LING 391. Principles and Practices of Teaching ESL in Migrant Communities**  
(3). (*R&E*). (*EXPERIENTIAL*). *May be elected three times for credit.*

In this service-learning course students explore the language, educational, health, and legal issues facing migrant farmworkers in southeast Michigan. As students come to understand the needs of these communities, they learn and practice methods and techniques for teaching ESL to this mixed-proficiency, primarily Spanish-speaking population.

**RCSSCI 396 / AMCULT 362 / EDUC 396 / ELI 396 / LATINOAM 362 / LING 396. Migrant Community Outreach and ESL Teaching Practicum**  
*ELI 395; completed with a minimum grade of C or better. (Prerequisites enforced at registration.) (2 - 3). (EXPERIENTIAL).*  
*May be elected three times for credit.*

In this Summer half-term course students practice teaching English to migrant farm workers in southeast Michigan. Students also help provide outreach services to camp residents such as pesticide training, interpreting, and translating. Central to the course is extensive reflection on the teaching experience, both in discussions and written assignments.

**RCSSCI 428 / ANTHRCUL 428 / WGS 428. Sex Panics in the US and UK since 1890**

*One course in WGS or ANTHRCUL or RCSSCI, SOC, or HISTORY. (3). May not be repeated for credit.*

This course explores the paradigm of "sex panics" and examines several case studies, including anti-prostitution movements in Britain and the US, progressive era conflicts over age of consent, female sexual precocity and juvenile justice in the US, the eruption of concern over sexual psychopaths in the 1930s-1950s, and anti-homosexual crusades in the 1940s and 1950s. The lingering legacies of these conflicts and their imprint on more contemporary conflicts will be explored.

**RCSSCI 460. Social Science Senior Seminar**

*Senior standing. (4). May be repeated for credit.*

Examines approaches to the social sciences and significant social trends in the 20th century from an interdisciplinary perspective. Subject matter varies from term to term.

**RCSSCI 461. Senior Seminar**

*(3). May not be repeated for credit.*

Examines approaches to the social sciences and significant social trends in the twentieth century from an interdisciplinary

perspective. Subject matter varies from term to term.

**RCSSCI 488 / SOC 488. Organizing Internship**

*Consent of department required. (1). May not be repeated for credit. Offered mandatory credit/no credit.*

Students serve as "organizing interns" with a community organization for a minimum of 10 hours per week. They may accept one of the placements arranged by the instructor, or develop their own internship or project in close consultation with the instructor. Appropriate projects require mobilizing the participation of others to achieve measurable organizing outcomes by the end of the semester. This focus on community organizing distinguishes this course from most other service-learning courses on campus, which tend to focus on community service.

**RCSSCI 489 / SOC 489. Organizing: People, Power, and Change**

*(3). May not be repeated for credit.*

This course introduces students to community organizing. Topics covered include: the definition of community organizing; the role of the organizer; motivating collective action through values, narratives, and interests; resources and power; leadership development; building community capacity; strategy and tactics; campaigns; and organizational structure and governance.

**Russian, East European, and Eurasian Studies (REEES)**

**REEES 214 / POLISH 214. Rock Poetry and Political Protest in Poland**

*(3). (HU). May not be repeated for credit.*

An introduction to Polish history and culture through a detailed analysis of jazz, cabaret, rock, and punk music texts and performance styles and strategies. The course introduces students to rhetorical and contextual reading of verbal and non-verbal texts. It places Polish culture in the larger Central European context.

**REEES 230. REES Topics in the Humanities**

*(3 - 4). (HU). May be elected five times for credit. May be elected more than once in the same term.*

Russian, Eastern European, and Eurasian topics in the Humanities; content and number of credits varies by term and instructor.

**REEES 301. Directed Reading**

*Consent of instructor required. (1 - 3). (INDEPENDENT). May be repeated for a maximum of 6 credits.*

Independent study, under the guidance of a faculty member, of a specialized topic in Russian, Soviet, or Eastern European studies.

**REEES 318 / ISLAM 318 / MEMS 318 / MIDEAST 318 / RELIGION 318. The Church of Armenia: Profile of a National Institution**

*Upper-class undergraduates or graduate students. (3). (HU). May not be repeated for credit.*

This course highlights the introduction of Christianity to Armenia and rise of the Armenian Church as an independent institution, with Armenia's political, cultural, and social history as its background. Focal topics include the following: the Christian Armenian self-image as fashioned by the Church; the Church's relations with other churches and Islam; and the religious, cultural, social, and

political administrative role, whether formal or informal, the Church played in Armenian realities.

**REEES 340 / ASIAN 340 / HISTORY 340 / MENAS 340 / MIDEAST 340. From Genghis Khan to the Taliban: Modern Central Asia**

(4; 3 - 4 in the half-term). (SS). (R&E). *May not be repeated for credit.*

This course provides an overview of modern Central Asian history. It focuses on the empires of the last 300 years: especially in Russian and Soviet Central Asia, but also the neighboring areas dominated by Britain and China (Afghanistan, Pakistan, Xinjiang).

**REEES 350 / BCS 350 / JUDAIC 350. Legacy of the Holocaust in Yugoslav Culture: How and Why We Need to Narrate the Holocaust**

(3). (HU). (R&E). *May not be repeated for credit.*

The course explores new texts about the Holocaust written in response to the resurrection of racist ideologies in the context of post-Communist Eastern Europe, the EU enlargement, as well as a persistent global economic and social crisis. Readings include fictional and testimonial narratives, theoretical and documentary material.

**REEES 395 / HISTORY 332 / POLSCI 395 / SLAVIC 395 / SOC 392. Russia and the Soviet Union: Reform, Revolution, and the Socialist Experiment**

(4; 3 in the half-term). (SS). *May not be repeated for credit.*

This interdisciplinary course explores the extraordinary history of the Russian Empire, later the Soviet Union, and now Russia and fourteen other states, among them Ukraine, the "stans" of Central Asia, Armenia, Georgia, and the Baltic republics.

**REEES 396 / POLSCI 396 / SLAVIC 396 / SOC 393. East Central Europe: Nationalism, Socialism, Democracy**  
(3 - 4). (SS). *May not be repeated for credit.*

This interdisciplinary course explores the extraordinary history of the Russian Empire, later the Soviet Union, and now Russia and fourteen other states, among them Ukraine, the "stans" of Central Asia, Armenia, Georgia, and the Baltic republics.

**REEES 397 / ANTHRCUL 317 / HISTORY 228 / POLSCI 334 / SLAVIC 397 / SOC 317. Communism and Capitalism in Eastern Europe**

(4). (SS). *May not be repeated for credit. No credit granted to those who have completed or are enrolled in REEES 396 or SLAVIC 396 or POLSCI 396 or HISTORY 333 or SOC 393.*

An overview of East Central Europe from 1945 to the present. The first half of the course explores the workings of state socialism from an anthropological perspective (with particular focus on political economy and material culture) from the Stalinist 1950s to the more diversified decades of the 1960s to 1980s. The second half covers the "revolutions" of 1989 and contemporary social, cultural, economic and political processes, including struggles over membership to the E.U.

**REEES 402. Honors Workshop, Junior**  
*Consent of instructor required. Honors student and junior standing. (2). May not be repeated for credit.*

**REEES 403. Honors Colloquium, Senior**  
*Consent of instructor required. REEES 402 or a thesis prospectus accepted (prior to start of fall term of senior year) by REEES Honors advisor and an individual thesis advisor. (1 - 6). May be repeated for a maximum of 6 credits.*



This course is required of all senior honors concentrators in REEES and is open only to them. Must be admitted by REEES honors advisor.

**REEES 405. Topics in Russian, East European, and Eurasian Studies**

*(1 - 4). May be repeated for a maximum of 8 credits. May be elected more than once in the same term.*

This course provides an introduction to focused topics in major disciplines. It is open to all students who wish to expand their knowledge of the area. Students may be required to write several papers based on original research from primary and secondary sources.

**REEES 411 / MIDEAST 411. Islamic Movements in Comparative Perspective**

*Introductory course on Islam (i.e. NEAREAST 216). (3). May not be repeated for credit.*

This course examines the rise and evolution of political movements that derive their distinct identity from Islam and appeal to its foundational ideas, values and practices.

**REEES 418 / ISLAM 418 / MIDEAST 418 / RUSSIAN 418. Islam in/and Russia: Russia's Encounters with Islam and Muslims**

*(3). May not be repeated for credit.*

This course covers the complex history of Russia's encounters with Muslim communities and states within and outside its geographical and political borders. The topics include: Ivan the Terrible, recent wars in Chechnya and Dagestan, and attempts of the Russian government to manage, accommodate and integrate Muslim communities into new Russia.

## **Religion (RELIGION)**

**RELIGION 110 / JUDAIC 120 / MELANG 101. Elementary Classical Hebrew I**

*(3). May not be repeated for credit.*

An introduction to the language and style of the Hebrew Bible and other ancient texts written in Hebrew. Regular instruction on grammar and vocabulary with drills.

**RELIGION 111 / JUDAIC 121 / MELANG 102. Elementary Classical Hebrew II**

*MELANG 101 (NESLANG 101). (3). May not be repeated for credit.*

Lessons and exercises on the language of the Hebrew Bible and other ancient texts written in Hebrew. Presentation of grammar and vocabulary.

**RELIGION 201 / MIDEAST 202. Introduction to Judaism, Christianity, Islam**

*(4; 3 in the half-term). (HU). May not be repeated for credit. F.*

Religions of the Book include Judaism, Christianity, and Islam, all with roots in the Middle East. This course serves as an introduction to those world religions. Traditions studied include Ancient Israel (including the Hebrew Bible/Old Testament) as well as its "offspring:" Judaism, Christianity, and Islam. Special attention is paid the origins and development of these traditions, what they share, and how they differ.

**RELIGION 202 / ASIAN 220. Philosophy and Religion in Asia**

*(4). (HU). May not be repeated for credit.*

This course provides a broad overview of Asian philosophies. Its central focus is to examine the relationship between important

Asian philosophical concepts and the religious movements associated with them.

**RELIGION 204 / ISLAM 216 / MIDEAST 216. Introduction to Islam** (4; 3 in the half-term). (HU). May not be repeated for credit. W.

This course provides a comprehensive introduction to Islam as a religious tradition. After examining the fundamental sources of Islam, particularly the Qur'an and the reports about the activities and sayings of the Prophet Muhammad, we will discuss how these foundations gave rise to the beliefs and practices of Muslims and to an Islamic civilization with spectacular achievements in such areas as law, theology, science, philosophy, and mysticism. Our emphasis will be on the first thousand years of Islam, but modern and recent developments will be covered as well.

**RELIGION 209 / HISTORY 209 / INTLSTD 209. Death, Immortality, and Afterlife** (3). (ID). May not be repeated for credit.

This course aims to answer this big question "What makes us human" by exploring the 'deep history' of humanity from prehistory to the present by exploring death as a universal phenomenon. It employs a multidisciplinary and multi-species approach by bringing history and the four sub-fields of anthropology in a conversation.

**RELIGION 210 / JUDAIC 220 / MELANG 201. Intermediate Classical Hebrew I**  
*MELANG 102 (NESLANG 102). (3). May not be repeated for credit.*

Introduction to the Hebrew language and literature of Ancient Israel which includes, but is not limited to, the biblical traditions. Special emphasis is placed on refining the

student's knowledge of Classical Hebrew through the study of Hebrew syntax.

**RELIGION 211 / JUDAIC 221 / MELANG 202. Intermediate Classical Hebrew II**  
*MELANG 201 (NESLANG 201). (3). (Lang Req). May not be repeated for credit.*

Introduction to Classical Hebrew language and literature through the reading and analysis of Biblical and extra-Biblical texts from the time of Ancient Israel. Special emphasis placed on the study of Classical Hebrew syntax.

**RELIGION 212 / ASIAN 211 / SEAS 211. Monks, Magic and Mediums: Buddhism in Southeast Asia** (3). (HU). May not be repeated for credit.

This course introduces undergraduates to Southeast Asian Theravada Buddhism by focusing on popular religion. Various religious actors, sacred objects and ritual activities are investigated, ranging from the normative and orthodox (monks, scripture and meditation) to the unconventional and stigmatized (spirit mediums, sacred tattoos, and spirit worship).

**RELIGION 223 / ASIAN 223. Krishna Speaks: Bhagavad-Gita** (3). (HU). May not be repeated for credit.

This class introduces Hinduism to students through an intensive study of this single most important scriptural text, the Bhagavad-Gita. We spend half the time going over the text-in-translation, chapter by chapter. The other half of the class time is devoted to critical issues relating to the text, i.e., history of the text, its transmission, its location within the history of Hinduism, its connections with political/cultural history, its ancient and modern interpretations.

**RELIGION 225 / ASIAN 225.****Introduction to Hinduism**

(3). (HU). *May not be repeated for credit.*

Hinduism is a major world religion practiced by over a billion people, primarily in South Asia, but it also was the precursor of Buddhism, and along with Buddhism it had a major impact on the civilizations in East and Southeast Asia. This class will cover its origins and development, its literature, its belief and practices, its unique social structures and doctrines, its interactions with other religions, and finally its confrontation with and accommodation of "modernity."

**RELIGION 230 / ASIAN 230 / PHIL 230.****Introduction to Buddhism**

(4). (HU). *May not be repeated for credit.*

**RELIGION 231 / ASIAN 231.****Introduction to Tibetan Buddhism**

(4). (HU). *May not be repeated for credit.*

This course surveys the development of Buddhism in Tibet. It begins with an introduction to those doctrines and practices of Indian Buddhism that would come to hold an important place in the Tibetan tradition and goes on to examine the process of transmission of Buddhism from India to Tibet.

**RELIGION 235 / JUDAIC 235 / MIDEAST 235. Introduction to the Tanakh/Old Testament**

(3). (HU). *May not be repeated for credit.*

This course is designed to introduce to the student to the modern study of the Tanakh or Old Testament within the context of a contemporary public university liberal arts curriculum. This collection of texts will be studied both as cultural vestige of the ancient Near East and as a foundational document to Western thought. Lectures and readings will focus on the development of ancient Israel's literature, religion and

history as well as on the roles of those central to the formation and maintenance of early Israelite traditions, the priest, king, prophet, and sage.

**RELIGION 236 / MIDEAST 236.****Introduction to the New Testament**

(4; 3 in the half-term). (HU). *May not be repeated for credit.*

The course will introduce the student to the modern study of the New Testament, the most widely read, but probably least understood, book in the world.

**RELIGION 246 / ANTHRCUL 246 / ISLAM 246. Anthropology of Religion**

(4). *May not be repeated for credit.*

An introduction to basic problems faced by religions and by the study of religion.

Draws on case studies from around the world to examine how people confront questions of life, death, evil, misfortune, and power. Also asks how the study of religion wrestles with relations between tolerance and faith.

**RELIGION 248 / ASIAN 248 /****HISTORY 248. Jesus Comes to Asia:****Conversion and its Consequences in Asia**

(4). (HU). (R&E). *May not be repeated for credit.*

This course provides a broad introduction to the study of Christian conversion and its legacy in the regions now known as South, East, and Southeast Asia.

**RELIGION 258 / ENGLISH 258 /****JUDAIC 258. The Bible as Literature**

(3). (HU). *May not be repeated for credit.*

Literary genres of the Old and New Testaments and the formation of the Canonical Book.

**RELIGION 260 / HISTORY 269 /****JUDAIC 260. Introduction to the**

### **Talmud and the Rabbis**

(3). (HU). *May not be repeated for credit.*

Come learn about that great classic of Jewish culture, the Talmud. The Talmud is an idiosyncratic, complex, profound and humorous meditation on many aspects of life including law, ritual, desire and God. This course provides the historical and literary tools necessary to analyze this ancient text produced by the rabbis in the first few centuries CE.

### **RELIGION 262 / PHIL 262.**

#### **Introduction to the Philosophy of Religion**

(4; 3 in the half-term). (HU). *May not be repeated for credit.*

This course covers, among other topics: traditional arguments for the existence of the God of the world's major monotheistic religions; the problem of evil; the relation of religion and morality; and the question of religious tolerance.

### **RELIGION 270 / MIDEAST 242.**

#### **Introduction to Rabbinic Literature**

(3). (HU). *May not be repeated for credit. No credit granted to those who have completed or are enrolled in HJCS 470 or JUDAIC 470 or HJCS 570 or ACABS 570 or JUDAIC 570. Taught in English.*

This course will explore the history and substance of these writings on three levels. First, we will situate the rabbinic literary enterprise within a broader cultural, historical and religious context. Second, we will examine the various genres that constitute rabbinic literature and get acquainted with the sages, an elite group of Jewish intellectuals, who created this corpus during the Roman and Byzantine periods. Finally, we will trace the way subsequent generations gradually shaped these texts to their current format and endowed them with their exalted status.

### **RELIGION 277 / MIDEAST 207. The Land of Israel/Palestine through the Ages**

(4; 3 in the half-term). (HU). (R&E). *May not be repeated for credit. Taught in English.*

This survey course on the history of the Land of Israel/Palestine will outline the historical events that occurred in that territory, analyze the various factors (political, economic, cultural) that shaped its development, and introduce empires and nations that ruled the land as well as the people who inhabited its cities and villages.

### **RELIGION 280 / JUDAIC 280 /**

#### **MIDEAST 238. The Historical Jesus in Christianity, Judaism, and Islam**

(4; 3 in the half-term). (HU). *May not be repeated for credit.*

The course focuses on the founder of Christianity, Jesus son of Joseph (Joshua bar-Yosef), as an historical character. By examining all extant historical sources (Jewish, Christian, and Pagan), the course offers a critical reconstruction of the major stages of the life and deeds of the prophet from Nazareth, from his birth under Herod the Great to his death and crucifixion under Pontius Pilate, within the diverse world of Second Temple Judaism. The course also explores the way in which the figure of Jesus has been reinterpreted over the centuries within the Christian, Jewish, and Muslim traditions, as well as his numerous portraits in the arts, involving the students in a multimedia experience of theater, fine arts, and music (Gospel music, and operas like *Amahl and the Night Vision* by Menotti as well as musicals like *Jesus Christ Superstar* and *Godspell*). Particular emphasis is placed on a detailed analysis of the many movies on Jesus, from Zecca-Noguét (1905) to DeMille (1927), Ray (1961), Pasolini (1966), Scorsese (1988), and Gibson (2004).

**RELIGION 296 / JUDAIC 296 /  
MIDEAST 255. Perspectives on the  
Holocaust**

*(4; 3 in the half-term). (HU). (R&E). May not be repeated for credit.*

This course is a study of the Holocaust as an historical event and its impact on Jewish thought and culture.

**RELIGION 303 / ASIAN 303. War  
Machines: Religious Militant Orders of  
the World**

*(3). (HU). May not be repeated for credit.*

This course explores the figure of the "Warrior Saint" as it is depicted in some of the better known religious-military orders of the world such as the Khalsa in India, the Japanese Samurai, the Shaolin monks of China, Christian Crusaders and Muslim jihadists in the medieval period.

**RELIGION 305 / ASIAN 305. Religion  
and Violence in the Secular World**

*(3). (HU). May not be repeated for credit.*

How do we think about religion and violence in a secular world? Through a series of case studies focusing on the world's major religious traditions including Christianity, Islam, Hinduism, Judaism, Sikhism and Buddhism, this course reflects on a variety of contemporary themes including the War on Terror, religious pluralism, the fate of liberal democracy etc.

**RELIGION 307 / ASIAN 307 /  
HISTORY 308. Eat, Pray, Love:  
Devotional Traditions in South Asia**

*ASIAN 220 or 225. (3). (HU). May not be repeated for credit.*

This course explores the meaning and location of devotion within Indian religions. Over the semester, the course grapples with the centrality of practice, beyond the world of scripture and sacred texts, in understanding Religion. Focusing primarily

on Hindu, Sikh, and Islamic devotional traditions, this course guides students to a deeper and nuanced understanding of the practice of popular religion in the Indian subcontinent today, as well as in the past.

**RELIGION 318 / ISLAM 318 / MEMS  
318 / MIDEAST 318 / REEES 318. The  
Church of Armenia: Profile of a National  
Institution**

*Upper-class undergraduates or graduate students. (3). (HU). May not be repeated for credit.*

This course highlights the introduction of Christianity to Armenia and rise of the Armenian Church as an independent institution, with Armenia's political, cultural, and social history as its background. Focal topics include the following: the Christian Armenian self-image as fashioned by the Church; the Church's relations with other churches and Islam; and the religious, cultural, social, and political administrative role, whether formal or informal, the Church played in Armenian realities.

**RELIGION 319 / ASIAN 319. Spirits of  
Contemporary Japan in Popular Culture**  
*ASIAN 200. (3). (HU). May not be repeated for credit.*

We search for answers within contemporary Japanese culture, focusing media. Taking the meanings of "spirit" in Japan's recent past and present predicaments, we examine themes as Japanese "spirituality" and its relationship to religion; and the current problem of "dispiritedness," and efforts to reinvigorate the victims of those conditions.

**RELIGION 323 / ASIAN 325. Zen:  
History, Culture, and Critique**

*(4). (HU). May not be repeated for credit.*

This course provides an introduction to the religious history, philosophy and practices of Zen Buddhism.

**RELIGION 325 / ASIAN 324 /  
HISTORY 325 / ISLAM 325 / MEMS  
325 / MIDEAST 375. The History of  
Islam in South Asia**

(4). (HU). (R&E). *May not be repeated for credit.*

This course examines the history of Muslim communities and institutions in South Asia. It will consider Muslim political expansion and sovereignty, conversion, the interaction between religious communities, Islamic aesthetics, the impact of colonial rule, India's partition and the creation of Pakistan, and the contemporary concerns of South Asia's Muslims.

**RELIGION 326 / CLARCH 327 / CLCIV  
327 / MIDEAST 355. Jews in the Roman  
Mediterranean: Archaeology, Religion,  
and Culture**

(3). (ID). *May not be repeated for credit.*

An introductory survey course on the history of the Jews in the Roman and Byzantine worlds, from the arrival of the Romans in the East in the first century BCE through the Arab conquests in the seventh and eighth centuries CE.

**RELIGION 328 / ASIAN 328.  
Introduction to Theravada Buddhism**

(3). (HU). *May not be repeated for credit.*

This course will introduce undergraduates to the variety of Theravada Buddhist doctrines, teachings, institutions, actors and practices in South and Southeast Asia. Myth, ritual and symbolism within the tradition will be explored comparatively across a diverse range of societies and cultures, both in the past and in the present.

**RELIGION 330 / ISLAM 330 /  
MIDEAST 330 / RCHUMS 330. The  
Arabian Nights**

(3). (HU). *May not be repeated for credit.*

This course introduces students to the Arabian Nights in translation. Students have an opportunity to discuss the structures and the functions of narratives in society. We also focus on attitudes toward death, madness, and love. The course ends with the reception of the Nights in Euro-American contexts.

**RELIGION 337 / ASIAN 337. The  
Ramayana: Text and Context in an  
Indian Epic**

ASIAN 220 or ASIAN 206. (3). (HU). *May not be repeated for credit.*

This upper-level undergraduate course intends to familiarize students with the Ramayana as literature, performance, scripture, and ideology in the Indian context. It also intends to de-familiarize students with the normative and well-known versions of this great Indian epic by introducing lesser-known retellings of the tale.

**RELIGION 346 / HISTART 346. The  
Moving Image in the Middle Ages**

(3). (HU). *May not be repeated for credit.*

This course examines contexts in which the Byzantine image disproves the traditional notion (or burden) of stillness imposed upon it. These contexts range from the public arena of processions in which icons (images) were the center of visual attention, to the walls of Byzantine churches and palaces where they performed, to the miracles in which they supposedly came "alive".

**RELIGION 351 / ASIAN 350. Gods,  
Ghosts, and Gangsters: Popular Religion  
in China**

(3). (HU). *May not be repeated for credit.*

This course introduces students to the popular religious traditions of China. From divination to demon slayers, from animal

spirits to ancestral rites, students are introduced to the texts, visual cultures, and traditions found throughout China and Taiwan.

**RELIGION 353 / CLCIV 354 / MIDEAST 354. Ancient Jerusalem: Archaeology, Religion, and Culture**  
(3). (ID). *May not be repeated for credit.*

The centrality of Jerusalem in our modern society requires no elaboration. This course reconstructs the history of ancient Jerusalem in its Graeco-Roman, and Byzantine contexts. It examines archaeological remains, inscriptions, coins, and artistic depictions, and studies the multi-faceted literary tradition that preserved the story of this ancient place.

**RELIGION 359 / JUDAIC 335 / MIDEAST 335. History and Religion of Second Temple Judaism**  
(3). (HU). *May not be repeated for credit.*

The course covers the history and religion of Ancient Judaism from the Babylonian exile (6th century BCE) to the emergence of Rabbinic Judaism (3rd century CE).

**RELIGION 360 / RCHUMS 365. Experiences of Atheism: A History of Skepticism and Unbelief**  
(3). (HU). *May not be repeated for credit.*

An examination of the concepts and expressions of atheism in its historical and social context in four periods in Western Culture: 1) the Greco-Roman world (Thales, Democritus, Lucretius, Cicero); 2) the European Enlightenment (Spinoza, Hume, Darwin); 3) the Founding Fathers (Paine, Jefferson, Madison); and 4) the Modern Period (Marx, Nietzsche, Freud).

**RELIGION 363 / MIDEAST 322. The Qur'an and Its Interpretations**  
*No prior knowledge of Islam is necessary, although some knowledge of the Bible*

*would be helpful. (3). (HU). May not be repeated for credit.*

This course examines the history of the Qur'anic text from its inception in seventh century Arabia to the present. Special attention is given to the world of ideas of the Qur'an and the ways in which it was understood and interpreted by Muslims living in vastly different social, political and cultural environments. The Qur'an's multifarious influences on all aspects of Muslim life (language, literature, arts, politics, jurisprudence, moral/ethical codes, rites of passage/lifecycle) will be examined.

**RELIGION 380. Selected Topics**  
*Only one course from RELIGION 380, 387, and 487 may be elected in the same term. (3). May be repeated for a maximum of 6 credits.*

**RELIGION 381 / CLCIV 381. Magic and Witchcraft**  
(4). (HU). *May not be repeated for credit.*

This course explores magic and witchcraft as a cultural phenomenon. We will examine magic and witchcraft from several cross-cultural perspectives, then trace the development of magic and witchcraft and the witch stereotype in history, literature, and art from classical antiquity, through the middle ages, to the early modern period in Europe and America.

**RELIGION 382 / CLCIV 380 / HISTORY 381 / JUDAIC 380. The Beginnings of Judaism: From Ethnicity to Religion**  
(3). (ID). *May not be repeated for credit. No credit granted for students who have taken both ACABS 322 and ACABS 326.*

This is an introduction to Jewish history and culture as it emerged in the sixth century B.C.E. until the Persian and Islamic conquests in the seventh century. We will try to understand how the "varieties of

Judaism" emerged from the religion and culture of Israelite origins in the context of Near Eastern and Mediterranean imperial and cultural history.

**RELIGION 387. Independent Study**

*Consent of instructor required. Only once course from RELIGION 380, 387, and 487 may be elected in the same term. (1 - 3). (INDEPENDENT). May be repeated for credit. F, W, Sp/Su.*

**RELIGION 402. Topics in Religion**

*Junior standing or permission of instructor. (1 - 3; 2 in the half-term). May not be repeated for credit.*

**RELIGION 421 / AAS 421 / HISTORY 421 / LACS 421. Religions of the African Diaspora**

*(3). (R&E). May not be repeated for credit. Rackham credit requires additional work.*

Conceptualizes "diaspora" and introduces Brazilian Candomble, Cuban Santeria and Palo Monte, Haitian Vodou, Jamaican and globalized Rastafari, the ancestor religion of the Garifuna of Central America, and Afro-Indian practices in Trinidad. Studies of historical development as well as contemporary practice will be used.

**RELIGION 423 / ISLAM 423 /**

**MIDEAST 423. Islamic Law/Shariah**

*NEAREAST 216. (3). May not be repeated for credit.*

This course will introduce students to classical Islamic legal theory and some applications of positive law in the Sunni tradition. This will include an examination of such key issues as ijihad versus taqlid, the madhhab (or school of law), the legal responsum (fatwa), legal eclecticism, and the issue of legal change, stasis and borrowing.

**RELIGION 448 / PSYCH 418.**

**Psychology and Spiritual Development**

*One of the following: PSYCH 111, 112,*

*114, or 115, and permission of instructor. (3). May not be repeated for credit.*

This course explores the contributions of transpersonal psychology in examining direct spiritual experience, the division to work within a specific spiritual discipline, and the diversity of lives led in search of life's highest goals.

**RELIGION 455 / SOC 455. Religion and Society**

*One introductory course in sociology. (3). May not be repeated for credit.*

This course introduces students to concepts and theories that apply to the sociological analysis of religion.

**RELIGION 461 / ISLAM 424 / MIDEAST 424. Islamic Intellectual History**

*Taught in English. (3). May not be repeated for credit.*

A comparative study of Islamic Sufism, theosophy, philosophy, and dialectical theology, focusing on how these diverse fields - varying in methodology and purpose - have conceived of God and the relationship between him and the created world, especially the world of human beings.

**RELIGION 464 / ASIAN 464 /**

**HISTORY 470. From Mystic Saints to Holy Warriors: Islam in Southeast Asia**

*(3). May not be repeated for credit.*

*Rackham credit requires additional work.*

Islam has taken many forms in Southeast Asia: from the sometimes otherworldly mysticism of Sufi saints to the hard-liner Islamist agendas of some contemporary jihadists. This course is an interdisciplinary exploration of these various forms of Islamic expression, viewing them through the lenses of history, culture, politics, and film.



**RELIGION 465 / MIDEAST 421. Islamic Mysticism: Sufism in Time and Space**

*(3). May not be repeated for credit. Taught in English.*

Beginning with the Qur'anic origins of Islamic mysticism and its early Christian and ascetic influences, this course will explore the central themes and institutional forms of Sufism, a stream of Islam which stresses the esoteric (mystical) dimensions of religious faith. It will reflect upon the inward quest and devotions of Muslim mystics as these have been lived and expressed in art, theology, literature, and fellowship since the 8th century CE.

**RELIGION 467 / HISTORY 427 / ISLAM 422 / MIDEAST 422. The History of Shi'ism: Drama, Ritual, and Memory**

*Junior standing or permission of instructor. (3). May not be repeated for credit.*

The course will survey the history of diverse Alid movements from the assassination of Ali (d.661) to the crystallization of shi'ism into distinct political, legal and theological schools (Twelver, Isma'ili, Zaydi), and ends with the establishment of Twelver Shi'ism as an imperial religion in Safvi Iran (1501-1722). Emphasis on the debate over authority.

**RELIGION 468 / CLCIV 466. Greek Religion**

*(3; 2 in the half-term). May not be repeated for credit.*

**RELIGION 469 / JUDAIC 468 / MIDEAST 456. Jewish Mysticism**

*(3). May not be repeated for credit. Taught in English.*

A critical study of the historical development of Jewish mysticism, its symbolic universe and its social ramifications. While the course will survey mystical traditions from the early rabbinic

period through the modern, the focus will be on the variegated medieval stream known as kabbalah.

**RELIGION 471 / JUDAIC 467 /**

**MIDEAST 476. Seminar: Topics in the Study of Judaism**

*(3). May be repeated for a maximum of 9 credits. May be elected more than once in the same term.*

Topics within history of modern Judaism such as reform and tradition in modern Judaism, theological responses to the Holocaust, modern Jewish philosophy. Topics will change.

**RELIGION 478 / JUDAIC 478 /**

**MIDEAST 455. Modern Jewish Thought**

*(3). May not be repeated for credit. Taught in English.*

An exploration of selected 20th-century Jewish thinkers and their responses to the crisis of modernity (and post-modernity): the breakdown of traditional Jewish culture and its system of meaning; the encounter with, and assimilation of, Western culture; the impact of the traumas of World War I and the Holocaust; and the contemporary quest for intimacy and tikkun, or "healing."

**RELIGION 485 / ASIAN 485. Religion in China**

*Consent of instructor required. ASIAN 230 or permission of instructor. (3). May be repeated for a maximum of 6 credits.*

This seminar examines the histories, doctrines, and practices of religious traditions in China. It makes extensive use of primary materials (both in Chinese and in translation) and secondary scholarship to investigate the relationships between literature, history, culture, and belief.

**RELIGION 486 / ASIAN 486. Buddhist Meditation**

*ASIAN 230. (3). May not be repeated for credit.*

This course examines the theories, practices, histories, and benefits of Buddhist meditation. Rather than focus on one tradition, the course explores a wide variety of Buddhist meditative traditions such as asceticism, mindfulness, seated meditation, walking meditation, tantric meditation, koan meditation and so on.

**RELIGION 487. Independent Study**

*Consent of instructor required. Only one course from RELIGION 380, 387 and 487 may be elected in the same term. (1 - 3). (INDEPENDENT). May be repeated for credit. F, W, Sp/Su.*

**RELIGION 496 / HISTORY 429 /**

**MIDEAST 432 / WGS 471.**

**Gender and Sexuality in Pre-Modern Islam**

*Students should preferably have had one course in Islamic Studies. (3). May not be repeated for credit. Taught in English.*

An introduction to Muslim understanding of gender and gender relations, first through a study of those sacred texts (Qur'an and Hadith) that came to define the ideal woman and man, as well as their roles and relationships. Then, gender participation in the political and cultural life of the Safavi, Ottoman and Mughal Courts shall be explored to view the interplay between theory and practice.

**RELIGION 497. Senior Honors Thesis**

*Consent of instructor required. Open only to seniors admitted to the Honors concentration program with permission of instructor. (1 - 6). (INDEPENDENT). May be repeated for a maximum of 6 credits. Continuing Course. Y grade can be reported at end of the first-term to indicate work in progress. At the end of the second term, the final grade is posted for both term's elections. F, W, Sp.*

## **Romance Languages and Literatures (ROMLANG)**

**ROMLANG 250. Special Topics in Humanities**

*(3). (HU). May be repeated for a maximum of 6 credits.*

A course on special topics related to the humanities discipline. Content varies by term and instructor.

**ROMLANG 253. The Mediterranean: History and Culture**

*(3). (HU). May not be repeated for credit. No credit granted to those who have completed or are enrolled in either HISTART 253 or JUDAIC 253.*

This course focuses on the political, social, and cultural history of the Early Modern Mediterranean, through close readings of literary and archival sources such as travelogues, ambassadors' reports, soldiers' tales, and captivity narratives. The course is part of the cross-disciplinary team-taught course "The Mediterranean."

**ROMLANG 377. Race and Ethnicity in Romance Studies**

*(3). May not be repeated for credit.*

**ROMLANG 400. Topics in Romance Languages and Literature**

*(1 - 4). May be elected twice for credit. Course may be taught in a Romance language. Rackham credit requires additional work.*

Topics in Romance languages, literatures and/or cultures. Course may be taught in a Romance language. Students should read the course description for the current term to see the language in which the course is offered.

**ROMLANG 491. Senior Honors Course**  
*Seniors, with permission of the Honors Advisor. (3). (INDEPENDENT). May not be repeated for credit.*

First semester of supervised independent study for the purpose of completing an honors thesis in Romance Studies.

**ROMLANG 492. Senior Honors Course**  
*Consent of department required. ROMLANG 491. (3). (INDEPENDENT). May not be repeated for credit.*

Second semester of supervised independent study for the purpose of completing an honors thesis in Romance Studies.

**ROMLANG 495. Independent Study**  
*Consent of department required. Application required. (1 - 3). (INDEPENDENT). May not be repeated for credit.*

Independent research project in Romance linguistics, literatures, and/or cultures that involve more than one Romance language.

**ROMLANG 498. Senior Seminar in Romance Languages and Literatures**  
*RLL concentrators and senior standing. (Prerequisites enforced at registration.) (3). May not be repeated for credit. Rackham credit requires additional work.*

Introduction to the field of Romance Studies, research methods, and guided individual research projects.

## **Romance Linguistics (ROMLING)**

**ROMLING 298 / SPANISH 298.**  
**Introduction to Spanish Linguistics**

*SPANISH 275, 276, or SPANISH 277; or SPANISH 278 (or 290) or AMCULT 224 or LATINOAM 224; or RCLANG 324. (Prerequisites enforced at registration.) (3). May not be repeated for credit. No credit granted to students who have completed SPANISH 330 or ROMLING 330.*

This course introduces the main concepts and methods of analysis in linguistic theory focusing on Spanish. Central to the course the concepts and techniques in the analysis of word formation (morphology), sentence structure (syntax), meaning (semantics), and sounds (phonetics-phonology). Time permitting, the course examines subfields of linguistics such as language acquisition.

**ROMLING 300. Introduction to the Romance Languages**  
*French, Spanish, or Italian: five terms at college level or equivalent. (3; 2 in the half-term). May not be repeated for credit.*

An introduction to the terminology and principles of linguistic analysis and application of these principles to the study of the Romance Languages and their development from Latin.

**ROMLING 333 / SPANISH 333.**  
**Techniques of Pronunciation and Oral Expression**  
*SPANISH 275, 276, or SPANISH 277; or SPANISH 278 (or 290) or AMCULT 224 or LATINOAM 224; or RCLANG 324. (Prerequisites enforced at registration.) (3). May not be repeated for credit.*

This course is an undergraduate-level introduction to Spanish phonetics. The main goal of the class is for the student to understand the production of sounds in Spanish as well as to apply this new knowledge to the practice and improvement of pronunciation.

**ROMLING 355 / SPANISH 355. New World Spanish**

*SPANISH 275, 276, or SPANISH 277; or SPANISH 278 (or 290) or AMCULT 224 or LATINOAM 224; or RCLANG 324.*

*(Prerequisites enforced at registration.) (3). May not be repeated for credit.*

An introduction to the history and structure of the regional and social varieties of Spanish spoken in the New World.

**ROMLING 410 / SPANISH 410. Spanish Phonetics and Phonology**

*[SPANISH/ROMLING 298, or SPANISH 333, or LING 210 and (six additional credits from SPANISH 279 through 399, or 300-level study abroad equivalent)] OR [SPANISH/ROMLING 298, or SPANISH 333, or LING 210 and two courses of RCLANG 324 and (three additional credits from SPANISH 279 through 399, or 300-level study abroad equivalent)].*

*(Prerequisites enforced at registration.) (3). May not be repeated for credit.*

This course, offering a solid theoretical foundation in Spanish phonetics and phonology, includes articulatory phonetics, acoustic phonetics, phonological theory, distinctive feature analysis, practice in transcription, contrastive analysis of English and Spanish, the consonantal system and its process, syllable, linguistic atlases, metrics origins.

**ROMLING 411 / SPANISH 411.**

**Advanced Syntax**

*[SPANISH/ROMLING 298 or LING 210 and (six additional credits from SPANISH 279 through 399, or 300-level study abroad equivalent)] OR [SPANISH/ROMLING 298 or LING 210 and two courses of RCLANG 324 and (three additional credits from SPANISH 279 through 399, or 300-level study abroad equivalent)]. (Prerequisites enforced at registration.) (3). May not be repeated for credit.*

Detailed analysis of specific syntactic problems such as theory of the tenses of the verb, the subjunctive mood, structure of simple and compound sentences.

**ROMLING 413 / EDCURINS 455 /**

**SPANISH 413. Teaching**

**Spanish/Applications of Linguistics**

*Nine credits chosen between SPANISH 279 and 399; or two RCLANG 324 and six credits chosen between SPANISH 279 and 399. (Prerequisites enforced at registration.) One of: SPANISH 298, ROMLING 298, LING 210. (3). May not be repeated for credit.*

Principles of phonological, morphological, syntactic, and semantic analyses applied to the teaching of Spanish.

**ROMLING 414 / SPANISH 414.**

**Background of Modern Spanish**

*Nine credits chosen between SPANISH 279 and 399; or two RCLANG 324 and six credits chosen between SPANISH 279 and 399. (Prerequisites enforced at registration.) One of: SPANISH 298, ROMLING 298, or LING 210. (3). May not be repeated for credit. Taught in Spanish.*

A general history of the Spanish language, based on the political and cultural history of Spain. The history of the sounds and forms, word borrowings, and changes in meaning.

**ROMLING 415 / SPANISH 415.**

**Problems in Language Translation**

*Nine credits chosen between SPANISH 279 and 399; or two RCLANG 324 and six credits chosen between SPANISH 279 and 399. (Prerequisites enforced at registration.) One of: SPANISH 298, ROMLING 298, SPANISH 289 or LING 210 AND six credits of 300 level Spanish. (3). May not be repeated for credit.*

A course designed for students at the intermediate level. the purpose of the course

is to solidify one's knowledge of Spanish grammar and structure as well as to become acquainted with the multiple and often contradictory choices that face the translator.

**ROMLING 416 / SPANISH 416. Spanish Sociolinguistics**

*Nine credits chosen between SPANISH 279 and 399; or two RCLANG 324 and six credits chosen between SPANISH 279 and 399. (Prerequisites enforced at registration.) One of SPANISH 298, ROMLING 298, LING 210. (3). May not be repeated for credit. Rackham credit requires additional work.*

This course provides a comprehensive analysis of the theoretical foundations and practical applications of language variation (dialectal, social, historical) in Spanish-speaking communities.

**ROMLING 418 / SPANISH 418. Spanish Second Language Acquisition**

*Nine credits chosen between SPANISH 279 and 399; or two RCLANG 324 and six credits chosen between SPANISH 279 and 399. (Prerequisites enforced at registration.) One of SPANISH 298, ROMLING 298, LING 210. (3). May not be repeated for credit. Rackham credit requires additional work.*

This course provides a comprehensive analysis of Second Language Acquisition in general, and more specifically, of the acquisition of Spanish by second language learners. The content covers the most relevant theories of Second Language Acquisition as well as research on the second language acquisition of Spanish.

**ROMLING 450. Independent Study**

*Consent of instructor required. (1 - 3). (INDEPENDENT). May be repeated for credit.*

**ROMLING 487 / SPANISH 487. Studies in Hispanic Linguistics**

*Nine credits chosen between SPANISH 279 and 399; or two RCLANG 324 and six credits chosen between SPANISH 279 and 399. (Prerequisites enforced at registration.) SPANISH 298, ROMLING 298, or LING 210. (3). May be repeated for a maximum of 9 credits. May be elected more than once in the same term. Rackham credit requires additional work.*

Study of selected topics in Hispanic Linguistics

**Russian (RUSSIAN)**

**RUSSIAN 101. First-Year Russian**

*(5). May not be repeated for credit. May not be repeated for credit. No credit granted to those who have completed or are enrolled in RUSSIAN 103/RCLANG 193 or RUSSIAN 123 or RUSSIAN 511.*

The student is introduced to the basics of Russian pronunciation and grammar. The class meets once a week of a lecture (grammar and culture) and four times a week for drill sections. The course begins with an intensive study of the Russian sound system and orthographic rules (alphabet and correct spelling).

**RUSSIAN 102. First-Year Russian, Continued**

*RUSSIAN 101. (Prerequisites enforced at registration.) (5). May not be repeated for credit. May not be repeated for credit. No credit granted to those who have completed or are enrolled in RUSSIAN 103 or 123 or 512, or RCLANG 193.*

This course is a sequel to RUSSIAN 101. The class meets once a week for a lecture (grammar and culture) and four times a

week for drill sessions. Students expand their vocabulary and learn to express themselves in Russian about topics of interest including Russian history and culture.

**RUSSIAN 103. Intensive First-Year Russian**

*(8). May not be repeated for credit. Credit is granted from only one course among RUSSIAN 103, 111, 123, or RCLANG 193. No credit is granted to those who have completed or are enrolled in RUSSIAN 101, 102, 511, or 512.*

This course covers in one term the material ordinarily covered in two terms in RUSSIAN 101 and RUSSIAN 102. The course carries 8 credit hours and is designed for highly motivated students who wish to acquire rapid mastery of Russian. Emphasis is on vocabulary building, speaking and comprehension.

**RUSSIAN 123. Intensive First Year Russian**

*(8 in the half-term). May not be repeated for credit. May not be repeated for credit. No credit granted to those who have completed or are enrolled in RUSSIAN 101, 102, or RUSSIAN 103/RCLANG 193 or RUSSIAN 511 or 512. Sp, Su.*

Using Nachalo as the primary text, this course is intended to take the beginner to a level of basic fluency in all four language skills. This course covers Russian grammar and syntax, equips the students with a basic yet functional vocabulary, and provides practice in speaking, reading, writing and listening. The material is supplemented by videos, audio, and Internet resources.

**RUSSIAN 125. Russian for Heritage Speakers I**

*Native or near-native speaker or permission of instructor. (3). May not be repeated for credit.*

This course is designed for "heritage speakers" of Russian, i.e. those who have a Russian background and may speak Russian at home, but have not studied the language formally. The course teaches basic reading and writing skills, as well as the development of conversational skills, emphasizing correct use of the language. Particular attention will be paid to spelling rules, basic Russian grammar, and enlarging active and passive vocabulary. The course will involve reading short Russian stories, discussing various cultural topics, and viewing and discussing Russian movies.

**RUSSIAN 201. Second-Year Russian**  
*RUSSIAN 102 or 103 or 123, or RCLANG 193. (Prerequisites enforced at registration.) (4). May not be repeated for credit. May not be repeated for credit. No credit granted to those who have completed or are enrolled in RUSSIAN 203 or RCLANG 293 or RUSSIAN 223 or 513.*

This course reviews and expands grammatical concepts first covered in RUSSIAN 101 and RUSSIAN 102, focusing on verbal aspect, declension and the verbs of placement.

**RUSSIAN 202. Second-Year Russian, Continued**

*RUSSIAN 201. (Prerequisites enforced at registration.) (4). (Lang Req). May not be repeated for credit. May not be repeated for credit. No credit granted to those who have completed or are enrolled in RUSSIAN 203 or 223 or 514, or RCLANG 293.*

This course assumes student knowledge of the fundamentals of Russian grammar, and involves the use of verbs of motion (with and without special prefixes), the formation and usage of participles and verbal adverbs.

**RUSSIAN 203. Intensive Second Year Russian**

*RUSSIAN 102, 103, or 123 or RCLANG*

*193. (Prerequisites enforced at registration.) (8). (Lang Req). May not be repeated for credit. No credit granted to those who have completed or are enrolled in RUSSIAN 201, 202, 223, 513 or 514.*

An intensive course meeting 8 hours a week plus language lunch table. This course covers the material which is usually covered in two terms of RUSSIAN 201 and RUSSIAN 202. Special emphasis is placed on speaking, comprehension and vocabulary building. Recommended for students who intend to concentrate in Russian or in Russian and East European Studies.

**RUSSIAN 223. Intensive Second Year Russian**

*RUSSIAN 123 or 103 or 102, or RCLANG 123. (Prerequisites enforced at registration.) (8 in the half-term). (Lang Req). May not be repeated for credit. May not be repeated for credit. No credit granted to those who have completed or are enrolled in RUSSIAN 201, 202, or RUSSIAN 203/RCLANG 293. Sp, Su.*

V Puti is the primary text for this course, which will enable the student to function relatively comfortably in real-life Russian-language situations. This course reviews and expands grammatical concepts first covered in the first-year Russian courses. It greatly emphasizes the development of speaking and listening skills.

**RUSSIAN 225. Russian for Heritage Speakers II**

*Successful completion of RUSSIAN 125 or permission of instructor. (3). (Lang Req). May not be repeated for credit. May not be repeated for credit. No credit granted to those who have completed or are enrolled in RUSSIAN 301, 302, 303, 515, or 516.*

This course is designed for students who have completed Russian 125 or speakers of

Russian who have basic reading and writing skills. This course is a continuation of Russian 125, and is focused on more advanced usage of Russian. Students will work on improving their skills in creative writing, reading and grammar. An emphasis will be made on more complex Russian grammar, such as, verbs of motion, use of verbal aspect, and the Russian numerical system. Topics will include Russian history, education, relationships in Russian society, current events etc. The course will involve literary readings, discussing various cultural topics, and viewing and discussing Russian movies. The successful completion of this course satisfies the University of Michigan Language Requirement. Upon completion students may advance to fourth-year level Russian, and/or content courses in literature and area studies.

**RUSSIAN 231. Russian Culture and Society: An Introduction**

*(3). (HU). May not be repeated for credit.*

Interdisciplinary course spanning many periods and areas of Russian culture, from medieval times to the present day, covering art, music, literature, architecture, popular culture, and cinema.

**RUSSIAN 301. Third-Year Russian**

*RUSSIAN 202, 203, 223, 225, or RCLANG 293. (Prerequisites enforced at registration.) Satisfactory scores on a proficiency test. (4). May not be repeated for credit. No credit granted to those who have completed or are enrolled in RUSSIAN 303, or 515. F.*

A course designed to provide concentrated training in the speaking, aural comprehension and writing of the Russian language.

**RUSSIAN 302. Third-Year Russian**

*RUSSIAN 301 or RCLANG 323.*

*(Prerequisites enforced at registration.) (4). May not be repeated for credit. No credit*

*granted to those who have completed or are enrolled in RUSSIAN 303, or 516.*

A course designed to provide concentrated training in the speaking, aural comprehension and writing of the Russian language.

**RUSSIAN 303. Third-Year Intensive Russian**

*RUSSIAN 202, 203, 223, 225 or RCLANG 293. (Prerequisites enforced at registration.) (8). May not be repeated for credit. No credit granted to those who have completed or are enrolled in RUSSIAN 301, 302, 515, or 516. S.*

This course is the intensive variant of RUSSIAN 301 and 302 that provides a concentrated review of grammar, introductory readings in Russian culture and literature, and regular practice in conversation.

**RUSSIAN 322. Russia Today**

*(4). (HU). May not be repeated for credit.*

An examination of how Russian society defines itself through many forms of cultural production. An exploration of the problematic uses and meaning of the word "culture".

**RUSSIAN 333. Sport in Russia**

*(3). (HU). May not be repeated for credit.*

The story of sport in Russia, from pre-modern times and folk sports to Soviet domination, post-Soviet collapse, and then the twenty-first-century renaissance. The course looks, among other things, at the role and meaning of sport in Russian society and culture; the relationship between native and imported features; and the tensions between government impulse and popular preference.

**RUSSIAN 346. Russian Literature from Romanticism to Realism**

*(3). (HU). May not be repeated for credit.*

Introduction to major masterpieces of 19th century Russian fiction that covers major intellectual and literary developments. The course discusses a broad range of religious, social, and moral issues raised by Russian writers. It also traces the evolution of Russian narrative traditions, emphasizing the formative role of ideas in Russian literature. Taught in English.

**RUSSIAN 347 / RCHUMS 347. Survey of Russian Literature**

*A knowledge of Russian is not required. No knowledge of Russian literature or history is presupposed. (4). (HU). May not be repeated for credit.*

Russian Literature of the 19th century to c. 1870 with emphasis on Pushkin, Lermontov, Gogol, Goncharov, Turgenev, Dostoevsky, and Tolstoy.

**RUSSIAN 352. Russian Literature of the Eighteenth Century**

*(3). May not be repeated for credit.*

Russian post-Petrine literature and culture will be considered as a testing ground for the intellectual and artistic movements originating in the West (French, English, German) - both opening up to cultural exchanges with abroad and indigenizing Western European currents in a distinct manner. Russian authors will include: Prokopovic, Kantemir, Trediakovsky, Lomonosov, Sumarokov, Derzhavin, Fonvizin, Radishchev, and Karamzin. European authors will include Boileau, Pope Swift, Voltaire, Defoe, Racine, Rousseau. The added comparative/interdisciplinary component will cater to students from across the university.

**RUSSIAN 358. Central Asia through Russian Eyes: Cultural Appropriation of**



### **an Exotic Land**

(3). (HU). (R&E). *May not be repeated for credit. No credit granted to those who have completed or are enrolled in RUSSIAN 558. Taught in English.*

This course explores key representations of Central Asia in Russian culture from the 19th-21st centuries. It highlights the following topics: how Russia's conquest of Central Asia contributed the Russians' quest for national identity; how their perceptions of the region have evolved; and how they positioned themselves in regard to values associated with Muslim culture. Taught in English.

### **RUSSIAN 361. Russian Modernism: Decadence, Symbolism, and the Avant-garde in Russia**

(3). (HU). *May not be repeated for credit. May not be repeated for credit.*

This course offers a detailed introduction to the art and thought of Russian modernism (1890-1921). It covers the colorful phenomenon of decadence and its literary and ideological manifestations, from symbolism and "the new religious consciousness" to the avant-garde and an overcoming of the decadent mood in the post-symbolist poetics.

### **RUSSIAN 362. Dostoevsky**

(3). (HU). *May not be repeated for credit. May not be repeated for credit.*

A detailed examination of the work of one of the great masters of nineteenth-century Russian prose, with particular emphasis on his exploration of urban themes and settings within the context of the emergence of modern European society.

### **RUSSIAN 364. Anton Chekhov and His Time**

*Permission of instructor. (3). (HU). May not be repeated for credit.*

A detailed examination of the literary career of Anton Chekhov: his prose and drama are analyzed and assessed in the context of the literary, social, and political currents of his time, and as masterpieces of Russian literature. An informal lecture course, with contributions and discussion from students encouraged. This course should appeal to anyone interested in short story or in modern drama. It is taught in English, and all readings may be done in English.

### **RUSSIAN 375 / HISTORY 333.**

#### **Literature and Empire: Nineteenth-Century Russian Prose**

(3). (HU). (R&E). *May not be repeated for credit.*

Nineteenth-century Russia is famous for its brutal imperialism and humanistic literature. This course explores the connection between these two aspects of Russian culture and probes the ways in which the imperial drive influenced - and was artistically mediated by - literature.

### **RUSSIAN 391 / MEMS 391. Art, Culture, and Literature in Old Russia**

(3). (HU). *May not be repeated for credit. No credit granted to those who have completed or are enrolled in RUSSIAN 551.*

An examination of the culture, arts, and literature of the Eastern Slavs from the ninth to the seventeenth centuries.

### **RUSSIAN 401. Fourth-Year Russian**

*RUSSIAN 302 or 303. (4). May not be repeated for credit. May not be repeated for credit. No credit granted to those who have completed or are enrolled in RUSSIAN 403 or 517. F.*

RUSSIAN 401/RUSSIAN 402 are designed to provide an active mastery of the more difficult facets of Russian grammar, especially the verbal system. Assignments

include Russian short stories, compositions, and oral reports.

**RUSSIAN 402. Fourth-Year Russian**

*RUSSIAN 401. (4). May not be repeated for credit. May not be repeated for credit. No credit granted to those who have completed or are enrolled in RUSSIAN 403 or 518. W.*

RUSSIAN 401/RUSSIAN 402 are designed to provide an active mastery of the more difficult facets of Russian grammar, especially the verbal system. Assignments include Russian short stories, compositions, and oral reports.

**RUSSIAN 418 / ISLAM 418 / MIDEAST 418 / REES 418. Islam in/and Russia: Russia's Encounters with Islam and Muslims**

*(3). May not be repeated for credit.*

This course covers the complex history of Russia's encounters with Muslim communities and states within and outside its geographical and political borders. The topics include: Ivan the Terrible, recent wars in Chechnya and Dagestan, and attempts of the Russian government to manage, accommodate and integrate Muslim communities into new Russia.

**RUSSIAN 430. Supervised Reading of Russian Literature**

*Consent of instructor required. Permission of Department Chair. (1 - 4).*

*(INDEPENDENT). May be elected twice for credit.*

**RUSSIAN 464. Tolstoy**

*(3). May not be repeated for credit. Taught in English. No prior knowledge of Russian literature and culture is necessary. Russian concentrators are expected to read Russian texts.*

This course covers some of the major works written by Leo Tolstoy throughout his long and extremely productive artistic life - from

the 1850s through the beginning of the 20th century. While examining Tolstoy's masterpieces in connection with religious, political, and social developments of that period, this course also focuses on how Tolstoy's writings, his religious and political views changed the Russian intellectual landscape. The course emphasizes the main existential problems that preoccupied Tolstoy and focuses on his artistic devices and narrative strategies. The class is designed both for those with a general interest in Russian literature, and for those with a specific, scholarly or literary interest in Tolstoy. All readings are in English translation. No prior knowledge of Russian literature and culture is necessary.

**RUSSIAN 466. Gogol**

*Permission of instructor. (3). May not be repeated for credit.*

A course concentrating on close reading of Gogol's works of prose fiction. A survey of Gogol's literary career, his role and position in Russian literary history and criticism are presented, as are lectures on Gogol's relation to West European writers.

**RUSSIAN 469. 20th-Century Authors**

*(3). May be repeated for a maximum of 6 credits. Taught in English.*

A detailed examination of the careers and works of one or two major authors of the twentieth century.

**RUSSIAN 477. Russian Culture and National Ideology**

*Permission of instructor. (3). May not be repeated for credit.*

This course examines the development of national ideology in 19th century Russia as a central problem of Russian culture of this period. Official nationalism as well as popular national ideology will be discussed in their metaphoric representation, as will

their deep connection with Russian literature, which provided society with some of its most popular cultural myths.

**RUSSIAN 491. Senior Honors Course**

*Consent of instructor required. Approval of departmental Honors Committee. (3). (INDEPENDENT). May be repeated for a maximum of 6 credits. Credit is granted for a combined total of six credits of RUSSIAN 491 and 492. Continuing Course. Y grade can be reported at end of the first-term to indicate work in progress. At the end of the second term of RUSSIAN 492, the final grade is posted for both term's elections.*

As the first in a two-term Honors sequence, Honors students work in consultation with the Honors advisor and thesis supervisor, and conduct research in an area of literary or linguistic studies. By the end of the term students should have completed a detailed bibliography and prospectus for a thesis. Regular meetings with the advisor are expected.

**RUSSIAN 492. Senior Honors Course**

*Consent of instructor required. Approval of departmental Honors Committee. (3). (INDEPENDENT). May be repeated for a maximum of 6 credits. Credit is granted for a combined total of six credits of RUSSIAN 491 and 492.*

**RUSSIAN 499. Advanced Seminar in Russian**

*RUSSIAN 302 or 303, and 351. (3). May not be repeated for credit. Taught in Russian.*

This seminar serves as the capstone course for the concentration in Russian, but the course is open to other qualified undergraduates and to graduate students. Topics on Russian literature and/or culture vary. Readings, discussions, written and oral assignments in Russian.

**RUSSIAN 551. Old Russian Literature**

*Permission of instructor. (3). May not be repeated for credit.*

This is a concise historical survey of medieval East Slavic written monuments, both ecclesiastic and secular, considered within the cultural framework of the Kievan Rus' (10th to 13th century) and of Muscovy (13th to 17th c.), as well as certain local centers. Specimens of homiletics (Sermon on Law and Grace), hagiography (The Life and Assassination of SS. Boris and Gleb, Life of St. Stephen of Perm, Life of Archpriest Avvakum), chronicles, and lay literature (The Institution of Vladimir Monomachus, the Igor Tale, The Supplication of Daniil Zatochnik, Discourse on the Ruin of the Land of Rus, The Journey Beyond Three Seas of Afonasil Nikitin, The Tale of Dracula, accounts of the Time of Troubles, and some 17th c. fiction and poetry) will be discussed with special attention to their language and style.

**Scandinavian Studies  
(SCAND)**

**SCAND 103. Elementary Swedish**

*(4). May not be repeated for credit.*

Essentials of grammar, written exercises, pronunciation, vocabulary building, and study of idioms. An introduction to literary texts.

**SCAND 104. Elementary Swedish**

*SCAND 103. (4). May not be repeated for credit. Students needing SCAND 103 or the equivalent for entry into SCAND 104 can meet this prerequisite by passing an examination by the instructor.*

Essentials of grammar, written exercises, pronunciation, vocabulary building, and study of idioms. An introduction to literary texts.

**SCAND 233. Second-Year Swedish**  
*SCAND 104 or 100. (4). May not be repeated for credit.*

**SCAND 234. Second-Year Swedish**  
*SCAND 233. (4). (Lang Req). May not be repeated for credit. Students needing SCAND 233 or the equivalent for entry into SCAND 234 can meet this prerequisite by passing an examination given by the instructor.*

**SCAND 325. Third Year Swedish**  
*SCAND 234. (Prerequisites enforced at registration.) (4). May be elected twice for credit.*

This course builds on the knowledge of Sweden and the Swedish language acquired during the first and second year courses. Students expand their knowledge about Sweden by reading and discussing fictional and non-fictional texts as well as watching movies. They write weekly response papers and one essay-length paper which is also presented in class.

**SCAND 331. Introduction to Scandinavian Civilization**  
*(3). (HU). May not be repeated for credit. Taught in English.*

A survey of artistic, intellectual, political, social, and literary traditions of Scandinavia from the Viking Age to the present.

**SCAND 349. Independent Study**  
*Consent of instructor required. (1 - 4). (INDEPENDENT). May be repeated for a maximum of 8 credits. F, W, Sp.*

This course serves the needs of students who wish to develop special topics not offered in the Scandinavian Studies

curriculum. It may be a program of directed readings with reports, or it may be a research project and long paper. Either must be supervised by a faculty member, and the student must have the faculty member's agreement before electing the course. This course is also used by concentrators for developing preliminary research and a prospectus for the senior thesis.

**SCAND 351. Practice in Business Swedish**

*SCAND 234, plus internship in a Scandinavian country. (3). (EXPERIENTIAL). May not be repeated for credit.*

This course offers students an opportunity to receive credit for an eight-week summer internship in a Scandinavian country. During the following semester, the student will complete and turn in a report written in Swedish. The students will also give a presentation in the second-year language classes.

**SCAND 375 / GERMAN 375 / MEMS 375. Celtic and Nordic Mythology**  
*(3). (HU). May not be repeated for credit. Taught in English. F.*

A study of the Celtic and Nordic cycles of myths and sagas, including the Nibelungenlied, Tristan and Isolde cycles, the Irish Tain, the Welsh Mabinogi, the Scandinavian Edda and some of the literature based on mythology of these cycles.

**SCAND 442. The Icelandic Saga (in English Translation)**  
*Upperclass standing or permission of instructor. (3). May not be repeated for credit. Taught in English.*

## **Southeast Asian Studies (SEAS)**

### **SEAS 211 / ASIAN 211 / RELIGION**

#### **212. Monks, Magic and Mediums:**

##### **Buddhism in Southeast Asia**

*(3). (HU). May not be repeated for credit.*

This course introduces undergraduates to Southeast Asian Theravada Buddhism by focusing on popular religion. Various religious actors, sacred objects and ritual activities are investigated, ranging from the normative and orthodox (monks, scripture and meditation) to the unconventional and stigmatized (spirit mediums, sacred tattoos, and spirit worship).

#### **SEAS 215. Contemporary Social Issues in Southeast Asia**

*(3). (SS). May not be repeated for credit. W.*

Southeast Asia is at the center of world developments best addressed from multiple disciplines (law, business, politics, sociology, health, anthropology). This course explores a number of factors that can produce significant social shifts: democracy and human rights, rapid economic growth, globalization, technological change, urbanization, migration, religious and ethnic tensions, environmental degradation, AIDS and avian flu, and youth culture.

#### **SEAS 354 / POLSCI 354. Governments and Politics of Southeast Asia**

*One course in Political Science or upperclass standing. (3). (SS). May not be repeated for credit.*

This course analyzes political developments in the countries of Southeast Asia defined in terms of Vietnam, Cambodia, Thailand, Laos, Burma, Malaysia, Singapore, Indonesia, and the Philippines.

#### **SEAS 450. Minicourse in Southeast Asian Studies**

*Junior, Senior, or graduate students. (1 - 2). May be repeated for a maximum of 6 credits. May be elected more than once in the same term. Rackham credit requires additional work.*

This course covers various topics in Southeast Asian Studies. The topics will vary term to term. Students should consult the Schedule of Classes for the focus in any given term.

#### **SEAS 455. Topics in Southeast Asian Studies**

*Junior, Senior, graduate students. (3). May be repeated for a maximum of 12 credits. May be elected more than once in the same term. Rackham credit requires additional work.*

This course covers various topics in Southeast Asian Studies. The topics will vary term to term. Students should consult the Schedule of Classes for the focus in any given term.

## **Information (SI)**

### **SI 106 / UC 109. Programs, Information and People**

*(4). May not be repeated for credit.*

Introduction to programming with a focus on applications in informatics. Covers the fundamental elements of a modern programming language and how to access data on the internet. Explores how humans and technology complement one another, including techniques used to coordinate groups of people working together on software development.

**SI 110 / UC 110. Introduction to Information Studies**

*(4). (SS). May not be repeated for credit.*

This course will provide the foundational knowledge necessary to begin to address the key issues associated with the Information Revolution. Issues will range from the theoretical (what is information and how do humans construct it?), to the cultural (is life on the screen a qualitatively different phenomenon from experiences with earlier distance-shrinking and knowledge-building technologies such as telephones?), to the practical (what are the basic architecture of computing networks?). Successful completion of this "gateway" course will give you the conceptual tools for an initial understanding of the politics, economics, and culture of the Information Age, providing a foundation for later study in Information or any number of other disciplines. You will be more thoughtful about thorny information issues, and more "information literate" than you were before.

**SI 301. Models of Social Information Processing**

*EECS 280. (4). May not be repeated for credit.*

This course focuses on how social groups form, interact, and change. We look at the technical structures of social networks and explore how individual actions are combined to produce collective effects. The techniques learned in this course can be applied to understanding friend systems like Facebook, recommender systems such as Digg, auction systems such as Ebay, and information webs used by search engines such as Google. This course introduces two conceptual models, networks and games, for how information flows and is used in multi-person settings. Networks or graph representations describe the structure of connections among people and documents.

They permit mathematical analysis and meaningful visualizations that highlight different roles played by different people or documents, as well as features of the collection as a whole. Game representations describe, in situations of interdependence, the actions available to different people and how each person's outcomes are contingent on the choices of other people. It permits analysis of stable sets of choices by all the people (equilibrium's). It also provides a framework for analysis of the likely effects of alternative designs for markets and information elicitation mechanisms, based on their abstract game representations. Assignments in the course include problem sets exploring the mechanics of the models and essays applying them to current applications in social computing.

**SI 410 / AMCULT 410 / DIGITAL 410. Ethics and Information Technology**

*(4). May not be repeated for credit.*

Applies an emergent philosophy of information to a variety of new technologies that are inherently social in their design, construction, and use. Learning modules include: social media interaction; remembering/forgetting; and game design ethics. By collaborating on building a wiki community, students explore ethical/unethical information behaviors and test information quality metrics.

**SI 422. Needs Assessment and Usability Evaluation**

*(3). May not be repeated for credit.*

Any product--whether a website, a technological system, or an electronically mediated service--benefits from evaluation before, during, and after the development cycle. Too often, the people who use a product cannot find what they want or accomplish what they need to do. Products are more successful when they are

developed through a process that identifies how the products will be used, elicits input from potential users, and watches how the product function in real time with real users. This course provides a hands-on introduction to methods used throughout the entire evaluation process--from identifying the goals of the product, picturing who will use it, engaging users through a variety of formative evaluation techniques, and confirming a product's function through usability testing and summative evaluation. Specific methods include personas and scenarios, competitive analysis, observation, surveys, interviews, data analysis, heuristic evaluation, usability testing, and task analysis. Students will work on group projects that apply these techniques to real products in use or development.

**SI 429. Online Communities: Analysis and Design of Online Interaction**  
(3). *May not be repeated for credit.*

This course gives students a background in theory and practice surrounding online interaction environments. For the purpose of this course, a community is defined as a group of people who sustain interaction over time. The group may be held together by a common identity, a collective purpose, or merely by the individual utility gained from the interactions. An online interaction environment is an electronic forum, accessed through computers or other electronic devices, in which community members can conduct some or all of their interactions.

**SI 561 / EECS 595 / LING 541. Natural Language Processing**  
*Senior standing. (3). (BS). May not be repeated for credit.*

Linguistics fundamentals of natural language processing (NLP), part of speech tagging, hidden Markov models, syntax and

parsing, lexical semantics, compositional semantics, word sense disambiguation, machine translation. Additional topics such as sentiment analysis, text generation, and deep learning for NLP>

## **Slavic Languages and Literatures (SLAVIC)**

**SLAVIC 150. First Year Seminar**

*Enrollment restricted to first-year students, including those with sophomore standing. (3). (HU). May be repeated for a maximum of 6 credits.*

The course will serve as the Freshman Seminar for the Slavic Department. It will have several sections, each serving as an introduction to aspects of culture in Eastern Europe, Russia and Eurasia. Each section will be subtitled and its description will address the cultural features to be analyzed and discussed (i.e., diversity, history, ethnicity, religions, languages, art, etc.)

**SLAVIC 151. First Year Seminar**

*Enrollment restricted to first-year students, including those with sophomore standing. (4). (FYWR). May not be repeated for credit.*

The course will serve as the Depts. 4 credit Freshmen Seminar. It will have multiple sections, as needed, each serving as an introduction to aspects of culture in Eastern Europe, Russia, and Eurasia. Each section will be subtitled and its description will address the cultural features to be analyzed and discussed (i.e., diversity, history, ethnicity, religions, languages, customs, etc.)

**SLAVIC 225. Arts and Cultures of Central Europe**

(3). (HU). *May not be repeated for credit.*

The course is an introduction to the rich cultures of the peoples of Central Europe (Croats, Czechs, Hungarians, Jews, Poles, Serbs, and Slovaks) seen against the background of two world wars, communism and its recent disintegration. Culturally vibrant, Central Europe reveals the tragic destiny of twentieth-century civilization which gave rise to two totalitarian systems: fascism and communism. The course will outline the ethnic complexities of the region, with special attention to Jewish culture and its tragic destruction during the Holocaust. The traumatic effects of the war and of ideological coercion on the civilian population will be documented by contemporary films. The course will examine the fate of culture under totalitarianism and study subterfuges used by novelists, dramatists, and artists to circumvent political control and censorship.

**SLAVIC 240. Introduction to Slavic Folklore**

(3). (HU). *May not be repeated for credit.*

Introduction to the folklore of Slavs, the largest population of Central and Eastern Europe and the Balkans. Primary emphasis on oral traditional verse and prose (epic, ballad, lyric, folktale), plus folk art and architecture, music, dance, cooking, customs, and ritual.

**SLAVIC 245. Vampires and How to Spot Them: Blood, Lust and Power**

(3). (HU). *May not be repeated for credit.*

This course examines the phenomenon of vampirism at different periods in various cultures. We begin with the vampiric folklore in Eastern Europe, follow the legend's variations since the 18th century all the way to the contemporary Hollywood

and pop culture fascination with blood, sex, and eternal life.

**SLAVIC 260. Directed Reading in Slavic Studies**

*Consent of instructor required. (1 - 4). May be elected twice for credit.*

This course is designed to provide an opportunity for extensive reading and research in Slavic studies. The subject covered is dependent upon the preparation and interest of the individual student.

**SLAVIC 261. Introduction to Baltic Cultures**

(3). (HU). *May not be repeated for credit.*

This interdisciplinary course provides an overview of the histories, societies, and cultures of the Baltics from the pagan age to contemporary times. While investigating major Estonian, Latvian, and Lithuanian contributions to literature, painting, music, architecture, sciences, and politics, the course will emphasize the Baltic states' unique multicultural dimensions.

**SLAVIC 270 / JUDAIC 271. Contact and Conflict: Jewish Experience in Eastern Europe through Art, Film and Literature**

(3). (R&E). *May not be repeated for credit.*

The class surveys Jewish experience in Central and Eastern Europe, primarily in the nineteenth and twentieth centuries, focusing on contact and coexistence in the multiethnic environments characteristic of the area. This experience will mainly be studied through literature and film, making the course primarily an investigation of cultural history.

**SLAVIC 281 / JUDAIC 281 / MIDEAST 281. Jews in the Modern World: Texts, Images, Ideas**

(4). (HU). (R&E). *May not be repeated for credit.*



In this course we examine the multiple ways in which Jews in Europe, America, Israel, and the Middle East have responded to the cultural, political, economic, and social forces of modernity. By focusing on a variety of textual and visual material from the late 18th century to the present (including literary texts, fine arts, film, architecture), students have an opportunity to explore the processes by which Jewish culture has been shaped and reshaped in the face of unprecedented new freedoms and persecutions.

**SLAVIC 290. Studies in Eastern European Cultures**

*(1 - 3; 1 in the half-term). (HU). May be repeated for a maximum of 3 credits. May be elected more than once in the same term.*

Slavic topic title courses are intended to introduce a specific area of Slavic studies to a general student audience. Basic concepts and analytical techniques are introduced, and the students gain significant knowledge of a clearly-defined topic.

**SLAVIC 312 / RCHUMS 312. Central European Cinema**

*A knowledge of Russian is not required. (3). (HU). (R&E). May not be repeated for credit. Taught in English.*

During four decades of Communist Party rule, the film industries of Poland, Czechoslovakia, Hungary and the former Yugoslavia were under state control. One positive result of this was ample funding for serious films about social and political topics. In certain thematic areas, particularly those dealing with racial and ethnic intolerance and with the plight of women in patriarchal societies, filmmakers in East Central Europe were often able to be more incisive, frank and provocative than is often the case in profit-driven Hollywood film. Talented and committed filmmakers

crafted powerful films which the regimes had no ideological grounds to suppress; this tradition of critical filmmaking has continued into the post-Communist period. The films we study concern the Holocaust, women's lives under state socialism, and the ethno-nationalism that led to the wars in the former Yugoslavia in the 1990s. We view and discuss fourteen films from East Central Europe dealing with the above issues, considering the artistic structure of the films as well.

**SLAVIC 313 / FTVM 313 / RCHUMS**

**313. Russian and Ukrainian Cinema**

*(3). (HU). May not be repeated for credit. F.*

Before the Bolshevik Revolution of 1917, Russian cinema genres resembled those common in Europe at the time. In the 1920s, however, Russian filmmakers, armed with bold new ideas about cinematic art and with a revolutionary political ideology, created theories of "montage" and a decade of acknowledged film masterpieces. In the 1930s, the experimental directions of early Soviet cinema were replaced by the doctrine of "socialist realism," a style closer to that of classical (Hollywood) narrative cinema, with themes intended to foster the political and didactic agenda of the state. After Stalin's death in 1953, however, filmmakers were able to reintroduce personal and even religious and philosophical themes, as well as return to a more 'poetic' style, particularly in Ukrainian film. As censorship ended during the Gorbachev period of glasnost (openness), 1985-91, a more honest and naturalistic cinema emerged, along with renewed stylistic experimentation. In the 1990s and in the first decades of the 21st century Russian cinema has reacted to American-style genre films by adapting those patterns to deal with new pressing concerns, such as ethnic

conflict and the economic traumas of the transition to capitalism. We will view, analyze and discuss fifteen films from the 1920s through the 2000s-with an eye both to their intrinsic artistic structure and to the social and cultural background and the political events with which they deal.

**SLAVIC 315. Field Work**

*Consent of instructor required. At least one course in Russian, Polish, Czech, Ukrainian and/or Bosnian/Croatian/Serbian language, literature, culture, or history. (1 - 3). (EXPERIENTIAL). May be repeated for a maximum of 6 credits. Offered mandatory credit/no credit.*

Independent study for field work either locally or abroad.

**SLAVIC 395 / HISTORY 332 / POLSCI 395 / REEES 395 / SOC 392. Russia and the Soviet Union: Reform, Revolution, and the Socialist Experiment**

*(4; 3 in the half-term). (SS). May not be repeated for credit. May not be counted in a Slavic Department academic minor. F.*

This interdisciplinary course explores the extraordinary history of the Russian Empire, later the Soviet Union, and now Russia and fourteen other states, among them Ukraine, the "stans" of Central Asia, Armenia, Georgia, and the Baltic republics.

**SLAVIC 396 / POLSCI 396 / REEES 396 / SOC 393. East Central Europe: Nationalism, Socialism, Democracy**  
*(3 - 4). (SS). May not be repeated for credit. May not be counted in a Slavic Department academic minor.*

This interdisciplinary course explores the extraordinary history of the Russian Empire, later the Soviet Union, and now Russia and fourteen other states, among them Ukraine, the "stans" of Central Asia, Armenia, Georgia, and the Baltic republics.

**SLAVIC 397 / ANTHRCUL 317 / HISTORY 228 / POLSCI 334 / REEES 397 / SOC 317. Communism and Capitalism in Eastern Europe**

*(4). (SS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in REEES 396 or SLAVIC 396 or POLSCI 396 or HISTORY 333 or SOC 393.*

An overview of East Central Europe from 1945 to the present. The first half of the course explores the workings of state socialism from an anthropological perspective (with particular focus on political economy and material culture) from the Stalinist 1950s to the more diversified decades of the 1960s to 1980s. The second half covers the "revolutions" of 1989 and contemporary social, cultural, economic and political processes, including struggles over membership to the E.U.

**SLAVIC 450. Directed Readings in Slavic Studies**

*(1 - 4). (INDEPENDENT). May be elected twice for credit.*

This course is designed to provide an opportunity for extensive reading and research in Slavic studies. The subject covered is dependent upon the preparation and interest of the individual student.

**SLAVIC 470. Topics in Cultural Studies of Central, Eastern, and Southern Europe**

*(1 - 3; 1 in the half-term). May be repeated for a maximum of 9 credits.*

Survey and analysis of selected topics in the literature, arts, and related areas of the cultures of Central, Eastern, and Southern Europe.

**Sociology (SOC)**

**SOC 100. Introduction to Sociology**

*Restricted to first- and second-year students. (Prerequisites enforced at registration.) Juniors and seniors electing an introductory course should elect SOC 300 or SOC 302. (4; 3 in the half-term). (SS). May not be repeated for credit. No credit granted to students who have completed or are enrolled in SOC 102, 195, 300, or 302. May not be included in a Sociology major.*

This course is an introduction to sociology as a field of scholarship and mode of inquiry. Students develop their own ability to reason sociologically and become part of an ongoing conversation about the patterns, probabilities, principles, and processes that characterize society.

**SOC 102. Introduction to Sociology: Special Topics**

*Restricted to first- and second-year students. (Prerequisites enforced at registration.) Juniors and seniors electing an introductory course should elect SOC 300 or SOC 302. (4; 3 in the half-term). (SS). May be repeated for a maximum of 8 credits. No credit granted to students who have completed or are enrolled in SOC 100, 195, 300, or 302. May not be included in a Sociology major.*

An introduction to the discipline of sociology via examination of topical social issues.

**SOC 105. First Year Seminar in Sociology**

*Enrollment restricted to first-year students, including those with sophomore standing. (3). (SS). May not be repeated for credit. May not be included in a Sociology major.*

An examination of topical social issues.

**SOC 122 / ALA 122 / PSYCH 122.****Intergroup Dialogues**

*Consent of instructor required. (3). (R&E).*

*May be repeated for a maximum of 6 credits. May not be included in a major in Sociology. May not be used as a prerequisite for, or included in, a major in Psychology.*

In a multicultural society, discussions about issues of conflict and community are needed to facilitate understanding between social/cultural groups. In this intergroup dialogue, students will participate in semi-structured face-to-face meetings across social identity groups. Students will discuss relevant reading material and will explore group experiences in various social and institutional contexts. Participants will examine narratives and historical, psychological, and sociological materials. Students will participate in exercises that will be debriefed in class and in weekly journals. Students will learn about pertinent issues facing the participating groups on campus and in society. The goal is to create a setting in which students engage in open and constructive dialogue, learning, and exploration concerning issues of intergroup relations, conflict, and community.

**SOC 195. Honors Introduction to Sociology**

*Open to first- and second-year students admitted to the LSA Honors Program. Other first- and second-year students with a minimum GPA of 3.2 may enroll with permission. (4; 3 in the half-term). (SS). May not be repeated for credit. No credit granted to students who have completed or are enrolled in SOC 100, 102, 300, or 302. May not be included in a Sociology major.*

An accelerated introduction to the discipline of sociology.

**SOC 203. Sociology of Multiculturalism**

*(3). (SS). May not be repeated for credit.*

This course examines conflict solutions in sustainable, structural, and ethical ways,

particularly among individuals with membership in groups of diverse class, race/ethnicity, gender, sexual orientation, citizenship, and other identity backgrounds. It explores strategies that could turn stratified, dominant, and unjust differences into differences that enrich social relationships.

**SOC 204. International Migration and the Politics of Membership in a Globalizing World**

(3). (SS). *May not be repeated for credit.*

The growing movement of peoples across national boundaries profoundly transforms societies. It does so by altering the nature and significance of fundamental institutions and categories of membership, including citizenship, race/ethnicity, gender, and class. This course provides an introductory look into the topic of, and the major debates surrounding, international migration.

**SOC 206 / ENVIRON 216. Animals and Society**

(3). (SS). *May not be repeated for credit.*

This course sociologically examines the relationships that exist between humans and other non-human animals. It explores the legal, ethical, cultural, political, ecological, and social issues that underlie the concerns for and against animal rights and protections.

**SOC 207. Social Suffering**

*No credit for students who have previously taken SOC 295 Topics in Sociology with the topic "Soc of Suffering" (Topic #11). (Prerequisites enforced at registration.) Introduction to Sociology (100, 102, 195, 300, 302). (3). (SS). May not be repeated for credit.*

This course is a survey of the most important questions, perspectives, concepts, and research findings of a relatively new, multi-disciplinary field, known as the study

of "social suffering" which focuses on the lived experience of pain, damage, injury, deprivation, and loss having their origins in society and whose devastating consequences are experienced by individuals within particular forms of culture, social structures, and power relations existing in their own societies and in the global world they live in.

**SOC 208. Terrorism, Torture, and Violence**

(4; 3 in the half-term). (SS). *May not be repeated for credit.*

This course analyzes contemporary trajectories of violence in three parts, starting with the analysis of terrorism, continuing with torture and ending with campus sexual assault. It thus traces violence from the macro to the micro level.

**SOC 210. Elementary Statistics**

(4; 3 in the half-term). (MSA). (BS). (QR/1). *May not be repeated for credit. No credit granted to those who have completed or are enrolled in STATS 250, 280, or 412, or ECON 404, 405, 251, 451, and 453, or IOE 265. Those with credit for SOC 210 receive no credit for STATS 180. Sociology majors should elect this course during their sophomore year. Honors majors should enroll in SOC 210, STATS 250 (350) or its equivalent prior to beginning the Honors course sequence in the winter term of the junior year.*

A survey of the use of statistics in research. Students are introduced to descriptive measures and problems of inference in relation to a wide range of materials. An introduction to statistical packages on microcomputers is provided.

**SOC 216 / WGS 216. Thinking Class: Inequality in Media, Bodies, Environment, and More**

(3). *May not be repeated for credit.*

According to ideals of American exceptionalism, we live in a classless society. But according to mounting evidence, 21st Century America is a class-bound society with historic, widening gulfs between upper and lower strata. Through readings, discussion, and audiovisual materials, this seminar examines class "on the ground" in various sites and contexts.

**SOC 218 / ALA 220 / PSYCH 213.**

**Foundations of Intergroup Relations**

*No credit granted if you've already taken UC 218, ALA 220, SOC 218, or PSYCH 218 with the topic "Foundations in Intergroup Relations (#2). (Prerequisites enforced at registration.) (3). (SS). May not be repeated for credit.*

This introductory course examines the theory behind how social identity groups form, how bias develops (prejudice, stereotyping, and discrimination), and how people come to understand their own social identity group membership in the context of a society where privilege and power exist. Students can expect to participate in class through individual and group projects as well as class discussion.

**SOC 220 / RCSSCI 220. Political Economy**

*(4). (SS). May not be repeated for credit.*

**SOC 221 / AMCULT 221. Unequal America: Understanding Social Inequality**

*(4; 3 in the half-term). (SS). May not be repeated for credit.*

The United States has higher inequality - the gap between the rich and the poor - than any of the other industrialized democracies. Further, that gap has increased dramatically since 1980. This course examines inequality in U.S. society from a sociological perspective, incorporating insights from other fields, including demography,

psychology, and economics. We will explore contemporary debates and issues, with an emphasis on research evidence. A goal of the course is to encourage students to critically evaluate their own assumptions about the rich and the poor in U.S. society.

**SOC 225. Project Community: Sociology in Action**

*(2 - 4). (EXPERIENTIAL). May not be repeated for credit. A combined total of eight credits of SOC 225 (and 389), 321, 324, 394, 395, and 396 may be counted toward a major in Sociology. A maximum of four credits of SOC 225 (and 389) may be included in a major in sociology.*

Students combine approximately 4 hours of weekly service in community settings, with weekly student-led seminars. Seminars are interactive, focus on related sociological issues, and provide a time for mutual support, planning and problem-solving.

**SOC 233. Social Problems**

*(4; 3 in the half-term). (SS). May not be repeated for credit.*

This course is a critical exploration of three of the most pressing social problems in contemporary American society: residential segregation, mass incarceration, and political polarization. Through a sociological lens, we will examine how some issues, but not others, morph into social problems.

**SOC 240. Sociology of Culture**

*(4; 3 in the half-term). (SS). May not be repeated for credit.*

This class surveys scholarship in the sociology of culture - one of the broadest and fastest growing subfields in Sociology. The topics of study range from the study of meaning, symbols, classification, narratives, and beliefs, to inequality, organizations, arts, science, and cultural consumption.

**SOC 242. The Experience of Social Class in College and the Community**

(3). (SS). *May not be repeated for credit.*

Considers how social class inequality is encountered in America. Examines structural bases of class examined including family, educational, occupational, and income inequalities in a country publicly committed to equality of opportunity. Reviews contradictions for children and adults from various class backgrounds. Matters of ethics and social justice are considered.

**SOC 250. Politics, Power, and Society**  
(4; 3 in the half-term). (SS). *May not be repeated for credit.*

This course introduces students to the theories and debates in the subfield of political sociology. The course will examine readings on political philosophy, the nature of the state and citizenship, ideology and belief, social welfare policy, political processes, and the social contexts of domination and resistance.

**SOC 255. Sociology of Music: Impacts of Culture on Composition and Performance**

*One course in sociology or musicology, or extensive personal background in music.*  
(3). (SS). *May not be repeated for credit.*

This course draws on both theoretical and applied literature to explore the impact of social context on the production and experience of music as well as music's impact in various social environments. Popular and classical forms of music are examined.

**SOC 260 / CMPLXSYS 260. Tipping Points, Bandwagons and Cascades: From Individual Behavior to Social Dynamics**

(3). *May not be repeated for credit.*

In this class, we examine how interdependent behaviors of individuals can lead to some surprising and unexpected social outcomes. We will explore both theoretical models and empirical applications of social dynamics, including sexual networks and marriage markets, the formation and transformation of neighborhoods, the success or failure of social movements, and the diffusion of innovation.

**SOC 270 / WGS 270. Gender and the Law**

(4; 3 in the half-term). (SS). (R&E). *May not be repeated for credit.*

This course explores contemporary legal responses to gender inequality in the U.S., with particular attention to the ways that feminists have tried to use law for social change. Topics include equal protection under the U.S. constitution, sex and race discrimination on the job, pay equity, regulations of pregnancy and abortion, and transgender rights.

**SOC 285. Social Life in the Digital World**  
(3). (SS). *May not be repeated for credit.*

This course explores a series of fundamental concepts in sociology: structure, culture, inequality, communities, socialization, presentation of self, deviance, institutions, and social movements. In each case, the traditional concept is explained and its application to the digital world is explored.

**SOC 295. Topics in Sociology**

(1 - 4). (SS). *May be elected three times for credit. May be elected more than once in the same term.*

These courses address specific research problems currently under study by faculty members. Topics are announced each term in the Schedule of Classes.

**SOC 300. Sociological Principles and Problems**

(3). (SS). *May not be repeated for credit. No credit granted to those who have completed or are enrolled in SOC 100, 102, 195, or 302.*

An upper level introduction to the mode and procedure of sociological explanation in its major fields of theory and application. This class is appropriate for students with little social science background.

**SOC 302. Health and Society: An Introduction to Sociology**

(4). (SS). *May not be repeated for credit. No credit granted to those who have completed or enrolled in SOC 100, SOC 102, SOC 195, SOC 300.*

This introduction to sociology course is designed for students who have a strong interest in the social issues surrounding health and medicine or those with plans to enter the health professions in any capacity. This course introduces students to the core concepts and methods of sociological inquiry. Unlike a traditional introductory course, however, it uses concepts from medical sociology wherever possible to illustrate these concepts. This class will prove relevant to students interested in medical issues and help to prepare future medical professionals to work as informed agents of health and healthcare.

**SOC 303 / AAS 303. Race and Ethnic Relations**

*An introductory course in Sociology or AAS 201. (3 - 4; 3 in the half-term). (SS). (R&E). May not be repeated for credit.*

This course examines the tensions underlying American race and ethnic relations. Students use theoretical debates, historical, social and political meanings of race and ethnicity, and the study of how various racial and ethnic groups construct

and use their social identities to examine the processes that facilitate or impede intergroup relations.

**SOC 304 / AMCULT 304 / LATINOAM 304. American Immigration**

*One introductory course in Sociology or American Culture. (4). (SS). (R&E). May not be repeated for credit.*

As America is a nation of immigrants, this course surveys the immigrant past of ethnic groups such as the Irish, Germans, Jews, Italians, Chinese, Japanese, Blacks, Puerto Ricans, Cubans, and Mexicans. Surveying these varied ethnic histories, we analyze them from contrasting theoretical perspectives on race and ethnic relations, theories of assimilation, internal colonialism, etc. We seek to understand what is unique to and shared among these experiences.

**SOC 305. Introduction to Sociological Theory**

*At least one course in introductory sociology. (4; 3 in the half-term). May not be repeated for credit. It is highly recommended that sociology majors not elect both SOC 305 and SOC 310 in the same term.*

This course provides an introduction to sociological theory. It covers both classical and contemporary theories, paying particular attention to their role in research settings. Most spaces are reserved for concentrators.

**SOC 310. Sociological Research Methods**

*Sociology majors. (Prerequisites enforced at registration.) Sociology majors are strongly encouraged to elect SOC 310 in their junior year. Honor majors should elect this course prior to or concurrently with SOC 497 (the first required course in the Sociology Honors sequence). (4; 3 in the half-term). (BS). (QR/1). May not be repeated for credit. No credit granted to*

*those who have completed SOC 312. Meets the sociology Research Methods Requirement. It is highly recommended that sociology majors not elect both SOC 305 and SOC 310 in the same term.*

This course explores the basic methods of sociological research. Students will examine the relationship between social theory and research, the research process, choosing a sample, conditions for inferring causation, and methods of data collection, along with the applications and ethics of sociological research.

**SOC 313 / RCSSCI 301. Social Science Theory I: From Social Contract to Oedipus Complex**

*At least one 200-level social science course. (4). (SS). May not be repeated for credit.*

This course explores the origins and early development of social science thinking, focusing on political economy, sociology, and psychology. The course provides students with an introduction to the theoretical foundations of social science thinking and how all such thinking is shaped and limited by its social and historical context.

**SOC 315. Economic Sociology: Money, Markets, and Power**

*One introductory course in sociology, economics, or political science. (3 - 4). (SS). May not be repeated for credit.*

This course offers an integrated view of the interactions between formal organizations and socio political systems. It examines large, diversified modern corporate organizations, explicitly recognizing the constraints imposed by modern states and advanced capitalism. The course integrates literature from sociology, political science, and economics and includes historical studies and cross national comparisons.

**SOC 317 / ANTHRCUL 317 / HISTORY 228 / POLSCI 334 / REEES 397 / SLAVIC 397. Communism and Capitalism in Eastern Europe**

*(4). (SS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in REEES 396 or SLAVIC 396 or POLSCI 396 or HISTORY 333 or SOC 393.*

An overview of East Central Europe from 1945 to the present. The first half of the course explores the workings of state socialism from an anthropological perspective (with particular focus on political economy and material culture) from the Stalinist 1950s to the more diversified decades of the 1960s to 1980s. The second half covers the "revolutions" of 1989 and contemporary social, cultural, economic and political processes, including struggles over membership to the E.U.

**SOC 320 / ALA 320 / PSYCH 310. Processes of Intergroup Dialogues Facilitation**

*Admission by application. Previous participation in UC 122/PSYCH 122/SOC 122 strongly encouraged. (3). (R&E). May not be repeated for credit.*

Designed to give students a foundation in the skills and knowledge needed to facilitate multicultural group interactions, including structured intergroup dialogues. Topics include: basic group facilitation skills and their applications to multicultural settings; social identity group development; prejudice and stereotyping and their effects on groups; etc.

**SOC 321 / ALA 321 / PSYCH 311. Practicum in Facilitating Intergroup Dialogues**

*PSYCH 310/SOC 320 and permission of instructor. (4). (EXPERIENTIAL). May not be repeated for credit. A combined total of eight credits of SOC 225 (and 389), 321,*



324, 394, 395, and 396 may be counted toward a major in Sociology.

This practicum follows PSYCH 310 or SOC 320, and requires applied work in facilitating intergroup dialogues. Students also participate in weekly supervision seminars to discuss their work in the dialogue groups. They also discuss theory and practice of group observation, in-out group conflict intervention skills, intergroup communication, and community building.

**SOC 324 / ALA 322 / PSYCH 324.**

**Advanced Practicum in Intergroup Relations**

*Consent of instructor required. UC 320/PSYCH 310/SOC 320. (1 - 4). (EXPERIENTIAL). May be repeated for a maximum of 8 credits. A combined total of eight credits of SOC 225 (and 389), 321, 324, 394, 395, and 396 may be counted toward a major in Sociology.*

This course is for students doing advanced applied work in intergroup relations.

**SOC 325. Project Community Advanced Practicum**

*Consent of department required. SOC 225 plus SOC 310: Sociological Research Methods or an equivalent research methods course. (2 - 4). (EXPERIENTIAL). May not be repeated for credit.*

This course provides students who have taken SOC 225 with an opportunity to strengthen existing relationships and deepen their engagement with their community site. This is a small, discussion-based seminar where students can choose an internship or research project that meets their interests and the needs of the community.

**SOC 331. The Politics of Data**

*(3). (SS). May not be repeated for credit.*

This course will concentrate on the importance of the Federal Statistical System

for governance. The data from the Federal Statistical System is essential for our democracy as these data are the fuel for policy decisions by the federal government and state/local policy makers as well. The alternative is policy-by-anecdote.

**SOC 335 / AAS 347 / RCSSCI 343.**

**Urban Inequality in America**

*One course in introductory sociology. (4; 3 in the half-term). (SS). May not be repeated for credit. No credit granted to students who are enrolled in or have completed SOC 435 or SOC 535.*

This course examines three questions: (1) Why are American cities and suburbs so racially and economically segregated? (2) What are the consequences of living apart? (3) What are the challenges of living together? The role of race and policy is interrogated. The class focuses primarily on Black and White communities.

**SOC 344. Sociology of Families**

*One introductory course in Sociology. (4; 3 in the half-term). (SS). May not be repeated for credit.*

This course will provide a sociological examination of marriage and family patterns. The course will study family and marriage structures, processes, relationships, and changes. A particular focus of the class is the relationship between marriage and family structures and the larger social system. The course will examine social and personal influences on marriage and family processes as well as the way family processes influence other aspects of personal and social life.

**SOC 345 / WGS 348. Sociology of Sexualities**

*One introductory course in Sociology. (4; 3 in the half-term). (SS). May not be repeated for credit.*

This course is an introduction to the sociology of sexuality in contemporary American society. Different theoretical perspectives for thinking about sexuality in the social sciences will be examined, issues of studying sexuality empirically will be reviewed, and how people construct a variety of social identities and relationships will be explored.

**SOC 346. Sociology of the Body**

*One introductory course in Sociology or Women's Studies. (3). May not be repeated for credit.*

This course explores how bodies have been identified, interpreted, and represented throughout history, particularly the West from the 19th century onward when the body became the contested arena of debates concerning sex and desire, gender and race, citizenship, and labor and reproduction.

**SOC 350. Human Rights in the United Nations**

*One introductory course in sociology, political science, or other disciplines that examine human rights and globalization. (4). May not be repeated for credit.*

This course examines how various human rights problems in the world (such as genocide, women's rights, and poverty) are discussed and acted on in the United Nations. Students are engaged in weekly video conference sessions with a representative from the United Nations headquarters in New York.

**SOC 354. Law and Society**

*One introductory course in any social science discipline. (4). (SS). May not be repeated for credit. No credit for students who have taken SOC 454 prior to Fall 2013.*

This course explores theoretical perspectives on the connection between law

and society; explanations for legal compliance, deviance, and resistance; the relationship between "law on the books" and "law in action;" the relationship between law and social change; and law's ubiquitous role in popular culture.

**SOC 368. Criminology**

*One introductory course in sociology. (4; 3 in the half-term). (SS). May not be repeated for credit.*

The analysis of criminal behavior in relationship to the institutional framework of society. Emphasis upon the more routinized and persistent forms of criminality along with the joint roles played by victims, the criminal, the police and all the other relevant parties.

**SOC 375 / ALA 228 / PSYCH 312.**

**Intergroup Conflict and Coexistence: Religion, Ethnicity and Culture**

*(3). May not be repeated for credit.*

This course examines examples of social conflict based on religion, ethnicity and culture, interdisciplinary theories that help to understand the nature of such conflict, and current coalition building and coexistence work among various religious, ethnic and cultural groups. Experiential activities enhance learning about intergroup conflict and coexistence work.

**SOC 379 / GERMAN 379 / POLSCI 386. Sports, Politics, and Society**

*One introductory course in sociology or political science. (3). (SS). May not be repeated for credit. No credit for those who have completed SOC 212/GERMAN 212.*

This course embraces broadly-based theories of society and politics to comparatively examine sports in the U.S. and Europe. Sports are closely tied to societal values on both sides of the Atlantic and furnish an excellent example for the study of popular attitudes and behavior.

**SOC 380 / ENVIRON 345 / POLSCI 331.****Environmental Public Opinion Analysis**

*One of the following: AP STATS 180, STATS 250, STATS 280, or SOC 210. (3). (SS). May not be repeated for credit.*

This course examines trends in environmental public opinion, influences on people's concerns about the environment, the depth and strength of concerns, and how environmental concerns affect personal behaviors and the political process. It also introduces students to useful statistical concepts and procedures for analyzing and interpreting public opinion data.

**SOC 391. Sociology in Practice**

*One introductory course in Sociology. (1 - 4; 1 - 3 in the half-term). (EXPERIENTIAL). May be elected twice for credit.*

Course topics vary. This interdisciplinary course is designed to engage sociology undergraduate students with practitioners working in the field.

**SOC 392 / HISTORY 332 / POLSCI 395 / REEES 395 / SLAVIC 395. Russia and the Soviet Union: Reform, Revolution, and the Socialist Experiment**

*(4; 3 in the half-term). (SS). May not be repeated for credit. May not be counted in a Slavic Department academic minor. F.*

This interdisciplinary course explores the extraordinary history of the Russian Empire, later the Soviet Union, and now Russia and fourteen other states, among them Ukraine, the "stans" of Central Asia, Armenia, Georgia, and the Baltic republics.

**SOC 393 / POLSCI 396 / REEES 396 / SLAVIC 396. East Central Europe: Nationalism, Socialism, Democracy**

*(3 - 4). (SS). May not be repeated for credit. May not be counted in a Slavic Department academic minor.*

This interdisciplinary course explores the extraordinary history of the Russian Empire, later the Soviet Union, and now Russia and fourteen other states, among them Ukraine, the "stans" of Central Asia, Armenia, Georgia, and the Baltic republics.

**SOC 394. Undergraduate Research**

*Consent of instructor required. (1 - 4). (INDEPENDENT). May be repeated for a maximum of 8 credits. A combined total of eight credits of SOC 225 (and 389), 321, 324, 394, 395, and 396 may be counted toward a major in Sociology.*

SURO (Sociology Undergraduate Research Opportunity) is an opportunity for qualified undergraduates to earn academic credit by assisting with ongoing research projects with faculty in the Sociology Department.

**SOC 395. Independent Study**

*Consent of instructor required. Enrollment requires departmental application and permission of supervising faculty. Students must have completed at least one introductory sociology course and one sociology course at the 300 level or above to apply. (1 - 4). (INDEPENDENT). May be repeated for a maximum of 8 credits. May be elected more than once in the same term. A combined total of eight credits of SOC 225 (and 389), 321, 324, 394, 395, and 396 may be counted toward a major in Sociology.*

Independent study is an avenue for students to work one-on-one with a Sociology faculty member on a mutually agreed topic. Students are strongly encouraged to seek a supervising faculty member one semester prior to the intended study.

**SOC 396. Undergraduate Internship**

*Consent of department required. Students must have a declared major or minor in Sociology, Law, Justice, and Social Change, or Sociology of Health &*

*Medicine. (1). (EXPERIENTIAL). May be repeated for a maximum of 2 credits. May be elected more than once in the same term. A combined total of eight credits of SOC 225 (and 389), 321, 324, 394, 395, and 396 may be counted toward a major in Sociology. Offered mandatory credit/no credit.*

Academic credit for a prearranged internship experience that lasts at least four weeks and includes a minimum of 100 hours of work. Application required. Credit will not be granted retroactively.

**SOC 397. Sociology Opportunities for Undergraduate Leaders I**

*Consent of department required. (2). May not be repeated for credit.*

This course is designed to help you, as a first-generation college student, be more successful and to help you reflect upon your identity. It is tied to a larger program in sociology which includes a paid research assistantship and a fellowship at the Barger Leadership Institute. The academic class component intends to serve as a foundation for the research you will do and a compliment to the leadership skills you obtain at the BLI.

**SOC 398. Sociology Opportunities for Undergraduate Leaders II**

*SOC 397. (Prerequisites enforced at registration.) (2). May not be repeated for credit.*

This course is designed to help you, as a first-generation college student, be more successful and to help you reflect upon your identity. It is tied to a larger program in sociology which includes a paid research assistantship and a fellowship at the Barger Leadership Institute. The academic class component intends to serve as a foundation for the research you will do and a

compliment to the leadership skills you obtain at the BLI.

**SOC 427 / ASIAN 459. Sociology of Contemporary Korea: Development, Globalization, and Identity**

*(3). May not be repeated for credit.*

This course examines the dramatic and tumultuous transformation of South Korea from a comparative and global perspective. By moving beyond the familiar realm of the American society, students will learn how the Korean case expands, deepens, or revises our understanding of development, inequality, democratization, gender politics, globalization, immigration, and diasporas.

**SOC 430. World Population Dynamics**

*(3). (QR/2). May not be repeated for credit. No credit granted to those who have completed or are enrolled in SOC 530.*

This course introduces students to the basics of demographic measurement and population change theory while focusing on how to examine empirical information about populations to draw informed conclusions about current world population trends. Students will learn how to assess the validity of media reports on population issues.

**SOC 445 / WGS 449. Diagnosis, Sex, and Society**

*(3). May not be repeated for credit.*

*Rackham credit requires additional work.*

Diagnoses are often seen as objective, "natural" entities valid across time and space. With a focus on sex, gender, and sexuality-related diagnoses, this course instead approaches diagnoses as social objects -- products of collective action shaped by group interests, history, and culture that serve practical and political purposes.

**SOC 447 / WGS 447. Sociology of Gender**

*One introductory course in sociology or women's studies. (3). May not be repeated for credit.*

This course asks: Why is there gender inequality? and what are women's experiences of that inequality? The course will examine politics, the state, work, family, body, and sexuality, all areas of social life that have been theorized as the locus of women's oppression.

**SOC 450. Human Rights in a Globalizing World: How Human Rights Evolved and Changed the World**

*Not available to students who previously elected SOC 495 in W16: "Human Rights in a Globalizing World: How Human Rights Evolved and Changed the World" (Topic #65). (Prerequisites enforced at registration.) SOC 350. (3). May not be repeated for credit.*

This undergraduate seminar examines how human rights ideas and instruments evolved in the last few centuries, especially in the last few decades, to become a powerful normative force in international society, and how the rise of global human rights changed international relations and national politics across the globe.

**SOC 451 / WGS 451. Women, Inequality, and Work**

*WGS 240 (or AMCULT 240) or SOC 100, and one other course in SOC or WGS. (3). May not be repeated for credit.*

This course will draw on empirical research and theory to analyze a wide range of issues regarding gender and work.

**SOC 455 / RELIGION 455. Religion and Society**

*One introductory course in sociology. (3). May not be repeated for credit.*

This course introduces students to concepts and theories that apply to the sociological analysis of religion.

**SOC 458. Sociology of Education**

*One introductory course in Sociology. (3). May not be repeated for credit.*

This course considers educational institutions as social organizations: relationship to society, various roles within educational institutions, and relationship of individuals from various backgrounds to K-12 and higher education experiences. Comparative examples are drawn from various societies as a basis for cross-cultural generalizations about the social role of educational systems.

**SOC 461. Social Movements: Political Protest and Collective Resistance**

*One introductory course in Sociology. (4; 3 in the half-term). May not be repeated for credit.*

This course provides an overview of contemporary theory and research on collective action. Social movement research seeks to explain how it is that people overcome widespread resignation and apathy during particular historical moments and join together in an effort to change the terms and conditions of their everyday lives. Drawing on examples from such movements as the Black civil rights movement, women's movement, gay rights movement, peace movement, environmental movement, and global justice movement, the course examines the social and political contexts in which social movements emerge, the factors that shape individual participation in collective action, social movement tactics and strategies, and the social and political consequences of social movement action.

**SOC 465 / PSYCH 488 / WGS**

**465. Sociology of Deviance: From Sin to**

**Sickness**

*One introductory course in sociology. (4; 3 in the half-term). May not be repeated for credit.*

This course is a sociological examination of the social construction of deviant categories and their consequences, using analysis of conventional values and modes of social control. Students are expected to develop a critical perspective and facilitate reflective thought about deviance.

**SOC 468. Crime and Justice: Inside-Out Prison Exchange Course**

*Students will not earn credit if previously elected SOC 495.001 "Inside Out" in Fall 2016 (Topic #70) or SOC 495.001 Crime & Justice in Winter 2017 (Topic #72). (Prerequisites enforced at registration.) SOC 368: Criminology. (3). (EXPERIENTIAL). May not be repeated for credit.*

This course is being offered through the Inside-Out Prison Exchange Program, bringing together currently incarcerated "inside" students and "outside" students from U-M to exchange ideas and perceptions about crime and justice. The course meets once a week, with most meetings taking place in a prison/jail.

**SOC 471 / ALA 429 / PSYCH 411. IGR Senior Capstone: Social Justice in the Real World**

*Consent of instructor required. UC/SOC 320/321/PSYCH 310/311 or CASC Foundations and 2 related courses in social movements or activism. (3). May not be repeated for credit.*

The focus is on strategies for social justice and change. The class explores alternative meanings of social justice, theories and strategies for social change, roles of change agents in traditional careers, the assessment of personal skills and resources, discussions

with local social justice advocates and practice in multicultural teamwork.

**SOC 472 / PSYCH 381. Advanced Laboratory in Social Psychology**

*STATS 250, STATS 280, STATS 425, or MATH 425; and one of the following: PSYCH 111, 112, 114, or 115.*

*(Prerequisites enforced at registration.) PSYCH 280. (3). May not be repeated for credit. Satisfies a Psychology research-based laboratory requirement. F, W, Su.*

This course provides a hands-on exploration of social psychological research methods. Students are introduced to different research methods and concepts, learn to collect and analyze survey data, and conduct an original, experimental research project. In this project (topic varies), students design the study, collect and analyze the data, and write a written APA style report.

**SOC 474. Social Inequalities in Health**

*(3). May not be repeated for credit.*

This course examines how and why society can make us sick or healthy. We will examine how gender, race/ethnicity/nativity, SES and other social statuses and social institutions shape inequalities in health outcomes. The course will draw on historical, contemporary and cross cultural material from the U.S. and around the world.

**SOC 475. Health, Medicine, and Society**

*One introductory course in sociology. (4; 3 in the half-term). May not be repeated for credit.*

This course examines the influence of social and cultural factors on health, illness, and medical care.

**SOC 476. Sociology of Bioethics**

*One introductory course in sociology. (3). May not be repeated for credit.*

This course examines the following topics: social sources of morality; organization of professions; politics of science, medicine, and biotechnology; interface between law and ethics; place of religion in pluralist societies; sociology of science; and social uses of bioethics.

**SOC 477. Death and Dying**

*An introductory course in Sociology: SOC 100, 102, 195, 300, or 302. (4; 3 in the half-term). May not be repeated for credit.*

This class provides an introduction to sociological studies of death and dying in modern societies. Among the topics discussed are analyses of social death; cultural attitudes toward death; medical technologies and how they change the way we die; and the way financial considerations inform care for the dying.

**SOC 488 / RCSSCI 488. Organizing Internship**

*Consent of department required. (1). May not be repeated for credit. Offered mandatory credit/no credit.*

Students serve as "organizing interns" with a community organization for a minimum of 10 hours per week. They may accept one of the placements arranged by the instructor, or develop their own internship or project in close consultation with the instructor. Appropriate projects require mobilizing the participation of others to achieve measurable organizing outcomes by the end of the semester. This focus on community organizing distinguishes this course from most other service-learning courses on campus, which tend to focus on community service.

**SOC 489 / RCSSCI 489. Organizing: People, Power, and Change**

*(3). May not be repeated for credit.*

This course introduces students to community organizing. Topics covered include: the definition of community organizing; the role of the organizer; motivating collective action through values, narratives, and interests; resources and power; leadership development; building community capacity; strategy and tactics; campaigns; and organizational structure and governance.

**SOC 495. Topics in Sociology**

*One introductory course in Sociology. (1 - 4; 1 - 3 in the half-term). May be elected three times for credit. May be elected more than once in the same term.*

This topics course addresses specific research problems currently under study by faculty members.

**SOC 497. Honors: Proposal Writing**

*Honors Sociology concentrators and [SOC 210 or STATS 350]. (Prerequisites enforced at registration.) (3). May not be repeated for credit. W.*

SOC 497 is the first of the required three-course sequence for the Honors Program in Sociology (SOC 497, 498, 499). The seminar's focus is on defining a research question and preparing a research prospectus. SOC 497 is offered only in the winter term.

**SOC 498. Honors: Data Collection and Analysis**

*SOC 497. (Prerequisites enforced at registration.) (3). May not be repeated for credit.*

SOC 498 is the second of the required three-course sequence for the Honors Program in Sociology and focuses on the collection and analysis of thesis data. Students work primarily on an independent basis, with input from their faculty mentor.

**SOC 499. Honors: Thesis Writing**

*SOC 498. (Prerequisites enforced at registration.) (3). May not be repeated for credit.*

SOC 499 is the final of the required three-course sequence for the Honors Program in Sociology (SOC 497, 498, 499). The seminar focuses on the completion of the undergraduate thesis. Students work primarily on an independent basis, with consistent input from their faculty mentor. Students also meet individually with the faculty honors program coordinator and as a cohort group to discuss their research and writing experiences.

## **Space Science & Engineering (SPACE)**

**SPACE 101. Rocket Science**

*(3). (NS). (BS). May not be repeated for credit.*

An introduction to the science of the space and space exploration. Topics covered include history of spaceflight, rockets, orbits, the space environment, satellites, remote sensing, and the future human presence in space. The mathematics will be at the level of algebra and trigonometry.

**SPACE 103 / ASTRO 183. Introduction to Space Weather**

*(3). (NS). (BS). May not be repeated for credit.*

"Space Weather" is an emerging discipline of space science that studies the conditions in space that impact society and Earth's technological systems. Space weather is a consequence of the behavior of the sun, the nature of Earth's magnetic field and

atmosphere, and our location in the solar system.

**SPACE 320 / CLIMATE 320 / EARTH 320. Earth Systems Evolution**

*MATH 115, MATH 116; (C or better). (3). (BS). May not be repeated for credit.*

Introduction to the physics and chemistry of Earth and space. Gravitational energy, radiative energy, Earth's energy budget, and Earth tectonics are discussed along with chemical evolution and biogeochemical cycles. The connections among the carbon cycle, silicate weathering, and the natural greenhouse effect are discussed.

**SPACE 321 / CLIMATE 321 / EARTH 321. Earth Systems Dynamics**

*CLIMATE/SPACE 320; Preceded or accompanied by MATH 215 and MATH 216. (3). (BS). May not be repeated for credit.*

This course will describe the major wind systems and ocean currents that are important to climate studies. The primary equations will be developed and simple solutions derived that will explain many of these motions. The relations among the dynamics and other parameters in the climate system will be illustrated by examples from both paleo and present day systems.

**SPACE 323 / CLIMATE 323 / EARTH 323. Earth System Analysis**

*(4). May not be repeated for credit.*

Introduction to the analysis of Earth and Atmospheric Science Systems. Topics include linear systems, harmonic analysis, sampling theory and statistical error analysis. Lectures emphasize underlying mathematical concepts. Labs emphasize application of mathematical methods to analysis of field data in a computer programming environment. Applications include turbulent air motion in the planetary



boundary layer, cloud and precipitation microphysical composition, oceanic wave propagation, stratospheric ozone depletion and satellite remote sensing.

**SPACE 350 / CLIMATE 350 / EARTH**

**350. Atmospheric Thermodynamics**

*MATH 216or256or286or316 (C>).*

*(Prerequisites enforced at registration.) (3).*

*May not be repeated for credit.*

Fundamentals of thermodynamics are presented, including the First, Second and Third Laws, ideal gases, adiabatic processes, phase changes, vapor pressure, humidity, and atmospheric stability. The Kinetic Theory of Gasses provides a molecular perspective on the various forms of atmospheric water substance and on macroscopic phenomenology in general.

**SPACE 370 / EARTH 370. Solar-Terrestrial Relations**

*MATH 216 and PHYSICS 240. (4). May not be repeated for credit.*

Introduction to solar terrestrial relations with an overview of solar radiation and its variability on all time-scales. The effects of this variability on the near-Earth space environment and upper atmosphere are considered, as well as effects on the lower and middle atmosphere with connections to weather and climate. Subjects are approached through extensive data analysis, including weekly computer lab sessions.

**SPACE 380 / CLIMATE 380 / EARTH**

**381. Introduction to Atmospheric Radiation**

*MATH 216or256or286or316 (C>).*

*(Prerequisites enforced at registration.) (3).*

*May not be repeated for credit.*

Basic concepts and processes of radiative transfer including radiometric quantities, electromagnetic spectrum, absorption, emission, scattering. The physics laws governing these processes including the

Planck Law and the Kirchhoff Law.

Radiative properties of atmospheric constituents. Reflection and refraction.

Introductory-level descriptions of relevant applications in atmospheric sciences and climate physics.

## Spanish (SPANISH)

**SPANISH 100. Intensive Elementary Spanish**

*No prior instruction in Spanish language OR placement of SPANISH 101.*

*(Prerequisites enforced at registration.)*

*Students with any prior study of Spanish must take the Placement Test. (8 in the half-term). May not be repeated for credit. No credit granted to those who are enrolled in or have completed SPANISH 101, 102, 103, 113, or RCLANG 194. This course does not meet the threshold for proficiency for the Residential College.*

The first year of college Spanish equivalent to SPANISH 101 and 102 taught in one term.

**SPANISH 101. Elementary Spanish**

*No prior Spanish language or placement of SPANISH 101. (Prerequisites enforced at registration.) Students with any prior study of Spanish must take the Placement Test.*

*(4). May not be repeated for credit. No credit granted to those who are enrolled in or have completed or are enrolled in SPANISH 100, 113, or RCLANG 194.*

The first part of an introduction to the Spanish language and culture; task- and content-based approach integrates grammar in a functional use through listening, speaking, reading, and writing. Language

use encouraged through communicative activities rather than a sequence of linguistic units. Videos, audio cassettes, and computer materials incorporated.

**SPANISH 102. Elementary Spanish**

*SPANISH 101 with a minimum grade of C- or better. (Prerequisites enforced at registration.) (4). May not be repeated for credit. No credit granted to those who are enrolled in or have completed SPANISH 100, 103, 113, or RCLANG 194.*

Continuation of SPANISH 101.

**SPANISH 103. Review of Elementary Spanish**

*Assignment of SPANISH 103 by placement test; or RCLANG 154. College or university transfer students with any prior study of Spanish must take the Placement Test. (Prerequisites enforced at registration.) Only placement score and not language coursework completed at a previous school will determine placement. (4). May not be repeated for credit. No credit granted to those who are enrolled in or have completed SPANISH 100, 102, 113, or RCLANG 194.*

A refresher course for students with previous training in Spanish, but not ready for a second-year course.

**SPANISH 230. Intensive Second-Year Spanish**

*SPANISH 100, 102 or 103 with a grade of C- or higher; or RCLANG 194; or assignment of SPANISH 231 by placement test. College or university transfer students with any prior study of Spanish must take the Placement Test. Only the placement score and not language coursework completed at a previous school will determine placement. (Prerequisites enforced at registration.) (8 in the half-term). (Lang Req). May not be repeated for credit. No credit granted to those who are enrolled in or have completed SPANISH*

*113, 231, 232, or RCLANG 294 or 314. This course does not meet the threshold for proficiency for the Residential College.*

The second year of college Spanish is equivalent to SPANISH 231 and 232 taught in one term.

**SPANISH 231. Second-Year Spanish**

*SPANISH 100, 102 or 103 with a grade of C- or higher; or RCLANG 194; or assignment of SPANISH 231 by placement test. College or university transfer students with any prior study of Spanish must take the Placement Test. Only the placement score and not language coursework completed at a previous school will determine placement. (Prerequisites enforced at registration.) (4). May not be repeated for credit. No credit granted to those who are enrolled in or have completed SPANISH 113, 230, or RCLANG 294 or 314.*

SPANISH 231 is designed to improve the speaking, listening, reading, and writing skills of students and to provide some insight into the literature and culture of Spanish-speaking people.

**SPANISH 232. Second-Year Spanish, Continued**

*SPANISH 231 with a minimum grade of C- or better, or RCLANG 254; or assignment by Placement Test. College or university transfer students with any prior study of Spanish must take the Placement Test. (Prerequisites enforced at registration.) Only placement score and not language coursework completed at a previous school will determine placement. (4). (Lang Req). May not be repeated for credit. No credit granted to those who are enrolled in or have completed SPANISH 113 or 230; or RCLANG 294 or 314.*

Continuation of SPANISH 231. Certain sections are devoted to readings in specialized topics.

**SPANISH 277. Reading, Grammar, and Composition**

*SPANISH 230 or 232 with a grade of C- or higher; RCLANG 294 or 314; or assignment of SPANISH 277 or SPANISH 275 by placement test; or SPANISH 274x or Spanish 279x AP or IB test credit.*

*(Prerequisites enforced at registration.)*

*Students who receive transfer credit for SPANISH 232 and wish to continue with their language study are strongly encouraged to take the Spanish placement exam to be certain that they are prepared for SPANISH 277. (3). May not be repeated for credit. No credit for students who have completed SPANISH 276. SPANISH 277 is the prerequisite for a minor or major in Spanish.*

This course is the new prerequisite for a minor or concentration in Spanish. It combines an introduction to the study of literature in Spanish with an advanced review of grammar.

**SPANISH 280. Conversation Through Spanish/Latin American Film**

*SPANISH 275, 276, or 277; or SPANISH 278 (or 290) or AMCULT 224 or LATINOAM 224; or RCLANG 324.*

*(Prerequisites enforced at registration.) (3).*

*May not be repeated for credit.*

Designed to provide maximum conversation practice based on topical Spanish and/or Latin American films along with related readings.

**SPANISH 283. Spanish for the Professions**

*SPANISH 275, 276, or SPANISH 277; or SPANISH 278 (or 290) or AMCULT 224 or LATINOAM 224; or RCLANG 324.*

*(Prerequisites enforced at registration.) (3).*

*May not be repeated for credit. No credit granted to students who have completed SPANISH 305.*

Gives advanced students a solid foundation in vocabulary, cultural concepts, and situational practice. Course objectives are to develop linguistic and cultural proficiency relevant to communication needs in services for Hispanic clients. Each section may offer different professions, but students may not repeat the course for credit with a different topic.

**SPANISH 287. Written Expression: Achieving Competence**

*SPANISH 275, 276, or SPANISH 277; or SPANISH 278 (or 290) or AMCULT 224 or LATINOAM 224; or RCLANG 324.*

*(Prerequisites enforced at registration.) (3).*

*May not be repeated for credit. No credit granted to students who have completed SPANISH 310. Conducted in Spanish.*

This course is intended to provide advanced knowledge of grammar and practice in writing to achieve competence.

**SPANISH 289. Introduction to Translation**

*SPANISH 275, 276, or SPANISH 277; or SPANISH 278 (or 290) or AMCULT 224 or LATINOAM 224; or RCLANG 324.*

*(Prerequisites enforced at registration.) (3).*

*May not be repeated for credit.*

The course provides students with the necessary skills to engage in Spanish-English and English-Spanish translations with a view to gaining introductory knowledge of the field and establishing the foundation for SPANISH 415.

**SPANISH 291 / CATALAN 291. Introduction to Catalan Language and Culture**

*SPANISH 275, 276, or SPANISH 277; or SPANISH 278 (or 290) or AMCULT 224 or LATINOAM 224; or RCLANG 324.*

*(Prerequisites enforced at registration.) (3).  
May not be repeated for credit.*

This course is an introduction to Catalan language, culture, and history. Students will learn the language through a communicative approach.

**SPANISH 295. Introduction to Literature, Culture, and the Arts in the Hispanic World**

*SPANISH 275, 276, or SPANISH 277; or SPANISH 278 (or 290) or AMCULT 224 or LATINOAM 224; or RCLANG 324.*

*(Prerequisites enforced at registration.) (3). (HU). May not be repeated for credit. No credit granted to students who have completed SPANISH 320.*

This class studies the cultural production of the Spanish-speaking world. Course materials will include short stories or novels, comics, film, theatre and poetry among others.

**SPANISH 296. Special Topics in Hispanic Literatures and Cultures**

*SPANISH 275, 276, or SPANISH 277; or SPANISH 278 (or 290) or AMCULT 224 or LATINOAM 224; or RCLANG 324.*

*(Prerequisites enforced at registration.) (3). May not be repeated for credit.*

Through specific key topics in Hispanic literatures, this course provides a survey of major genres, authors, and texts from colonial times to the present.

**SPANISH 298 / ROMLING 298.**

**Introduction to Spanish Linguistics**

*SPANISH 275, 276, or SPANISH 277; or SPANISH 278 (or 290) or AMCULT 224 or LATINOAM 224; or RCLANG 324.*

*(Prerequisites enforced at registration.) (3). May not be repeated for credit. No credit granted to students who have completed SPANISH 330 or ROMLING 330.*

This course introduces the main concepts and methods of analysis in linguistic theory focusing on Spanish. Central to the course are the concepts and techniques in the analysis of word formation (morphology), sentence structure (syntax), meaning (semantics), and sounds (phonetics-phonology). Time permitting, the course examines subfields of linguistics such as language acquisition.

**SPANISH 299. Introductory Internship**

*SPANISH 275, 276, or SPANISH 277; or SPANISH 278 (or 290) or AMCULT 224 or LATINOAM 224; or RCLANG 324.*

*(Prerequisites enforced at registration.) (3). (EXPERIENTIAL). May not be repeated for credit. Credit can be earned for no more than one independent study and one internship without the approval of the Spanish Undergraduate Curriculum Committee.*

This course is for internships that involves the extensive use of Spanish in a country or community in which Spanish is the primary language.

**SPANISH 308. Workshop in Academic Writing**

*SPANISH 275, 276, or SPANISH 277; or SPANISH 278 (or 290) or AMCULT 224 or LATINOAM 224; or RCLANG 324.*

*(Prerequisites enforced at registration.) (1). May not be repeated for credit. This course does not satisfy the language requirement. This course does not count toward the Spanish major or minor.*

This course is designed for students in upper-level Spanish courses who need to refine their language skills. The emphasis will be on improving written expression. Students will review the fine points of grammar, and peer-edit compositions written for other upper-level Spanish courses.

**SPANISH 313. Contemporary Issues in Spain**

*SPANISH 275, 276, or SPANISH 277; or SPANISH 278 (or 290) or AMCULT 224 or LATINOAM 224; or RCLANG 324.*

*(Prerequisites enforced at registration.) (3). May not be repeated for credit.*

This course focuses on researching and discussing contemporary issues in Spain, while improving oral performance. Primary sources include the daily press and media and archival material.

**SPANISH 315. Contemporary Issues in the Caribbean and South America**

*SPANISH 275, 276, or SPANISH 277; or SPANISH 278 (or 290) or AMCULT 224 or LATINOAM 224; or RCLANG 324.*

*(Prerequisites enforced at registration.) (3). May not be repeated for credit.*

This course focuses on researching and discussing contemporary issues in the Caribbean and South America, while improving oral performance. Primary sources will include the daily press and media and archival material.

**SPANISH 328. Studies in Hispanic Popular Culture**

*SPANISH 275, 276, or SPANISH 277; or SPANISH 278 (or 290) or AMCULT 224 or LATINOAM 224; or RCLANG 324.*

*(Prerequisites enforced at registration.) (3). May not be repeated for credit.*

Introduction to the study of popular culture in Spain, Latin America and/or in the U.S. Latino/a context.

**SPANISH 331 / GTBOOKS 331. Great Books of Spain and Latin America**

*Open to students at all levels. (3). (HU). May not be repeated for credit.*

Readings in translation of important works in Spanish and Latin American literature.

**SPANISH 332. Short Narrative in Latin America/Spain**

*SPANISH 275, 276, or SPANISH 277; or SPANISH 278 (or 290) or AMCULT 224 or LATINOAM 224; or RCLANG 324.*

*(Prerequisites enforced at registration.) (3). (HU). May not be repeated for credit.*

Readings and topical studies in short narrative from Latin America and Spain.

**SPANISH 333 / ROMLING 333. Techniques of Pronunciation and Oral Expression**

*SPANISH 275, 276, or SPANISH 277; or SPANISH 278 (or 290) or AMCULT 224 or LATINOAM 224; or RCLANG 324.*

*(Prerequisites enforced at registration.) (3). May not be repeated for credit.*

This course is an undergraduate-level introduction to Spanish phonetics. The main goal of the class is for the student to understand the production of sounds in Spanish as well as to apply this new knowledge to the practice and improvement of pronunciation.

**SPANISH 335. Contemporary Spanish and Spanish-American Cultural Production**

*SPANISH 275, 276, or SPANISH 277; or SPANISH 278 (or 290) or AMCULT 224 or LATINOAM 224; or RCLANG 324.*

*(Prerequisites enforced at registration.) (3). (HU). May be repeated for a maximum of 6 credits. May be elected more than once in the same term.*

A survey of contemporary cultural production in Spain and Spanish America.

**SPANISH 337. Poetry Workshop**

*SPANISH 275, 276, or SPANISH 277; or SPANISH 278 (or 290) or AMCULT 224 or LATINOAM 224; or RCLANG 324.*

*(Prerequisites enforced at registration.) (3). May not be repeated for credit.*

The course examines the cultural functions of poetry: What is poetry for? What work does it perform in human societies? Based on the study of selected Spanish/Latin-American poets, students engage in the practice of poetry, not only through analysis and interpretation, but also through writing, translation and performance.

**SPANISH 339. Introduction to Spanish Culture Before 19th Century**

*SPANISH 275, 276, or 277; or SPANISH 278 (or 290) or AMCULT 224 or LATINOAM 224; or RCLANG 324.*  
(Prerequisites enforced at registration.) (3).  
*May not be repeated for credit.*

This topics course addresses the development of Spanish culture from pre-Roman to the 19th century, with an emphasis on history, geography, and cultural production.

**SPANISH 340. Introduction to Contemporary Spanish Culture**

*SPANISH 275, 276, or SPANISH 277; or SPANISH 278 (or 290) or AMCULT 224 or LATINOAM 224; or RCLANG 324.*  
(Prerequisites enforced at registration.) (3).  
*May not be repeated for credit.*

This topics course examines the political, social, and cultural transformation of Spain since 1898, with an emphasis on artistic and literary expression.

**SPANISH 341. Introduction to Pre-Columbian/Colonial/Modern Latin-American Culture**

*SPANISH 275, 276, or SPANISH 277; or SPANISH 278 (or 290) or AMCULT 224 or LATINOAM 224; or RCLANG 324.*  
(Prerequisites enforced at registration.) (3).  
*May not be repeated for credit.*

This course examines the development of Latin American cultures since pre-Columbian times to Independence, with an

emphasis on social and political transformations as manifested in cultural production.

**SPANISH 342. Introduction to Contemporary Latin American Culture**

*SPANISH 275, 276, or SPANISH 277; or SPANISH 278 (or 290) or AMCULT 224 or LATINOAM 224; or RCLANG 324.*  
(Prerequisites enforced at registration.) (3).  
*May not be repeated for credit.*

This topics course focuses on recent and contemporary history of Latin American societies. Emphasis is placed on contemporary social and political issues as manifested in cultural production.

**SPANISH 350. Independent Studies**

*Consent of instructor required. Permission of concentration advisor. Application required. (1 - 3). (INDEPENDENT). May not be repeated for credit. Credit can be earned for no more than one independent study and one internship without the approval of the Spanish Undergraduate Curriculum Committee. Independent studies of fewer than three credits will not count toward the Spanish major requirements.*

**SPANISH 355 / ROMLING 355. New World Spanish**

*SPANISH 275, 276, or SPANISH 277; or SPANISH 278 (or 290) or AMCULT 224 or LATINOAM 224; or RCLANG 324.*  
(Prerequisites enforced at registration.) (3).  
*May not be repeated for credit.*

An introduction to the history and structure of the regional and social varieties of Spanish spoken in the New World.

**SPANISH 368. Literature and the Other Arts**

*SPANISH 275, 276, or SPANISH 277; or SPANISH 278 (or 290) or AMCULT 224 or LATINOAM 224; or RCLANG 324.*  
(Prerequisites enforced at registration.) (3).  
(HU). *May not be repeated for credit.*

The study of the relations of modern literary texts to painting, photography, classical and popular music. Multimedia program will be used for lectures and discussions.

**SPANISH 369. Introduction to Film/Media Theory and Criticism**

*SPANISH 275, 276, or SPANISH 277; or SPANISH 278 (or 290) or AMCULT 224 or LATINOAM 224; or RCLANG 324.*

*(Prerequisites enforced at registration.) (3).*

*May not be repeated for credit.*

This course serves to acquaint students with the basic concepts, methods, and theories that frame academic inquiry in the fields of film and media studies. Students will learn to analyze individual films and discuss them according to key historical, cultural, and theoretical settings using the basic tools of film analysis.

**SPANISH 371. Survey of Spanish Literature, I**

*SPANISH 275, 276, or SPANISH 277; or SPANISH 278 (or 290) or AMCULT 224 or LATINOAM 224; or RCLANG 324.*

*(Prerequisites enforced at registration.) (3).*

*(HU). May not be repeated for credit.*

*Conducted in Spanish.*

An introductory survey of Spanish literature from its beginnings in the Middle Ages to the 17th century. The course is conducted in Spanish.

**SPANISH 372. Survey of Spanish Literature, II**

*SPANISH 275, 276, or SPANISH 277; or SPANISH 278 (or 290) or AMCULT 224 or LATINOAM 224; or RCLANG 324.*

*(Prerequisites enforced at registration.) (3).*

*(HU). May not be repeated for credit.*

*Conducted in Spanish.*

An introductory survey of Spanish literature from the 18th century to the medieval

period to the present. The course is conducted in Spanish.

**SPANISH 373. Topics in Hispanic Studies**

*SPANISH 275, 276, or SPANISH 277; or SPANISH 278 (or 290) or AMCULT 224 or LATINOAM 224; or RCLANG 324.*

*(Prerequisites enforced at registration.) (3).*

*(HU). May be repeated for a maximum of 6 credits. May be elected more than once in the same term.*

Topical studies in Spanish literatures, cultures, and societies.

**SPANISH 375. Topics in Hispano/Islamic/Sephardic Cultures**

*SPANISH 275, 276, or SPANISH 277; or SPANISH 278 (or 290) or AMCULT 224 or LATINOAM 224; or RCLANG 324.*

*(Prerequisites enforced at registration.) (3).*

*(HU). May be repeated for a maximum of 6 credits. May be elected more than once in the same term.*

This course explores topics in Islamic and/or Sephardic cultures of the Iberian Peninsula. Students read Arabic, Hebrew (in Spanish translation), and Romance texts that shed light on the cultural production of Jews and Muslims in medieval and early modern periods, from the invasions of 711 to the expulsions of 1609.

**SPANISH 381. Survey of Latin American Literature, I**

*SPANISH 275, 276, or SPANISH 277; or SPANISH 278 (or 290) or AMCULT 224 or LATINOAM 224; or RCLANG 324.*

*(Prerequisites enforced at registration.) (3).*

*(HU). May not be repeated for credit.*

An introduction to the main currents of Latin American literature from the 16th to the 20th centuries through the study of its major figures.

**SPANISH 382. Survey of Latin American Literature, II**

*SPANISH 275, 276, or SPANISH 277; or SPANISH 278 (or 290) or AMCULT 224 or LATINOAM 224; or RCLANG 324.*

*(Prerequisites enforced at registration.) (3). (HU). May not be repeated for credit.*

An introduction to the main currents of Latin American literature from the 16th to the 20th centuries through the study of its major figures.

**SPANISH 385. Race and Ethnicity in the Hispanic World**

*SPANISH 275, 276, or SPANISH 277; or SPANISH 278 (or 290) or AMCULT 224 or LATINOAM 224; or RCLANG 324.*

*(Prerequisites enforced at registration.) (3). May be repeated for a maximum of 6 credits. May be elected more than once in the same term.*

This course involves a study of issues of race, racism, and ethnic identity in the Hispanic World. It may include analyses of sources relating to religious identity in medieval Iberia, slavery in the Mediterranean and the Americas, hybrid identities and mestizaje in Latin America, and racism in contemporary Spanish, Latin American, and Latino cultures.

**SPANISH 387. Social Forces and Cultural Production in Medieval/Early Modern Spain**

*SPANISH 275, 276, or SPANISH 277; or SPANISH 278 (or 290) or AMCULT 224 or LATINOAM 224; or RCLANG 324.*

*(Prerequisites enforced at registration.) (3). (HU). May not be repeated for credit.*

The study of selected works and their social contexts during the Medieval and Early Modern periods in Spain.

**SPANISH 405 / CATALAN 405. Advanced Catalan Language, Culture, and Society**

**CATALAN 291/SPANISH 291.**

*(Prerequisites enforced at registration.) (3). May not be repeated for credit. Rackham credit requires additional work.*

This course is a continuation of CATALAN 291/SPANISH 291. Throughout the semester we will continue to learn and expand our knowledge of Catalan culture, society, arts, politics, and language.

**SPANISH 410 / ROMLING 410. Spanish Phonetics and Phonology**

*[SPANISH/ROMLING 298, or SPANISH 333, or LING 210 and (six additional credits from SPANISH 279 through 399, or 300-level study abroad equivalent)] OR [SPANISH/ROMLING 298, or SPANISH 333, or LING 210 and two courses of RCLANG 324 and (three additional credits from SPANISH 279 through 399, or 300-level study abroad equivalent)].*

*(Prerequisites enforced at registration.) (3). May not be repeated for credit.*

This course, offering a solid theoretical foundation in Spanish phonetics and phonology, includes articulatory phonetics, acoustic phonetics, phonological theory, distinctive feature analysis, practice in transcription, contrastive analysis of English and Spanish, the consonantal system and its process, syllable, linguistic atlases, metrics origins.

**SPANISH 411 / ROMLING 411.**

**Advanced Syntax**

*[SPANISH/ROMLING 298 or LING 210 and (six additional credits from SPANISH 279 through 399, or 300-level study abroad equivalent)] OR [SPANISH/ROMLING 298 or LING 210 and two courses of RCLANG 324 and (three additional credits from SPANISH 279 through 399, or 300-level study abroad equivalent)]. (Prerequisites enforced at registration.) (3). May not be repeated for credit.*



Detailed analysis of specific syntactic problems such as theory of the tenses of the verb, the subjunctive mood, structure of simple and compound sentences.

**SPANISH 413 / EDCURINS 455 /**

**ROMLING 413. Teaching**

**Spanish/Applications of Linguistics**

*Nine credits chosen between SPANISH 279 and 399; or two RCLANG 324 and six credits chosen between SPANISH 279 and 399. (Prerequisites enforced at registration.) One of: SPANISH 298, ROMLING 298, LING 210. (3). May not be repeated for credit.*

Principles of phonological, morphological, syntactic, and semantic analyses applied to the teaching of Spanish.

**SPANISH 414 / ROMLING 414.**

**Background of Modern Spanish**

*Nine credits chosen between SPANISH 279 and 399; or two RCLANG 324 and six credits chosen between SPANISH 279 and 399. (Prerequisites enforced at registration.) One of: SPANISH 298, ROMLING 298, or LING 210. (3). May not be repeated for credit.*

A general history of the Spanish language, based on the political and cultural history of Spain. The history of the sounds and forms, word borrowings, and changes in meaning.

**SPANISH 415 / ROMLING 415.**

**Problems in Language Translation**

*Nine credits chosen between SPANISH 279 and 399; or two RCLANG 324 and six credits chosen between SPANISH 279 and 399. (Prerequisites enforced at registration.) One of: SPANISH 298, ROMLING 298, SPANISH 289 or LING 210 AND six credits of 300 level Spanish. (3). May not be repeated for credit.*

A course designed for students at the intermediate level. the purpose of the course

is to solidify one's knowledge of Spanish grammar and structure as well as to become acquainted with the multiple and often contradictory choices that face the translator.

**SPANISH 416 / ROMLING 416. Spanish Sociolinguistics**

*Nine credits chosen between SPANISH 279 and 399; or two RCLANG 324 and six credits chosen between SPANISH 279 and 399. (Prerequisites enforced at registration.) One of SPANISH 298, ROMLING 298, LING 210. (3). May not be repeated for credit. Rackham credit requires additional work.*

This course provides a comprehensive analysis of the theoretical foundations and practical applications of language variation (dialectal, social, historical) in Spanish-speaking communities.

**SPANISH 418 / ROMLING 418. Spanish Second Language Acquisition**

*Nine credits chosen between SPANISH 279 and 399; or two RCLANG 324 and six credits chosen between SPANISH 279 and 399. (Prerequisites enforced at registration.) One of SPANISH 298, ROMLING 298, LING 210. (3). May not be repeated for credit. Rackham credit requires additional work.*

This course provides a comprehensive analysis of Second Language Acquisition in general, and more specifically, of the acquisition of Spanish by second language learners. The content covers the most relevant theories of Second Language Acquisition as well as research on the second language acquisition of Spanish.

**SPANISH 420 / AMCULT 420 / LATINOAM 420. Latin American & Latino/a Film Studies**

*Nine credits chosen from: SPANISH 279 and 399 or two RCLANG 324; and six credits chosen from SPANISH 279 and 399.*

*(Prerequisites enforced at registration.) (3). May not be repeated for credit. Rackham credit requires additional work.*

Comparative survey of historical and theoretical development in Latin American and Latino/a audio visual media, with an emphasis on the cinema.

**SPANISH 421. Cinema From Spain**

*Nine credits chosen between SPANISH 279 and 399; or two RCLANG 324 and six credits chosen between SPANISH 279 and 399. (Prerequisites enforced at registration.) (3). May not be repeated for credit. Rackham credit requires additional work.*

This topics course presents a thematic approach to Spanish cinema. Depending on faculty expertise, classes may focus on a specific period, genre, or topic related to Spanish cinema.

**SPANISH 423. Visual Cultures in the Hispanic World**

*Nine credits chosen between SPANISH 279 and 399; or two RCLANG 324 and six credits chosen between SPANISH 279 and 399. (Prerequisites enforced at registration.) (3). May be repeated for a maximum of 6 credits. May be elected more than once in the same term.*

This course explores visual culture in the Hispanic world - painting, sculpture, architecture, handicrafts, film, and photography.

**SPANISH 425. Latin American/Spanish Theater**

*Nine credits chosen between SPANISH 279 and 399; or two RCLANG 324 and six credits chosen between SPANISH 279 and 399. (Prerequisites enforced at registration.) (3). May not be repeated for credit.*

The study of selected works of Latin American and/or Spanish theater.

**SPANISH 426. Film Genres in the Hispanic World**

*Nine credits chosen between SPANISH 279 and 399; or two RCLANG 324 and six credits chosen between SPANISH 279 and 399. (Prerequisites enforced at registration.) (3). May be repeated for a maximum of 6 credits. May be elected more than once in the same term.*

This course explores various film genres within the Hispanic context, such as: drama, documentary, political thrillers, comedy, horror, science fiction, women's cinema, and LGTBQ film.

**SPANISH 428. Internship in Spanish**

*Nine credits chosen between SPANISH 279 and 399; or two RCLANG 324 and six credits chosen between SPANISH 279 and 399. (Prerequisites enforced at registration.) (3). (EXPERIENTIAL). May not be repeated for credit. Credit can be earned for no more than one independent study and one internship without the approval of the Spanish Undergraduate Curriculum Committee.*

This course is for internships that involves the extensive use of Spanish in a country or community in which Spanish is the primary language.

**SPANISH 430. Advanced Studies in Hispanic Culture and Society**

*Nine credits chosen between SPANISH 279 and 399; or two RCLANG 324 and six credits chosen between SPANISH 279 and 399. (Prerequisites enforced at registration.) (3). May be repeated for a maximum of 6 credits. May be elected more than once in the same term.*

Lectures and discussion relating to the cultural diversity among Hispanic cultures of the world.

**SPANISH 432. Gender, Sexuality, and Culture**

*Nine credits chosen between SPANISH 279 and 399; or two RCLANG 324 and six credits chosen between SPANISH 279 and 399. (Prerequisites enforced at registration.) (3). May not be repeated for credit.*

Readings from the Hispanic world that examine gender and sexuality as social constructs informed by culture, class, ethnicity, race, and by the social imaginary of the Nation.

**SPANISH 435. Independent Study**

*Nine credits chosen between SPANISH 279 and 399; or two RCLANG 324 and six credits chosen between SPANISH 279 and 399. (Prerequisites enforced at registration.) (1 - 3). (INDEPENDENT). May be repeated for a maximum of 3 credits. Credit can be earned for no more than one independent study and one internship without the approval of the Spanish Undergraduate Curriculum Committee. Independent studies of fewer than three credits will not count toward the Spanish major requirements.*

**SPANISH 437. Introduction to Literature Studies and Criticism**

*Nine credits chosen between SPANISH 279 and 399; or two RCLANG 324 and six credits chosen between SPANISH 279 and 399. (Prerequisites enforced at registration.) (3). May be repeated for a maximum of 6 credits. May be elected more than once in the same term.*

Introduce students to the fundamental principles of literary studies as a discipline.

**SPANISH 438. Political and Economic Thought in Latin America/Spain**

*Nine credits chosen between SPANISH 279 and 399; or two RCLANG 324 and six credits chosen between SPANISH 279 and 399. (Prerequisites enforced at registration.) (3). May not be repeated for credit.*

Based on case studies of political and economic theory in Latin America or Spain, this course examines the complex relations among the political, economic and cultural domains.

**SPANISH 439. Social Movements in Latin America/Spain**

*Nine credits chosen between SPANISH 279 and 399; or two RCLANG 324 and six credits chosen between SPANISH 279 and 399. (Prerequisites enforced at registration.) (3). May be repeated for a maximum of 6 credits. May be elected more than once in the same term.*

This course addresses the politics, practices, and theories of social movements in Latin America and/or Spain. By examining cultural products that emerged from these movements, students will explore the structures, tactics and strategies, achievements, and consequences of these emergent political formations.

**SPANISH 440. Literatures and Cultures of the Borderlands: The Politics of Language**

*Nine credits chosen between SPANISH 279 and 399; or two RCLANG 324 and six credits chosen between SPANISH 279 and 399. (Prerequisites enforced at registration.) (3). May be repeated for a maximum of 6 credits. May be elected more than once in the same term. Conducted in Spanish.*

Narratives, poetry, and autobiographical texts by U.S. Latino and Latina writers who

explore migration, hybrid identities, interlinguality, and biculturalism.

**SPANISH 441 / CATALAN 441. Topics in Catalan Literature and Culture**

*Nine credits chosen between SPANISH 279 and 399; or two RCLANG 324 and six credits chosen between SPANISH 279 and 399. (Prerequisites enforced at registration.) (3). May not be repeated for credit.*

This course offers an examination of the different artistic and literary movements that developed in Catalonia from the 19th century to the present time, and that had an impact on Catalan literary and cultural production.

**SPANISH 443. History and Historiography in Latin America/Spain**

*Nine credits chosen between SPANISH 279 and 399; or two RCLANG 324 and six credits chosen between SPANISH 279 and 399. (Prerequisites enforced at registration.) (3). May be repeated for a maximum of 6 credits. May be elected more than once in the same term.*

This course explores key themes in Latin America and/or Spain from the perspectives of history and historiography. By working with primary and secondary materials, students study both the events of the past and the ways in which these events have been turned into narrative.

**SPANISH 444. Nations and Nationalisms in the Hispanic World**

*Nine credits chosen between SPANISH 279 and 399; or two RCLANG 324 and six credits chosen between SPANISH 279 and 399. (Prerequisites enforced at registration.) (3). May be repeated for a maximum of 6 credits. May be elected more than once in the same term.*

This course examines issues related to nationhood and nationalisms in the Hispanic world.

**SPANISH 445. Romance Studies: Introduction to French-Spanish Literary Relations**

*A reading knowledge of French and Spanish. (3). May not be repeated for credit.*

**SPANISH 447. The Archive**

*Nine credits chosen between SPANISH 279 and 399; or two RCLANG 324 and six credits chosen between SPANISH 279 and 399. (Prerequisites enforced at registration.) (3). May be repeated for a maximum of 6 credits. May be elected more than once in the same term.*

This course explores the archive in Spanish and Latin American studies from both practical and theoretical perspectives. By studying literature, film, and/or historiography, students examine the archive as a metaphor for historical memory and as a place for historical investigation.

**SPANISH 450. Middle Ages**

*Nine credits chosen between SPANISH 279 and 399; or two RCLANG 324 and six credits chosen between SPANISH 279 and 399. (Prerequisites enforced at registration.) (3). May be repeated for a maximum of 6 credits. May be elected more than once in the same term.*

Studies in Medieval Spanish Literature to 1500.

**SPANISH 453. Religion and Culture in the Hispanic World**

*Nine credits chosen between SPANISH 279 and 399; or two RCLANG 324 and six credits chosen between SPANISH 279 and 399. (Prerequisites enforced at registration.) (3). May not be repeated for credit.*

This course explores topics in religious history in the Hispanic Worlds. It incorporates readings in translation from non-Romance sources as well as sources in Castilian that shed light on aspects of religion in Iberia and/or Americas in any period.

**SPANISH 456. Golden Age**

*Nine credits chosen between SPANISH 279 and 399; or two RCLANG 324 and six credits chosen between SPANISH 279 and 399. (Prerequisites enforced at registration.) (3). May not be repeated for credit.*

Studies in the Golden Age.

**SPANISH 458. Early Modern Narrative**

*Nine credits chosen between SPANISH 279 and 399; or two RCLANG 324 and six credits chosen between SPANISH 279 and 399. (Prerequisites enforced at registration.) (3). May not be repeated for credit.*

The study of the origins and evolution of the genre in Spain and/or Latin America.

**SPANISH 459. Cervantes**

*Nine credits chosen between SPANISH 279 and 399; or two RCLANG 324 and six credits chosen between SPANISH 279 and 399. (Prerequisites enforced at registration.) (3). May be repeated for a maximum of 6 credits.*

A close study of Cervantes's literary works.

**SPANISH 460. The Spanish Comedia**

*Nine credits chosen between SPANISH 279 and 399; or two RCLANG 324 and six credits chosen between SPANISH 279 and 399. (Prerequisites enforced at registration.) (3). May not be repeated for credit.*

Readings in the Spanish drama of the late 16th and 17th centuries.

**SPANISH 467. Literary and Artistic Movements in Latin America/Spain**

*Nine credits chosen between SPANISH 279 and 399; or two RCLANG 324 and six credits chosen between SPANISH 279 and 399. (Prerequisites enforced at registration.) (3). May be repeated for a maximum of 6 credits. May be elected more than once in the same term.*

Topical studies in major literary and artistic movements in modern Spain and/or Latin America.

**SPANISH 468. Performance in the Hispanic World**

*Nine credits chosen between SPANISH 279 and 399; or two RCLANG 324 and six credits chosen between SPANISH 279 and 399. (Prerequisites enforced at registration.) (3). May not be repeated for credit.*

The study of performance in Latin America / Spain , with emphasis both on texts and performative practices.

**SPANISH 470. Colonial Latin America**

*Nine credits chosen between SPANISH 279 and 399; or two RCLANG 324 and six credits chosen between SPANISH 279 and 399. (Prerequisites enforced at registration.) (3). May be repeated for a maximum of 6 credits. May be elected more than once in the same term.*

The study of colonial Latin American literatures, cultures, and societies.

**SPANISH 472. Indigenous Societies**

*Nine credits chosen between SPANISH 279 and 399; or two RCLANG 324 and six credits chosen between SPANISH 279 and 399. (Prerequisites enforced at*

registration.) (3). May not be repeated for credit.

This course focuses on the history and cultural production of indigenous societies, in the pre-Columbian era, or in the modern and contemporary periods.

**SPANISH 473. Colonial/Postcolonial Studies in Latin-American Cultures**

*Nine credits chosen between SPANISH 279 and 399; or two RCLANG 324 and six credits chosen between SPANISH 279 and 399. (Prerequisites enforced at registration.) (3). May not be repeated for credit.*

Approaches to Latin-American Colonial texts and postcolonial predicaments.

**SPANISH 474. Cities and Spaces in the Hispanic World**

*Nine credits chosen between SPANISH 279 and 399; or two RCLANG 324 and six credits chosen between SPANISH 279 and 399. (Prerequisites enforced at registration.) (3). May be repeated for a maximum of 6 credits. May be elected more than once in the same term.*

This course explores urban spaces in the Hispanic world - political, sacred, commercial, and residential. Students will examine interactions between the material fabric and structure of cities and their cultural production, including literature, film, maps, and historical documents.

**SPANISH 475. Latin American/Spanish Narrative**

*Nine credits chosen between SPANISH 279 and 399; or two RCLANG 324 and six credits chosen between SPANISH 279 and 399. (Prerequisites enforced at registration.) (3). May be repeated for a maximum of 6 credits. May be elected more than once in the same term. Taught in Spanish.*

The study of selected Latin American or Spanish novels.

**SPANISH 476. Latin-American Poetry**

*Nine credits chosen between SPANISH 279 and 399; or two RCLANG 324 and six credits chosen between SPANISH 279 and 399. (Prerequisites enforced at registration.) (3). May be repeated for a maximum of 6 credits. May be elected more than once in the same term. Taught in Spanish.*

Concentration on the specific aspects of modern poetry through the analysis of works by major figures. Conducted in Spanish.

**SPANISH 480. Transnational Cultures**

*Nine credits chosen between SPANISH 279 and 399; or two RCLANG 324 and six credits chosen between SPANISH 279 and 399. (Prerequisites enforced at registration.) (3). May be repeated for a maximum of 6 credits. May be elected more than once in the same term.*

This course examines the transnational flows of people, goods, capital, culture and ideas across the Hispanic world.

**SPANISH 485. Case Studies in Peninsular Spanish and Latin American Literature**

*Nine credits chosen between SPANISH 279 and 399; or two RCLANG 324 and six credits chosen between SPANISH 279 and 399. (Prerequisites enforced at registration.) (3). May be repeated for a maximum of 6 credits. May be elected more than once in the same term.*

Considers in detail specific problems, figures, movements, works or literary genres in Hispanic literature; for example: baroque poetry, Jorges Luis Borges, nineteenth-century theater, Modernist prose works. Conducted in Spanish.

**SPANISH 487 / ROMLING 487. Studies in Hispanic Linguistics**

*Nine credits chosen between SPANISH 279 and 399; or two RCLANG 324 and six credits chosen between SPANISH 279 and 399. (Prerequisites enforced at registration.) SPANISH 298, ROMLING 298, or LING 210. (3). May be repeated for a maximum of 9 credits. May be elected more than once in the same term. Rackham credit requires additional work.*

Study of selected topics in Hispanic Linguistics

**SPANISH 488. Topics in Hispanic Literature/History/Culture**

*Nine credits chosen between SPANISH 279 and 399; or two RCLANG 324's and six credits chosen between SPANISH 279 and 399. (Prerequisites enforced at registration.) (3). May be repeated for a maximum of 6 credits. May be elected more than once in the same term.*

The study of selected topics in Spanish and Latin-American literature, history, and culture.

**SPANISH 491. Senior Honors Course**

*Consent of instructor required. Seniors, with permission of the Honors Advisor. (3). May not be repeated for credit.*

Introduces the student to the fundamental principles of literary studies as a discipline.

**SPANISH 492. Senior Honors Course**

*Consent of instructor required. SPANISH 491. (3). (INDEPENDENT). May not be repeated for credit.*

Supervised independent study leading to the completion of an honors thesis and a program of selected readings including conferences, term papers or reports, and written examinations.

**Statistics (STATS)****STATS 125. Games, Gambling and Coincidences**

*Enrollment restricted to first-year students, including those with sophomore standing. (3). (MSA). (BS). (QR/1). May not be repeated for credit.*

Students and faculty will work together solving problems related to games, gambling and coincidences, touching on many fundamental ideas in discrete probability, finite Markov chains, dynamic programming and game theory.

**STATS 150. Making Sense of Data**

*(3). (MSA). (BS). (QR/1). May not be repeated for credit. No credit granted to those who have completed or are enrolled in SOC 210, IOE 265, STATS 250(350), 280, 400, 412, or ECON 404, ECON 405.*

Can you really make statistics say anything you want? Yes and no. Some common statistical comparisons are susceptible to coercion, but there are others that can be trusted to tell the truth. We explore their differences, using the examples from the social and medical sciences and cutting-edge computing and graphical techniques.

**STATS 180. AP Statistics**

*(3). (BS). May not be repeated for credit. Students proceeding to STATS 250 receive full credit for STATS 250 but lose their credit for STATS 180.*

Credit is assigned for a score of 4 or 5 on the AP Statistics test. Those with STATS 180 credit may proceed to STATS 280 or any Statistics class for which STATS 250 is prerequisite. Students proceeding to STATS 250 receive full credit for STATS 250 but lose their credit for STATS 180.

## **STATS 206. Introduction to Data Science**

*(4). May not be repeated for credit.*

Data science combines mathematical and computational skills, together with statistical and ethical reasoning, to draw conclusions from data. A programming language is introduced in the context of data analysis. Probability and algorithms are developed as tools for formal statistical modeling and inference, and for exploratory analysis and visualization of data.

## **STATS 250. Introduction to Statistics and Data Analysis**

*(4). (MSA). (BS). (QR/1). May not be repeated for credit. No credit granted to those who have completed or are enrolled in ECON 451, IOE 265, or STATS 280 or STATS 412. Those with credit for STATS 250 receive no credit for STATS 180.*

A one term course in applied statistical methodology from an analysis-of-data viewpoint. Frequency distributions; measures of location; mean, median, mode; measures of dispersion; variance; graphic presentation; elementary probability; populations and samples; sampling distributions; one sample univariate inference problems, and two sample problems; categorical data; regression and correlation; and analysis of variance. Use of computers in data analysis.

## **STATS 251. Introductory Statistics Supplement for Mathematics Education**

*Prior or concurrent enrollment in STATS 250. (Prerequisites enforced at registration.) (1). (BS). May not be repeated for credit.*

This course is a supplemental Lab section to STATS 250. It follows the content trajectory of STATS 250, providing discussion and coursework assignments on (1) statistical knowledge needed for future elementary, middle, and high school teachers who will teach statistics; and (2)

pedagogical practices of teaching statistics throughout the K-12 curriculum.

## **STATS 280. Honors Introduction to Statistics and Data Analysis**

*Pre-calculus. (4). (MSA). (BS). (QR/1). May not be repeated for credit. No credit granted to those who have completed or are enrolled in ECON 451, IOE 265, SOC 210, STATS 250 or STATS 412.*

This course is an introduction to statistical methods and data analysis at the honors level, targeting advanced undergraduate students who are interested in a challenging introductory course.

## **STATS 299. Workplace Internship for Undergraduate Statistics Majors**

*Consent of department required. (1). (EXPERIENTIAL). May be elected twice for credit. Offered mandatory credit/no credit.*

This course allows Statistics majors to earn one credit for statistical work they perform as off-campus interns. Students must obtain advance approval from the Statistics Department for internship plans. Upon completion of the internship, the internship's offsite supervisor needs to provide documentation of satisfactory performance. Students also are required to submit a final report describing their internship duties and accomplishments and relating them to studies in Statistics.

## **STATS 306. Introduction to Statistical Computing**

*[STATS 250 OR STATS 280 OR STATS 412] AND prior or concurrent enrollment in [MATH 116 or MATH 121 or MATH 156 or MATH 186]. (Prerequisites enforced at registration.) (4). (BS). May not be repeated for credit.*

This course introduces basic concepts in computer programming and statistical computing techniques as they are applied to data extraction and manipulation, statistical processing and visualization. It is aimed primarily at undergraduate majors in Statistics and Data Science.

## **STATS 401. Applied Statistical Methods**



## II

*MATH 115, and STATS 180, STATS 250, STATS 280, or STATS 412, or ECON 451, or NRE 438. (4). (BS). (QR/1). May not be repeated for credit. No credit granted to those who have completed or are enrolled in STATS 413.*

An intermediate course in applied statistics which assumes knowledge of STAT 350/400-level material. Covers a range of topics in modeling and analysis of data including: review of simple linear regression, two-sample problems, one-way analysis of variance; multiple linear regression, diagnostics and model selection; two-way analysis of variance, multiple comparisons, and other selected topics.

### **STATS 403. Introduction to Quantitative Research Methods**

*STATS 401 or (STATS 250 and [MATH 214 or MATH 217]). (4). (BS). May not be repeated for credit.*

This course introduces methods for planning, executing, and evaluating research studies based on experiments, surveys, and observational datasets. In addition to learning a toolset of methods, students will read and report on recent research papers to learn how study design and data analysis are handled in different fields.

### **STATS 404. Effective Communication in Statistics**

*STATS 470 or 480. (2). (BS). May not be repeated for credit. May not be used in the Statistics or Applied Statistics academic minor. Rackham credit requires additional work.*

This course will focus on the principles of good written and oral communication of statistical information and data analyses. Participants will study communication principles and apply them in writing assignments and oral presentations of statistical analyses. Topics will include giving constructive feedback and rewriting to improve clarity and technical correctness.

### **STATS 406. Computational Methods in Statistics and Data Science**

*[MATH 214 OR MATH 217 OR MATH 417] AND [(STATS 250 AND MATH/STATS 425) OR STATS 412 OR STATS 426] AND [STAT 306 OR EECS 183 OR ENGR 101 OR EECS 280]. (3). (BS). May not be repeated for credit. F.*

This course introduces basic computational methods as needed in statistics. It is aimed primarily at undergraduate majors in Statistics and Data Science.

### **STATS 408. Statistical Principles for Problem Solving: A Systems Approach**

*High school algebra. (4). (BS). May not be repeated for credit. No credit granted to those who have completed or are enrolled in STATS 170.*

Our purpose is to help you use quantitative reasoning to facilitate learning. Specifically, we introduce statistical and mathematical principles, and then use these as analogues in a variety of real world situations. The notion of a system, a collection of components that come together repeatedly for a purpose, provides an excellent framework to describe many real world phenomena and provides a way to view the quality of an inferential process.

### **STATS 412. Introduction to Probability and Statistics**

*Prior or concurrent enrollment in MATH 215. (3). (BS). (QR/1). May not be repeated for credit. No credit granted to those who have completed or are enrolled in ECON 451 or 453, STATS 280, or IOE 265. One credit granted to those who have completed or are enrolled in STATS 250. May not be used in the Statistics or Applied Statistics academic minor. F, W, Sp.*

An introduction to probability theory; statistical models, especially sampling models; estimation and confidence

intervals; testing statistical hypotheses; and important applications, including the analysis of variance and regression.

**STATS 413. Applied Regression Analysis**  
[MATH 214, OR MATH 217 OR MATH 417] AND [(STATS 250 AND MATH/STATS 425) OR STATS 412 OR STATS 426]. (Prerequisites enforced at registration.) (4). (BS). May not be repeated for credit. No credit granted for those who have completed or enrolled in STATS 500.

This course covers traditional and modern topics in regression analysis. It is aimed primarily at undergraduate majors in Statistics and Data Science.

**STATS 414. Special Topics in Statistics**  
*Consent of department required. Varies by term and instructor. (2 - 4). May be elected twice for credit. May be elected more than once in the same term. Rackham credit requires additional work.*

A course in exploring topics of current interest in statistics, probability and/or data science. Content varies by term and instructor.

**STATS 415. Data Mining and Statistical Learning**  
MATH 215 and 217, and one of STATS 401, 406, 412 or 426. (4). (BS). May not be repeated for credit.

This course covers the principles of data mining, exploratory analysis and visualization of complex data sets, and predictive modeling. The presentation balances statistical concepts (such as over-fitting data, and interpreting results) and computational issues. Students are exposed to algorithms, computations, and hands-on data analysis in the weekly discussion sessions.

**STATS 425 / MATH 425. Introduction to Probability**

MATH 215. (3). (BS). May not be repeated for credit. F, W, Sp, Su.

**STATS 426. Introduction to Theoretical Statistics**

STATS 425 and prior or concurrent enrollment in MATH 217, 412 or 451. (3). (BS). May not be repeated for credit.

An introduction to theoretical statistics for students with a background in probability. Probability models for experimental and observational data, normal sampling theory, likelihood-based and Bayesian approaches to point estimation, confidence intervals, tests of hypotheses, and an introduction to regression and the analysis of variance. This course serves as a prerequisite for many graduate-level statistics courses.

**STATS 430. Applied Probability**  
STATS 425 or equivalent. (3). (BS). May not be repeated for credit.

Review of probability theory; introduction to random walks; counting and Poisson processes; Markov chains in discrete and continuous time; equations for stationary distributions; introduction to Brownian motion. Selected applications such as branching processes, financial modeling, genetic models, the inspection paradox, inventory and queuing problems, prediction, and/or risk analysis.

**STATS 449 / BIOSTAT 449. Topics in Biostatistics**

STATS 401, 403, or 425 or permission of instructor. (3). (BS). May not be repeated for credit.

Introduction to biostatistical topics: clinical trials, cohort and case-control studies; experimental versus observational data; issues of causation, randomization, placebos; case control studies; survival analysis; diagnostic testing; image analysis of PET and MRI scans; statistical genetics; longitudinal studies; and missing data.

**STATS 451. Bayesian Data Analysis**  
(STATS 412 or STATS 425) and (STATS 306 or EECS 280). (Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit.

The course is an introduction to both the principles and practice of Bayesian inference for data analysis. At the end of this course students will be familiar with the Bayesian paradigm, and will be able to analyze different classes of statistical models. The course gives an introduction to the computational tools needed for Bayesian data analysis and develops statistical modeling skills through a hands-on data analysis approach. Topics include: prior/posterior distributions, Bayes rule, Markov Chain Monte Carlo computations, linear and generalized linear models, mixed effect models, hierarchical models, analysis of spatial data, model selection and comparison, model checking.

**STATS 470. Introduction to the Design of Experiments**  
STATS 401 or 412 or 425, or MATH 425. (Prerequisites enforced at registration.) (4). (BS). May not be repeated for credit. F.

Introduces students to basic concepts for planning experiments and to efficient methods of design and analysis. Topics covered include concepts such as randomization, replication and blocking; analysis of variance and covariance and the general linear model; factorial and fractional factorial designs, blocked designs, and split-plot designs.

**STATS 480. Survey Sampling Techniques**  
STATS 401 or 412 or 425 or MATH 425. (Prerequisites enforced at registration.) (4). (BS). May not be repeated for credit. W.

Introduces students to basic ideas in survey sampling, moving from motivating

examples to abstraction to populations, variables, parameters, samples and sample design, statistics, sampling distributions, Horvitz-Thompson estimators, basic sample design (simple random, cluster, systematic, multiple stage), various errors and biases, special topics.

**STATS 485. Capstone Seminar**  
Consent of department required. Prior or concurrent enrollment in STATS 426 and STATS 413. Restricted to Statistics or Data Science majors in their final year of study, or Statistics honors students in their junior year. (3). (BS). May not be repeated for credit.

This capstone seminar builds on students' substantial statistical backgrounds to reach a broader and deeper understanding of statistical theory and practice. Specific topics vary by instructor, but generally include sophisticated examples of statistical methods being used to address challenging applied research problems. In addition, the seminar explores how statisticians evaluate the strengths and weaknesses of existing statistical methods and develop new ones.

**STATS 489. Independent Study in Statistics**  
Consent of instructor required. (1 - 4). (BS). (INDEPENDENT). May be repeated for a maximum of 4 credits. May not be used in the Statistics or Applied Statistics academic minor.

Individual study of advanced topics in statistics, reading and/or research in applied or theoretical statistics.

**STATS 499. Honors Seminar**  
Consent of instructor required. Permission of departmental Honors advisor. (2 - 3). (BS). (INDEPENDENT). May be repeated for a maximum of 6 credits. May not be used in the Statistics or Applied Statistics academic minor. Continuing Course. Y grade can be reported at end of the first-

*term to indicate work in progress. At the end of the second term, the final grade is posted for both term's elections. F, W, Sp.*

Discussion of new research methods; reading/discussion of relevant literature; individual projects on statistical modeling/analysis; technical writing and presentation to prepare for honors thesis.

**STATS 525 / MATH 525. Probability Theory**

*MATH 451 (strongly recommended). MATH 425/STATS 425 would be helpful. (3). (BS). May not be repeated for credit.*

**STATS 526 / MATH 526. Discrete State Stochastic Processes**

*MATH 525 or STATS 525 or EECS 501. (3). (BS). May not be repeated for credit.*

## **Study Abroad (STDABRD)**

**STDABRD 230. CGIS: Intermediate French Languages Studies in Grenoble, France**

*Minimum 4 semesters college-level French or equivalent. (1 - 10 in the half-term). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. (Grenoble, France). Su. Multiple Grading Patterns.*

Students with intermediate and advanced level French enroll in a 3-credit class taught by a UM faculty member, and also classes at the Centre Universitaire d'Etudes Francaises at the Universite Stendhal in Grenoble.

**STDABRD 234. CGIS: Multidisciplinary Studies in Barcelona, Spain**

*(1 - 10 in the half-term). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

Students enroll in 2-4 courses at the Barcelona School for International Studies during a 4 or 8 week period.

**STDABRD 235. CGIS: Advanced Language and Culture in Granada, Spain**

*Minimum five semesters collegelevel Spanish by program start date fulfilled by any of the following or an equivalent: SPANISH 277 RCLANG 324. (1 - 15). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

Students take a unique combination of courses with University of Michigan faculty at a local program center, and enroll in one course at the prestigious University of Granada. Requires completion of at least five semesters (or the equivalent) of college-level Spanish.

**STDABRD 236. CGIS: International Business and Humanities at the Universitat Autònoma de Barcelona (UAB)**

*(1 - 15). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

Students may take an optional Spanish language course at their level then choose from a variety of English or Spanish-taught electives at the Universitat Autònoma de Barcelona (UAB). Course offerings include international business, humanities and social sciences.

**STDABRD 237. CGIS: Sports and Society in Barcelona, Spain**

*(1 - 10 in the half-term). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

Administered by Barcelona Study Abroad Experience (SAE), students take a course on Sports and Society.

**STDABRD 242. CGIS: STEM Summer Research Program in Granada, Spain**

*(1 - 15). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

Administered by Arcadia University, this program allows students to perform STEM research for academic credit with the Andalusian Center for Environmental Research.

**STDABRD 245. CGIS: Intensive Language and Culture in Santiago de Compostela, Spain**

*(1 - 10 in the half-term). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

Students will enroll in two advanced Spanish courses. One with a UM faculty member and the second with a local professor from the University of Santiago de Compostela's Cursos Internacionales.

**STDABRD 250. CGIS: Intensive Chinese Language in Beijing, China**

*At least two semesters college-level Chinese language study with 3.0 GPA. (1 - 10 in the half-term). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. (Beijing, China). Su. Multiple Grading Patterns.*

The program provides students with in-depth and intensive coursework in Chinese language instruction, drill work, and conversation practice. Standard Mandarin is taught with simplified characters. Classroom work is supplemented with excursions around Beijing to historical and cultural sites.

**STDABRD 257. CGIS: University Study in China - Fudan University (Shanghai)**

*(1 - 15; 1 - 10 in the half-term). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

Students direct enroll as full-time students in classes at Fudan University, taught in English and Mandarin.

**STDABRD 258. CGIS: University Study in China - University of Macau**

*(1 - 15; 1 - 10 in the half-term). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

Students direct enroll as full-time students in classes at the University of Macau, taught in English.

**STDABRD 285. CGIS: Arts in Paris, France**

*(1 - 10 in the half-term). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

Students take one History of Art course with a U-M instructor and one French language course at a local institution.

**STDABRD 286. CGIS: Black Paris in Paris, France**

*(1 - 10 in the half-term). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

Students enroll in 3 week course with UM-Faculty. Students take course at ACCENT Paris Center.

**STDABRD 290. CGIS: International Affairs in Paris, France**

*(1 - 15). May be repeated for a maximum of 60 credits. May be elected more than once*

*in the same term. Multiple Grading Patterns.*

Students take a required French language course at their level and choose from a wide range of English-taught courses in the humanities and social sciences offered at the IES center.

**STDABRD 295. CGIS: University Study in France - Sciences Po Reims**  
*(1 - 15). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

Students enroll in classes offered at Sciences Po in Reims as part of the Exchange Programme. Courses are offered within four certificate programs: International Affairs and Strategy, European Affairs, Economics and Business, and Journalism & Communication.

**STDABRD 301. CGIS: Arabic Language and Culture in Amman, Jordan - Internship Track**  
*(1 - 15; 1 - 10 in the half-term). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

Students take part in an internship course and internship, along with an Arabic language course and Middle East studies electives to meet the recommended 15-16 total credits.

**STDABRD 303. CGIS: Environment and Sustainable Development in San Jose, Costa Rica**

*Minimum two semesters college-level Spanish, fulfilled by: SPANISH 100, SPANISH 102, RCLANG 194, or equivalent Background in appropriate social and natural sciences. (1 - 15). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

Students take classes in intensive language, ecology, Latin American political economy, and development theory. They also do fieldwork and an independent research project.

**STDABRD 304. CGIS: Intensive Arabic Language and Culture in Amman, Jordan**

*2 semesters of Modern Standard Arabic. (1 - 15; 1 - 10 in the half-term). May be repeated for a maximum of 60 credits. Multiple Grading Patterns.*

Administered by CET, this program offers Intensive Arabic language study along with content-based Arabic language courses offered in literature, contemporary society, business, history, religion and politics.

**STDABRD 305. CGIS: Language and Culture in Rabat, Morocco**

*(1 - 15; 1 - 10 in the half-term). May be repeated for a maximum of 60 credits. Multiple Grading Patterns.*

Administered by IES, this program offers Arabic and French language studies as well as North African area studies courses.

**STDABRD 306. CGIS: Advanced Language and Culture in Madrid, Spain**

*Minimum four semesters college-level Spanish by program start date fulfilled by any of the following or an equivalent: SPANISH 230, SPANISH 232, RCLANG 294, or RCLANG 314. (1 - 15). May be repeated for a maximum of 75 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

Students take intensive Spanish classes and get an introduction to Madrid and Spanish culture, politics and academic life. Classes are offered at the program center and at the Universidad Complutense de Madrid. A for-credit internship option is also available,

as are several business courses. All classes are taught in Spanish.

**STDABRD 307. CGIS: University Study in Egypt - American University in Cairo**  
*Consent of department required. (1 - 15; 1 - 10 in the half-term). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

AUC offers a broad range of courses in the humanities, social sciences, and sciences. With the exception of Arabic language, all courses are taught in English, and thus study abroad students may enroll in any course for which they have the appropriate disciplinary background.

**STDABRD 308. CGIS: EcoQuest Field Studies in Whakatiwai, New Zealand**  
*(1 - 15; 1 - 10 in the half-term). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

Students take interdisciplinary coursework in ecology and environment policy. For Spring term, this is combined with fieldwork and a directed research project.

**STDABRD 309. CGIS: Frontiers Abroad - Geology and Earth Systems Science in Auckland and Christchurch, New Zealand**  
*(1 - 15; 1 - 10 in the half-term). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

Frontiers Abroad leads undergraduate fieldwork and research programs in earth and environmental sciences.

**STDABRD 310. CGIS: International Development and French Language in Dakar, Senegal**  
*Minimum 3.0 GPA overall and in French classes; minimum 3 semesters college-level*

*French or equivalent. (1 - 15). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

All students are required to take at least one French language course, based on students' command of the French language, and one Wolof course; the most predominant local language. In addition students can enroll in a minimum of three three-credit courses from among those offered at UCAD and IFE and those specially arranged for program participants.

**STDABRD 311. CGIS: Psychology and Research in Madrid, Spain**  
*Preference given to students with two semesters college-level Spanish or more. (1 - 10 in the half-term). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

During the 6-week summer program in Madrid, students will take Introduction to Biological Psychology (3 credits, equivalent to Psych 230 at UM) and Research Laboratory in Psychology (3 credits) for a total of 6 credits. This program is offered in partnership with the prestigious Fundacion Ortega-Maranon in Madrid and the University of Minnesota's Department of Psychology.

**STDABRD 312. CGIS: Language and Culture in Madrid, Spain**  
*5 semesters of college-level Spanish. (1 - 10 in the half-term). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

Students enroll in two area studies courses, taught in Spanish, at the IES Madrid Center for a total of 6 credits at the 300 level.

**STDABRD 314. CGIS: Summer Arabic Language in Rabat, Morocco**

*(1 - 10 in the half-term). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

Students enroll in a Standard Modern Arabic Course and Colloquial Modern Arabic Language course.

**STDABRD 315. CGIS: Wildlife Management Studies in Rhotia, Tanzania**  
*(1 - 15; 1 - 10 in the half-term). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

At the School for Field Studies field site in Tanzania students study wildlife ecology and behavior, explore resource management techniques in the East African ecosystem, evaluate the ecological and sociocultural impacts of cultural tourism in Tanzania, and perform directed research.

**STDABRD 320. CGIS: Marine Resource Studies in The Turks and Caicos Islands**  
*(1 - 15; 1 - 10 in the half-term). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

At the School for Field Studies field site in Turks and Caicos students learn about tropical marine ecology, evaluate host country resource management and policies, and practice field research skills in the tropical Western Atlantic.

**STDABRD 325. CGIS: Chinese Studies in Shanghai, China**  
*(1 - 15; 1 - 10 in the half-term). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. (Beijing, China). Su. Multiple Grading Patterns.*

Designed for students with interest in Chinese area studies and any level of study in Chinese language. The program provides

an opportunity for in-depth learning about China from a broad perspective of topics. Required language study ensures linguistic and cultural connection with the area studies topics and optional internship placement.

**STDABRD 330. CGIS: Budapest Semesters in Mathematics in Budapest, Hungary**  
*(1 - 15; 1 - 10 in the half-term). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

Students enroll in mathematics courses taught in English by Budapest Semesters in Mathematics (BSM) faculty.

**STDABRD 332. CGIS: Central European Studies at Charles University in Prague, Czech Republic (UPCES)**  
*(1 - 15). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. (Prague, Czech Republic). F, W. Multiple Grading Patterns.*

Students choose from a wide range of courses in the humanities and social sciences, taught in English. Students select four courses in addition to the required Czech language course.

**STDABRD 336. CGIS: Central European Studies in Prague, Czech Republic (CIEE)**  
*(1 - 15). May be elected 91 times for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

Students direct enroll as fulltime students in classes at Charles University and/or the Prague CIEE Study Center taught in English. 15-18 credits.

**STDABRD 337. CGIS: Central European Studies Summer Program in Prague, Czech Republic**



*(1 - 10 in the half-term). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

Students direct enroll as part-time or full-time students in classes at the Prague CIEE Study Center taught in English. 3-10 credits depending on which session or combination of sessions participants are enrolled in.

**STDABRD 338. CGIS: Cross-Cultural Psychology in Prague, Czech Republic**  
*(1 - 10 in the half-term). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

Students enroll in this CET taught course for 3 credits. This course examines how cultural differences in developmental, social and educational areas affect individual behavior. It critically compares psychological theories and current research from specific countries and explores the critical thinking and intercultural competence in the framework of cross-cultural psychology.

**STDABRD 339. CGIS: Peace and Conflict Studies in Serbia, Bosnia, and Kosovo**  
*(1 - 15). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

Students take classes at the SIT Study Abroad center in Belgrade, Serbia focused on Conflict Studies in the Balkans. Students will also go on excursions to Bosnia-Herzegovina and Kosovo.

**STDABRD 340. CGIS: Liberal Arts in Athens, Greece**  
*(1 - 15; 1 - 10 in the half-term). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

Administered by CYA, students take courses in ancient, medieval, and modern Greek history, politics, literature, philosophy, and archaeology, as well as ancient and modern Greek language and Latin.

**STDABRD 341. CGIS: Summer Study Abroad in Athens or the Greek Isles, Greece**  
*(1 - 10 in the half-term). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

Administered by CYA, students study history, politics, writing, and sociology in sessions located throughout Greece, including Athens and the Greek Isles.

**STDABRD 343. CGIS: University Study in Japan - Hitotsubashi University (Tokyo)**  
*(1 - 15). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

Students enroll in classes at Hitotsubashi University. Classes are taught in English; students with Japanese language proficiency may enroll in regular classes.

**STDABRD 344. CGIS: Contemporary London, United Kingdom**  
*(1 - 10 in the half-term). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. May not be elected Pass/Fail. (London, England). Sp. Multiple Grading Patterns.*

Students enroll in two UM Faculty-led classes focusing on modern British society, culture and the arts, and will earn a total of six credits (three credits each class).

**STDABRD 345. CGIS: University Study in Germany - University of Tuebingen**

*3-4 semesters college-level German or equivalent. (1 - 15). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. (Tübingen, Germany). F, W. Multiple Grading Patterns.*

Students take an intensive German language course before enrolling directly in the University of Tuebingen.

**STDABRD 346. CGIS: Advanced Russian Language and Culture in Russia**

*Minimum 4 semesters of college Russian, with average of B or better in language courses. (1 - 15). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. (Russia) F, W. Multiple Grading Patterns.*

The C.V. Starr-Middlebury College School in Russia is designed for students at an intermediate to advanced level of Russian who wish to immerse themselves in the study of the Russian language and culture. Students will study in one of three distinct locations in Russia.

**STDABRD 347. CGIS: University Study in Japan - Waseda University (Tokyo)**  
*(1 - 15). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

Students enroll in classes at Waseda University. Classes are taught in English; students with Japanese language proficiency may enroll in regular classes.

**STDABRD 349. CGIS: Language and Culture in Hikone, Japan**

*One year proficiency in Japanese. (1 - 15). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. (Hikone, Shiga, Japan). F, W. Multiple Grading Patterns.*

Administered by JCMU, this program offers Japanese language and area studies courses.

**STDABRD 351. CGIS: Academic Year in Freiburg, Germany**

*Minimum two years of college-level German. (1 - 15). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. (Freiburg, Germany). F, W. Multiple Grading Patterns.*

Students enroll in classes at the University of Freiburg as well as classes offered by the AYF program.

**STDABRD 352. CGIS: University Study in Singapore - National University of Singapore**

*(1 - 15). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

Students enroll in classes at the National University of Singapore (NUS). A full range of classes is available.

**STDABRD 353. CGIS: Classical Studies (ICCS) in Rome, Italy**

*(1 - 15). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. (Rome, Italy). F, W. Multiple Grading Patterns.*

Administered by ICCS, students take courses in classics, classical history, or archaeology.

**STDABRD 354. CGIS: Metropolitan Studies in Berlin, Germany**

*(1 - 15). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

Students take coursework in the humanities and social sciences, in subjects such as gender studies, sustainability, film, and identity. Students take a required German language course.

**STDABRD 355. CGIS: Advanced French Language in Paris, France**

*5 semesters of college level French or equivalent. (1 - 15). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

Students enroll in classes at various Paris institutions as well as classes offered by the Middlebury program.

**STDABRD 357. CGIS: Sustainable Food Systems and Ecology in Chiang Mai, Thailand**

*(1 - 10 in the half-term). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

Students take one course while on-site and examine sustainable agriculture in Thailand with the larger framework of sustainable development and ecology. The course is a mix of seminars and field-based experiential learning focusing on global food systems and the ecological and cultural context of food systems in Thailand.

**STDABRD 358. CGIS: Conservation and Development Studies in Siem Reap, Cambodia**

*1 college-level course in Ecology, Biology, or Environmental Science/Studies. (1 - 15; 1 - 10 in the half-term). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

Students travel across various regions of Cambodia to explore development and

conservation challenges throughout the country, in addition to brief exploration of these themes in nearby communities in Vietnam. Summer students will also study conservation challenges and ethics while they focus on the ecology and conservation of the Asian elephant.

**STDABRD 359. CGIS: Community Public Health in Khon Kaen, Thailand**

*(1 - 10 in the half-term). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

In this course students will introduce students to performing community health assessments in Thai communities. Participants will gain practical knowledge from local healthcare providers and community organizations. Participants gain a view of health care and practices from the lens of the specific cultural, social, economic, and political context in Thailand.

**STDABRD 361. CGIS: Cuba: Roots, Culture, and Rhythms in Havana, Cuba**

*(1 - 10 in the half-term). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

Students enroll in a 3 credits. Explore and examine the roots of Afro Cuban culture through music, dance and visual art. Join UM students and faculty in Havana, as they investigate the Afro-Cuban influences in Cuban culture through engaged discussion, historical walks through Old Havana, workshops and performances in Afro-Cuban music and dance, as it relates to religion, popular culture and identity.

**STDABRD 362. CGIS: Intensive Russian Language and Culture in St. Petersburg, Russia**

*Minimum 4 semesters-college Russian (oral proficiency score of Intermediate or better). (1 - 15). May be repeated for a maximum of*

*60 credits. May be elected more than once in the same term. (St. Petersburg, Russia). F,W. Multiple Grading Patterns.*

Administered by CIEE, this program offers Russian language and area studies courses. This program is designed for students with two years of college-level Russian who wish to improve their proficiency with the Russian language. This is an intensive program that focuses on all language skills and includes Russian culture classes and field trips/excursions.

**STDABRD 363. CGIS: Liberal Arts in Santiago, Chile**

*Successful completion of one of the following courses, or equivalent (with approval from your CGIS Intercultural Programs Advisor): SPANISH 275 & 276, or SPANISH 277, or RCLANG 324 Spanish language course within the past year recommended. (1 - 15). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. (Santiago, Chile). F,W. Multiple Grading Patterns.*

Program participants take classes alongside Chilean students at the host university, La Pontifical Universidad Catolica. Administered jointly with the University of Wisconsin.

**STDABRD 364. CGIS: University Study in the UK - University of Sussex**

*(1 - 15). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. (Brighton, England). F,W. Multiple Grading Patterns.*

Students enroll in classes at the University of Sussex in Brighton. A full range of classes is available.

**STDABRD 365. CGIS: Development and Globalization in Khon Kaen, Thailand**

*(1 - 15). May be repeated for a maximum of 60 credits. May be elected more than once*

*in the same term. Multiple Grading Patterns.*

Administered by CIEE, students work on group projects and learn about development and globalization from both an academic and a grassroots community level and its overall effects on a developing nation.

**STDABRD 366. CGIS: Public Health in Santiago, Dominican Republic**

*College-level coursework in public health recommended. Minimum four semesters college-level Spanish, fulfilled by one of the following or equivalent: SPANISH 230, SPANISH 232, or RCLANG 294, RCLANG 314. (1 - 10 in the half-term). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. (Santo Domingo, Dominican Republic). Su. Multiple Grading Patterns.*

Designed for students with an interest in Spanish language, medicine, and public health. This program examines a range of pre-professional healthcare issues, and provides students with the opportunity to engage with local patients and medical staff through a health practicum and clinical rotation.

**STDABRD 367. CGIS: Global Public Health in New Delhi, India**

*(1 - 10 in the half-term). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

Customized program in Public Health for UM students. Students will participate in one course for UM credit while participating in excursions and visits to local NGOs and health facilities. Combines policy, culture, gender, caste, class, and politics to deliver a multi-dimensional understanding of global public health.

**STDABRD 368. CGIS: Intensive Hindi and Urdu Language in New Delhi, India**

*(1 - 10 in the half-term). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

Students participate in intensive language learning for the full program in Hindi or Urdu language.

**STDABRD 369. CGIS: Language and Culture in Varanasi, India**

*(1 - 15). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

Students participate in culture courses in India while studying at various levels of Hindi language, and also participate in a directed cultural field study. Opportunities to study Urdu are also possible.

**STDABRD 370. CGIS: Public Health in Ho Chi Minh City, Vietnam**

*(1 - 15; 1 - 10 in the half-term). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

Students enroll in CET courses relating to public health and development in Vietnam and may choose to participate in a 4-credit internship.

**STDABRD 372. CGIS: Development, Public Health, and Environment in Ho Chi Minh City, Vietnam**

*(1 - 15). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

Students enroll in CET courses pertaining to public health, environment, and development and may choose to participate in a 4-credit internship.

**STDABRD 374. CGIS: University Study in South Korea - Yonsei University**

**(Seoul)**

*(1 - 15). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. (Seoul, South Korea). F, W, Su. Multiple Grading Patterns.*

Students enroll in classes at Yonsei University. A full range of classes is available. Classes are taught in English; students with Korean language proficiency may enroll in regular classes.

**STDABRD 375. CGIS: Cuban Culture and Society in Havana, Cuba**

*2 semesters of Spanish or equivalent. (1 - 10 in the half-term). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

Through this CGIS faculty-led program, students take two 3-credit courses in English, one taught by a U-M professor and the other by a local professor. Courses focus on Cuban culture and society.

**STDABRD 376. CGIS: Summer at Yonsei - Seoul, South Korea**

*(1 - 10 in the half-term). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

Students take two to three courses as part of Yonsei University's International Summer School program. Courses are in English. The emphasis for this program is on Korean language and Korean studies, however students will also have the opportunity to choose from a range of humanities, social sciences, and science courses offered at Yonsei University.

**STDABRD 381. CGIS: Advanced Italian Language in Bologna, Italy**

*Minimum 5 semesters college-level Italian or equivalent (Winter); Minimum 4 semesters college-level Italian or equivalent (Academic Year). (1 - 15). May be repeated*

*for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

Students choose a combination of Bologna Consortial Studies Program (BCSP) courses and University of Bologna courses. All students are required to take one BCSP Advanced Grammar course. The program begins with a 4-week pre-session BCSP course, which integrates language and culture study, before university and regular semester BCSP courses begin.

**STDABRD 382. CGIS: Language and Culture in Ferrara, Italy**

*(1 - 15). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

This program is designed for students with little or no Italian language background with a strong interest in learning the Italian language and culture. Ferrara is a renaissance city in northeastern Italy, midway between Venice and Florence, and relatively unknown to tourists.

**STDABRD 383. CGIS: Language and Culture in Rome, Italy**

*(1 - 15). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

The Arcadia University Center for Italian Studies (AUCIS) is based in Rome. The program is connected with one of Rome's most dynamic and innovative universities, Università degli Studi Roma Tre.

**STDABRD 384. CGIS: Language and Culture in Rome, Italy - Internship Track**

*(1 - 15). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

Students enroll in classes at the Arcadia center in Rome, as well as classes offered at Università degli Studi Roma Tre. In addition, students will complete an internship.

**STDABRD 399. CGIS: European Union Summer Program in Amsterdam, Netherlands**

*(1 - 10 in the half-term). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

Students enroll in IES taught course for 3 credits. Introduces the basic principles of the European Union; its institutions and the position of member states. The focus will seek to understand how the EU deals with current challenges of migration, climate change and enlargement and how policies are implemented and the impact on member states.

**STDABRD 400. CGIS: Social Sciences in Amsterdam, the Netherlands**

*(1 - 15). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

Students enroll in courses at the University of Amsterdam as well as classes offered by the CIEE program.

**STDABRD 401. CGIS: Study Abroad in Scandinavia (DIS) in Copenhagen, Denmark**

*(1 - 15; 1 - 10 in the half-term). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

Students enroll in one core course and several elective courses offered in a variety of disciplines and taught in English by Danish Institute for Study Abroad (DIS) faculty in Stockholm.

**STDABRD 402. CGIS: Biodiversity & Development of the Amazon in Nauta, Peru**

*1 college-level course in Ecology, Biology, or Environmental Science/Studies. (1 - 15). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

Students travel to the Amazon to explore current conservation efforts, various ecological patterns, and study the extraordinary biodiversity of the Amazon. Participants enroll in 5 required courses on-site, while completing directed research projects and becoming acquainted with local indigenous peoples.

**STDABRD 403. CGIS: Quechua Language in Cusco, Peru**

*(1 - 10 in the half-term). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

Students enroll in intensive Quechua language classes at Centro Tinku in Cusco, Peru. They will be placed in one of three Quechua language levels.

**STDABRD 404. CGIS: International Development in Quito, Ecuador**

*Minimum 4 semesters college-level Spanish or equivalent (students must have taken Spanish within the last academic year or verify advanced level proficiency). (1 - 15). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

Students study international development in Ecuador while improving their Spanish language skills. They will also contribute through an internship or research project with a nonprofit organization while they are there.

**STDABRD 405. CGIS: Brazilian Studies and Portuguese Language in Sao Paulo,**

**Brazil**

*(1 - 15; 1 - 10 in the half-term). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

Students enroll in Portuguese language classes plus electives taught in English by CET faculty in Sao Paulo and have the option to directly enroll in courses at a local Brazilian institution.

**STDABRD 406. CGIS: Summer Study Abroad in Copenhagen, Denmark or Stockholm, Sweden (DIS)**

*(1 - 10 in the half-term). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

Students enroll in one to three spring/summer courses offered in a variety of disciplines by Danish Institute for Study Abroad (DIS) faculty in Stockholm, Sweden; Copenhagen, Denmark; or both.

**STDABRD 430. CGIS: Banking, Finance, and Social Responsibility in Nyon, Switzerland**

*(1 - 15). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

Students take classes at the SIT Study Abroad center in Nyon, Switzerland focused on banking, finance, social responsibility, and the French language.

**STDABRD 431. CGIS: Food Security and Nutrition in Nyon, Switzerland**

*(1 - 10 in the half-term). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

Students take classes at the SIT Study Abroad center in Geneva and Nyon,

Switzerland focused on food security, nutrition, and the French language.

**STDABRD 432. CGIS: Global Health and Development Policy in Nyon, Switzerland**

*(1 - 15). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

Students take classes at the SIT Study Abroad center in Nyon, Switzerland focused on health, development policy, and the French language.

**STDABRD 433. CGIS: International Studies and Multilateral Diplomacy in Geneva, Switzerland**

*(1 - 15). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

Students take classes at the SIT Study Abroad center in Geneva, Switzerland focused on international studies, multilateral diplomacy, and the French language.

**STDABRD 434. CGIS: International Studies and Multilateral Diplomacy Summer Program in Geneva, Switzerland**

*(1 - 10 in the half-term). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

Students take classes at the SIT Study Abroad center in Geneva, Switzerland focused on international studies, multilateral diplomacy, and the French language.

**STDABRD 435. CGIS: Traditional Health and Healthcare Systems in Antananarivo, Madagascar**

*(1 - 10 in the half-term). May be repeated*

*for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

Students take classes at the SIT Study Abroad center in Antananarivo, Madagascar focused on traditional and healthcare systems.

**STDABRD 436. CGIS: Peace and Conflict Studies in Gulu, Uganda and Kigali, Rwanda**

*(1 - 10 in the half-term). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

Students take classes at the SIT Study Abroad centers in Gulu, Uganda and Kigali, Rwanda focused on peace and conflict.

**STDABRD 438. CGIS: Health and Community in Brazil, India, South Africa, and the U.S.**

*(1 - 15). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

Students take classes at the SIT Study Abroad centers in Cape Town, South Africa; Delhi, India; Sao Paulo, Brazil; Washington D.C., United States. On this multi country program, students learn how communities around the world understand what it is to achieve and maintain health and well-being.

**STDABRD 439. CGIS: Health and Community in Argentina, South Africa, Vietnam, and the U.S.**

*(1 - 15). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

Students take classes at the SIT Study Abroad centers in Buenos Aires, Argentina; Cape Town, South Africa; Hanoi, Vietnam;



Washington D.C., United States. On this multi country program, students learn how communities around the world understand what it is to achieve and maintain health and well-being.

**STDABRD 440. CGIS: University Study in Ireland - University College Dublin**  
*(1 - 15). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

Administered by Arcadia University, this program allows students to enroll in classes at the University College Dublin.

**STDABRD 441. CGIS: STEM Summer Research Program in Dublin, Ireland**  
*(1 - 10 in the half-term). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

Administered by Arcadia University, this program allows students to perform STEM research for academic credit with University College Dublin faculty.

**STDABRD 445. CGIS: STEM Summer Research Program in Glasgow, Scotland**  
*(1 - 10 in the half-term). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

Administered by Arcadia University, this program allows students to perform STEM research for academic credit with University of Glasgow faculty.

**STDABRD 446. CGIS: Africa in the 21st Century in Accra, Ghana**  
*(1 - 15). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

Students take classes at the SIT Study Abroad center in Accra focused on Africa and more specifically, Ghana, in the 21st century.

**STDABRD 450. CGIS: University Study in the UK - University of Cambridge, Pembroke College**  
*(1 - 1.5). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

Students direct enroll in 24 credits at Pembroke College. There are no traditional classes at Cambridge University. Rather, Cambridge has the Tripos system, which encompasses three components: lectures, supervisions and exams. Students typically have one supervision per term, attend lectures throughout the terms and take exams at the end of the year.

**STDABRD 451. CGIS: University Study in the UK - University of Oxford, Hertford College**  
*(1 - 15). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

Hertford College is part of the University of Oxford system. CGIS has a relationship with Hertford College that allows UM undergraduates to apply to Hertford College as Visiting students. UM students will be considered in-residence at UM while taking courses at Hertford College.

**STDABRD 452. CGIS: University Study in the UK - University of Oxford, St. Peter's College**  
*(1 - 10 in the half-term). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. (Oxford, England). Su. Multiple Grading Patterns.*

Students on this summer program take seminars in English Literature, Medieval Studies or Environmental Studies.

**STDABRD 456. CGIS: University Study in the UK - London School of Economics and Political Science**

*(1 - 15). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. (London, England). F,W. Multiple Grading Patterns.*

Students enroll in classes at the London School of Economics and Political Science. A wide variety of classes is available.

**STDABRD 457. CGIS: STEM Summer Research Program in London, United Kingdom**

*(1 - 15). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

Administered by Arcadia University, this program allows students to perform STEM research for academic credit with Royal Veterinary College faculty.

**STDABRD 458. CGIS: University Study in the UK - University of St. Andrews**

*(1 - 15). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. (St Andrews, Scotland). F,W. Multiple Grading Patterns.*

Students enroll in classes at the University of St. Andrews. A full range of classes is available.

**STDABRD 460. CGIS: Study Abroad in Scandinavia (DIS) in Stockholm, Sweden**

*(1 - 15; 1 - 10 in the half-term). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

Students enroll in one core course and several elective courses offered in a variety of disciplines and taught in English by Danish Institute for Study Abroad (DIS) faculty in Stockholm.

**STDABRD 461. CGIS: University Study in Sweden - Uppsala University**

*(1 - 15). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. (Uppsala, Sweden). F,W. Multiple Grading Patterns.*

Students enroll in classes at Uppsala University. A full range of classes is available. Classes are taught in English; students with Swedish language proficiency may enroll in regular classes.

**STDABRD 462. CGIS: University Study in Sweden - Stockholm University**

*(1 - 15). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

Students enroll in classes at Stockholm University. A full range of classes is available. Classes are taught in English; students with Swedish language proficiency may enroll in regular classes.

**STDABRD 463. CGIS: Central European Studies in Warsaw, Poland**

*(1 - 15). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. (Prague, Budapest or Warsaw). F,W. Multiple Grading Patterns.*

This program is administered by CIEE in Warsaw, Poland at CIEE's Study Center at the Warsaw School of Economics, the oldest and largest economics university in Poland. Students are required to take a mandatory Polish language course and then select other course options taught in English from a range of in such fields as East and

Central European politics, literature, history, business and economics.

**STDABRD 466. CGIS: University Study in Japan - Kyushu University**

*(1 - 15). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. (Fukuoka, Japan). F,W. Multiple Grading Patterns.*

Michigan students on this exchange program study Japanese language and take a variety of Japan-related courses, most taught in English.

**STDABRD 468. CGIS: University Study in Australia - University of New South Wales (Sydney)**

*(1 - 15). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. (Sydney, Australia). F,W. Multiple Grading Patterns.*

Students enroll in classes at the University of New South Wales (UNSW). A full range of classes is available.

**STDABRD 470. CGIS: STEM Summer Research Program in Brisbane, Australia**

*(1 - 10 in the half-term). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

Administered by Arcadia University, this program allows students to perform STEM research for academic credit with the University of Queensland.

**STDABRD 472. CGIS: University Study in Turkey - Bogazici University (Istanbul)**

*(1 - 15; 1 - 8 in the half-term). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. (Istanbul, Turkey). Multiple Grading Patterns.*

Students enroll in classes at Bogazici University in Istanbul. A full range of classes is available. Classes are taught in English.

**STDABRD 480. CGIS: University Study in the UK - King's College London**

*(1 - 15). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

Students enroll in classes at King's College London, University of London. A full range of classes is available.

**STDABRD 481. CGIS: University Study in the UK - Queen Mary University in London**

*(1 - 15). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. (London, England). F,W. Multiple Grading Patterns.*

Students enroll in classes at Queen Mary, University of London. A full range of classes is available.

**STDABRD 483. CGIS: University Study in the UK - University College London**

*(1 - 15). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. (London, England). F,W. Multiple Grading Patterns.*

Students enroll in classes at University College London. A full range of classes is available.

**STDABRD 486. CGIS: University Study in France - Sciences Po Paris**

*Minimum 6 semesters college-level French (or the equivalent). Significant course work in political science or other social science. (1 - 15). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. (Paris, France). F,W. Multiple Grading Patterns.*

Students enroll in classes at the Institut d' Etudes Politiques (Sciences Po) in Paris. A wide range of classes is available. Students must take all courses in French.

**STDABRD 487. CGIS: University Study in South Africa - University of Cape Town**

*(1 - 15). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. (Cape Town, South Africa). F,W. Multiple Grading Patterns.*

Students enroll in classes at the University of Cape Town (UCT). A full range of classes is available. Classes are taught in English.

**STDABRD 488. CGIS: Public Health in Cape Town, South Africa**

*(1 - 10 in the half-term). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

Students examine health care delivery in South Africa through coursework, field visits, observational visits, and service work.

**STDABRD 489. CGIS: University Study in Australia - University of Melbourne**

*(1 - 15). May be repeated for a maximum of 75 credits. May be elected more than once in the same term. (Melbourne, Australia). F,W. Multiple Grading Patterns.*

Students enroll in classes at the University of Melbourne. A full range of classes is available.

**STDABRD 494. CGIS: Language and Culture in Buenos Aires, Argentina**

*Consent of department required. (1 - 15). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

This program is open to students of all language levels interested in studying in Buenos Aires. There is no minimum language requirement for this program, but course options will be dependent on language level placements. Students will enroll in a required 6 credit Spanish language course specifically tailored to their individual level. In addition, students will take IES Abroad area studies courses in English or Spanish. Students may also elect to enroll in a few preselected courses taught in Spanish at two local universities, the Universidad de Ciencias Empresariales y Sociales and the Instituto Universitario Nacional del Arte (specializes in creative and performing arts). Credit-based internships and service learning opportunities are also available.

**STDABRD 496. CGIS: Advanced Spanish Language in Buenos Aires, Argentina**

*Minimum 4 semesters college-level Spanish by program start date, fulfilled by: SPANISH 232, SPANISH 230, RCLANG 294, RCLANG 314, or equivalent. (1 - 15). May be repeated for a maximum of 60 credits. May be elected more than once in the same term. Multiple Grading Patterns.*

Take your Spanish abilities to the next level, through advanced level Spanish courses at the IES Abroad Center in downtown Buenos Aires. Students are required to have five or more semesters of college-level Spanish or the equivalent to study with this program. Specialized workshops focused on academic and creative writing are also available. Students may also select from a wide range and of disciplines and courses in Spanish at one of the following prestigious local universities: Universidad Torcuato di Tella; Universidad de Buenos Aires; Instituto Universitario Nacional de Arte; Universidad de Salvador;

and Universidad Ciencias Empresariales y Sociales. Credit-based internships and service learning opportunities are also available.

## **Social Work (SW)**

### **SW 305. Theories and Practices for Community Action and Social Change**

*Community Action and Social Change Minor declared or interested in declaring. (3). (SS). May not be repeated for credit.*

This foundations course for the Community Action and Social Change Minor is designed to prepare students to be informed and active participants in the process of community building and social change. The course uses a multidisciplinary framework to develop competencies that will help students envision what community action and social change looks like, identify and implement steps towards social change, build on positive sources of power, indigenous knowledge and experiences of individuals, groups, and communities who are engaged in social change efforts. The course material covers theories and practices of community action and social change through an interdisciplinary examination of examples in research and practice. The course focuses on individuals, groups and institutions and how they interact. The course examines empirical quantitative and qualitative studies that test social change methods and provides exposure to and experience with qualitative research methods such as ethnographic observation and interviewing and qualitative data-gathering. Students are engaged in a critical and contrasting assessment of community organizing and other social change methods.

## **Music Theory (THEORY)**

### **THEORY 135. Intro Music Theory**

#### **Music Theory Major**

*THTR MAJORS. (3). May be repeated for credit.*

### **THEORY 137. Introduction to the Theory of Music**

*No previous formal training in music theory only basic understanding of musical notation. (3). (HU). May not be repeated for credit.*

### **THEORY 139. Bmus Aural Sk I**

*129/SURV TEST. (1). May not be repeated for credit.*

### **THEORY 140. Bmus Aural Sk I I**

*THEORY 139. (Prerequisites enforced at registration.) (1). May not be repeated for credit.*

### **THEORY 149. Bmus Wrtg Sk I**

*(2). May be repeated for a maximum of 4 credits.*

### **THEORY 150. Bmus Wrtg Sk I I**

*THEORY 149. (Prerequisites enforced at registration.) (2). May not be repeated for credit.*

### **THEORY 211. Basic Th at Keybd**

*THRY 140,150. (2). May not be repeated for credit.*

### **THEORY 212. Basic Th at Keybd**

*THEORY 211. (Prerequisites enforced at registration.) (2). May not be repeated for credit.*

### **THEORY 236. Intro Music Analysis Music Theatre Major**

*THEORY 135. (Prerequisites enforced at registration.) (3). May be repeated for credit.*

### **THEORY 238. Introduction Music Analysis**

*THEORY 137. (Prerequisites enforced at*

registration.) (3; 2 in the half-term). (HU). May not be repeated for credit.

**THEORY 239. Bmus Aural Sk I I I**  
*THEORY 140. (Prerequisites enforced at registration.) (1). May not be repeated for credit.*

**THEORY 240. Bmus Aural Sk I V**  
*THEORY 239. (Prerequisites enforced at registration.) (1). May not be repeated for credit.*

**THEORY 249. Bmus Wrtg Sk I I I**  
*THEORY 140 & 150. (Prerequisites enforced at registration.) (2). May not be repeated for credit.*

**THEORY 250. Bmus Wrtg Sk I V**  
*THEORY 249. (Prerequisites enforced at registration.) (2). May not be repeated for credit.*

**THEORY 334. Soph Thry-Writn Skl**  
*THRY 332&333. (2). May not be repeated for credit.*

**THEORY 407. Directed Indiv Stdy**  
*Consent of instructor required. Permission of department chairman. (2 - 4). (INDEPENDENT). May be repeated for credit.*

**THEORY 408. Senior Project**  
*Consent of instructor required. SR.MAJ THRY. (2). (INDEPENDENT). May not be repeated for credit.*

**THEORY 430. Advanced Anl Tonal Music**  
*THEORY 240 and 250. (Prerequisites enforced at registration.) (3). May not be repeated for credit.*

**THEORY 433. Analysis of 20th-Century Modernist Music**  
*THEORY 240 and 250. (Prerequisites enforced at registration.) THEORY 259 or JAZZ 221 may substitute for THEORY 250. (3). May be repeated for credit.*

**THEORY 436. Analytical History of Jazz**  
*THEORY 240 and 250. (Prerequisites enforced at registration.) THEORY 259 of*

*JAZZ 221 may substitute for THEORY 250. (3). May not be repeated for credit.*

**THEORY 438. Theory and Analysis of World Musics**  
*THEORY 240 & 250. (Prerequisites enforced at registration.) (3). May be repeated for credit.*

A course concentrating on one or more types of music that have developed outside of European traditions. Topics change with each offering and the course. Activities typically involve transcription, music analysis, and readings in theories of the music under the study.

**THEORY 442. 18th C Counterpoint**  
*THEORY 240 and 250. (Prerequisites enforced at registration.) THEORY 240; 250 or 259. (3). May not be repeated for credit. F.*

**THEORY 443. 18th C Counterpoint**  
*THEORY 442. (Prerequisites enforced at registration.) (3). May not be repeated for credit.*

**THEORY 454. Orchestration I**  
*THEORY 240 and 250. (Prerequisites enforced at registration.) THEORY 259 or JAZZ 221 may substitute for THEORY 250. (3). May not be repeated for credit.*

**THEORY 455. Orchestration II**  
*THEORY 454. (Prerequisites enforced at registration.) (3). May not be repeated for credit.*

**THEORY 460. Special Courses**  
*THEORY 240 and 250. Consent of instructor required. (Prerequisites enforced at registration.) (3). May be repeated for credit.*

**THEORY 531. Schenkerian Theory and Analysis I**  
*Consent of instructor required. Music Theory 430 or 461; permission of instructor. (3; 2 in the half-term). May not be repeated for credit.*

**THEORY 532. Schenkerian Theory and Analysis II**

*THEORY 531 with permission of instructor. (3). May not be repeated for credit.*

**THEORY 534. Twentieth Century Music: Theory and Analysis I**

*Consent of instructor required. THEORY 433 or 533; or permission of instructor. (3). May not be repeated for credit.*

**THEORY 537. Proseminar in the Analysis of Music**

*THEORY 430. (Prerequisites enforced at registration.) THEORY 430 or 461; or permission of instructor. (3; 2 in the half-term). May not be repeated for credit.*

**THEORY 552. Project in Tonal Composition**

*Consent of instructor required. Permission of instructor. (2). May not be repeated for credit.*

**THEORY 560. Special Studies**

*THEORY 240 and 250. Consent of instructor required. (Prerequisites enforced at registration.) (2 - 3). May be repeated for credit.*

**THEORY 570. Directed Individual Study**

*Consent of instructor required. Must secure permission from chairman, Dept of Music Theory, during term prior to that of enrollment. (1 - 4). (INDEPENDENT). May be repeated for credit.*

**THEORY 590. Teaching Tonal Theory**

*Consent of instructor required. THEORY 430 or 461; with permission of instructor. (3). May not be repeated for credit.*

**THEORY 721. 20c Thry Tonal Mus**

*Music Theory 511 or permission of instructor. (3). May not be repeated for credit.*

**THEORY 805. Seminar in Theory**

*Permission of instructor. (3; 2 in the half-term). May not be repeated for credit.*

**THEORY 807. Research Project**

*Consent of instructor required. Permission*

*of department chairman. (2 - 4).*

*(INDEPENDENT). May not be repeated for credit.*

**Theatre and Drama  
(THTREMUS)**

**THTREMUS 101. Introduction to Acting I**

*Consent of instructor required. Open to non-concentrators. Consent of instructor required. (3). (CE). May not be repeated for credit.*

**THTREMUS 102. Intro to Acting II**

*Consent of instructor required. Consent of instructor. (3). (CE). May not be repeated for credit.*

**THTREMUS 110. Introduction to Acting for the Camera**

*THTREMUS 101 and/or permission of instructor. (3). (CE). May not be repeated for credit.*

To introduce students to the basic techniques of acting for the camera through the use of video. Sound foundation acting principles would be presented with an emphasis on exercise, scene and monologue work, and closing with scene orchestration via a basic two-camera with switcher recording, utilizing a mix of selected dramatic material and/or existing film scripts.

**THTREMUS 211 / ENGLISH 245 /  
RCHUMS 280. Introduction to Drama and Theatre**

*(3; 2 in the half-term). (HU). May not be repeated for credit. No credit granted to those who have completed or are enrolled in RCHUMS 281.*

This course aims to introduce students to as many basic aspects of the theatre, practical and theoretical, as time allows. It also presents them with a number of key plays from various periods and examines them from the point of view of their dramatic qualities, their theatrical strengths, their social and political contexts, their performance history, and their relevance today.

**THREMUS 222. Introduction to Global Theatre and Ethnic Studies**

(3). (HU). May not be repeated for credit.

Survey of performance histories of diverse cultural communities of the United States. Class studies transnational origins and cultural contexts for multi-cultural theater: African American, Latino/Latin American, Asian American, Middle Eastern and others.

**THREMUS 227 / ENGLISH 227. Introductory Playwriting**

(3; 2 in the half-term). (CE). May not be repeated for credit.

A creative writing course in the rudiments of playwriting, with special attention to the one-act play. Students are accepted on the basis of a portfolio.

**THREMUS 233. Modern Rituals/Traditional Practices**

Consent of instructor required. (3). (HU). May be repeated for a maximum of 6 credits.

Trains students in performance techniques grounded in various cultural traditions: Choral singing, masking, vocal call and response, dance, martial arts, and mimicry. Embodied studio practice emphasizes the aesthetics of diverse cultural communities.

**THREMUS 240. Introduction to Design**  
**THREMUS 250. (3). (CE). May not be repeated for credit.**

This course introduces students to the process of designing scenery, costumes and lighting for the stage. It deals both with finding and developing ideas and with finding ways to express them. It provides students with a process with which to approach to play and begin to design, as well as starting to develop a theatrical vocabulary which will serve as a foundation for future design work.

**THREMUS 245. Introduction to Stage Management**

Permission of instructor. (2 - 3). (CE). May not be repeated for credit.

**THREMUS 250. Introduction to Technical Theatre Practices**

(3; 2 in the half-term). May not be repeated for credit.

**THREMUS 251. Practicum I**

(1). May not be repeated for credit.

**THREMUS 252. Prod Practicum II**

THREMUS 251 and permission of instructor. (1). May not be repeated for credit.

**THREMUS 256. Lighting Design I**

THREMUS 250. (3). May not be repeated for credit.

This course is an introduction to the components of stage lighting, including an in-depth exploration of the functions and controllable properties of stage lighting. Some of the topics include color theory, optics, electricity, distribution, and equipment. Industry standards regarding control systems, organizational standards, and collaborative techniques will also be covered.

**THREMUS 260. Scene Design I**

THREMUS 250. (3). May not be repeated for credit.



This is a beginning course in scenic design with an emphasis on text analysis.

Expression of the production concept, style and period is studied by use of the elements of design. This includes analyzing and discussing plays as the inspiration for a design, some history of design, considering the three-dimensional world of a stage, and how to make basic drawings and models for a stage design.

**THREMUS 261. Practicum III**

*Permission of instructor. (1). May not be repeated for credit.*

**THREMUS 262. Practicum IV**

*Permission of instructor. (1). May not be repeated for credit.*

**THREMUS 270. Costume Design I**

*THREMUS 240 and 277/Permission of instructor. (3). May not be repeated for credit.*

This course is designed to familiarize students with the art and process of costume design. There is strong emphasis on text and character analysis as well as methods of research. An introduction to basic drawing skills is combined with other visual options in presenting design ideas and exploring the collaborative process.

**THREMUS 277. History of Dress**

*Permission of instructor. (3). May not be repeated for credit.*

A slide survey course, which traces the history of dress from ancient times through the present day, with an emphasis in the societies that produced particular manners and styles of dress and their relationship to one another.

**THREMUS 321 / ENGLISH 443.**

**History of Theatre I**

*(3). May not be repeated for credit.*

**THREMUS 322 / ENGLISH 444.**

**History of Theatre II**

*(3). May not be repeated for credit.*

**THREMUS 323 / ENGLISH 349.**

**American Theatre and Drama**

*(3). (HU). May not be repeated for credit.*

**THREMUS 324. Global Community Practicum**

*THREMUS 222. (Prerequisites enforced at registration.) Permission of instructor.*

*(3). May be repeated for a maximum of 6 credits.*

This course engages students in research and development of performance projects at a local, community organization or at an international site. The class participants in field work experiences and each individual submits a final project report or thesis at the end of their fieldwork. The Capstone course is collaborative and interdisciplinary and multiple faculty members can supervise and approves student work.

**THREMUS 325. Contemporary American Theatre and Drama**

*(3). May not be repeated for credit.*

This course examines works and developments in American theatre and drama from the past twenty years, especially the diverse and multicultural drama of this period. Looks at elements of class and ethnicity, urbanization, family and community, war and technology, commercialism and consumerism, gender, race, and sexuality.

**THREMUS 326. Intercultural Drama**

*Consent of instructor required. (3 in the half-term). May not be repeated for credit.*

This course examines how international dramatic literature in translation comments on global lives and lifestyles. Class reads, analyze and discusses intercultural plays in cultural context. Written assignments and

in-class presentations investigate the political, social, and cultural impact meaning of intercultural dramatic works.

**THREMUS 327 / ENGLISH 327.**

**Intermediate Playwriting**

*ENGLISH 227. (3; 2 in the half-term). May not be repeated for credit.*

Practice in writing short plays.  
Conceptualizing a full-length play.

**THREMUS 332. Performing Archives and Oral Histories**

*THREMUS 233 or AAS 342.*

*(Prerequisites enforced at registration.)  
Permission of instructor. (3 in the half-term). May not be repeated for credit.*

In this course students use ethnographic or archival sources to create new performance works. Building on histories introduced in 222, they create individual or small group projects. Interpretative text and character work helps to improve individual student performance skills.

**THREMUS 334 / RCHUMS 332. The Atonement Project**

*(3). May not be repeated for credit.*

This course will teach students about restorative justice, reconciliation, and atonement. We will explore questions of why and how artistic activity can begin and/or support processes of reconciliation for people who have committed crimes and for crime victims. Students in this class will facilitate weekly arts workshops in adult prisons and community venues where former prisoners, crime victims, and the families of those groups can gather together. Focusing on the themes of acknowledgement, apology, and atonement, the workshops will produce original performances, creative writing, and visual art presented at the end of the semester by both the student facilitators and the members of the workshop. Students and

workshop participants who give their consent can contribute their work to the Atonement Project website - an online forum designed by the MIT Media Lab - as a means of starting conversations about atonement with web users. Ultimately this course seeks to identify the best strategies for using the arts to address crime and those most affected by it.

**THREMUS 335 / RCHUMS 335.**

**Theatre and Incarceration**

*May not be repeated for credit.*

Artistic practice in prisons has occurred since the inception of prisons themselves, though popular thought tends not to connect the idea of the arts with that criminal justice systems. This course surveys the history of performance in prisons through the examination of plays written by and about prisoners as well as narratives which chronicle the process of creating theatre in prisons. The course also interrogates various strategies for creating performances in prisons, questioning the utility and goals of each process of creation and seeking to identify those which are most sustainable and which best serve participants in the process. Students will use some of these strategies in practice as they facilitate their workshops in prisons and juvenile detention centers.

**THREMUS 340. Devising Theatre**

*Permission of instructor. (3 in the half-term). May be repeated for a maximum of 6 credits.*

This course is a laboratory course for play development. The class creates collaborative theatrical works from text, visual art, movement, stories and/or contemporary events. The class develops performances through improvisation, then organizes and evaluates their work using principles of dramatic structure, and play analysis. Dramaturgy and directing skills

are introduced through studio practice and critique.

**THREMUS 345. Stage Management-Plays**

*Consent of instructor required.*

*THREMUS 351 & permission of instructor. (2 - 6). May be repeated for a maximum of 6 credits.*

This course covers methods of stage management including rehearsal coordination, prompt book preparation, record keeping, and director, cast and crew relationships during the rehearsal period.

**THREMUS 350. Scenic Constructn I**

*THREMUS 250&362/P.I. (3). May not be repeated for credit.*

**THREMUS 351. Practicum V**

*Permission of instructor. (1 - 3). May not be repeated for credit.*

**THREMUS 352. Practicum VI**

*Permission of instructor. (1 - 3). May not be repeated for credit.*

**THREMUS 353. Sound for Theatre**

*Consent of instructor required. Consent of instructor required. THREMUS 250&P.I. (2). May be elected five times for credit. W.*

Students work as a member of a theatre production team with emphasis on sound effects and sound design for theatre.

**THREMUS 356. Lighting Design II**

*Consent of instructor required. Consent of instructor required. THREMUS 256/P.I. (3). May not be repeated for credit.*

This course features an in-depth exploration into the development and execution of lighting design, including an extensive exploration into the lighting potentials of a wide variety of facilities, production styles, and lighting equipment. It works on the development of communication skills with directors and shops via value sketches, plots, and paperwork.

**THREMUS 360. Scene Design II**

*Consent of instructor required. Consent of instructor required. THREMUS 260/P.I. (3). May not be repeated for credit.*

This course is intended for students who would like to gain more experience with scenic design and for those whose main area of interest is scenic design. Some advanced model-making and drawing skills will be dealt with, but more time will be spent on the process of conceptualizing and articulating design ideas. Students will also explore the unique characteristics of proscenium, arena, and thrust staging.

**THREMUS 385 / ARTSADMN 385.**

**Performing Arts Management**

*Consent of instructor required. (2). May not be repeated for credit.*

An introduction and overview of management issues concerning the non-profit cultural sector.

**THREMUS 386. Prac Perfor Art Mgt**

*Consent of instructor required. PER. INSTR. (3). May not be repeated for credit.*

**THREMUS 399. Topics in Drama**

*(1 - 4). May be repeated for credit.*

This course covers specialized topics in theatre and drama, which vary from semester to semester. The purpose is to explore in depth aspects of the theatre that cannot be covered in existing courses, such as a play or special subject.

**THREMUS 400. Directed Reading**

*Consent of instructor required.*

*Undergraduate standing; and consent of instructor. (1 - 3). (INDEPENDENT). May be repeated for a maximum of 6 credits.*

**THREMUS 401. Independent Study**

*Consent of instructor required. PER.*

*INSTR. (1 - 3). (INDEPENDENT). May be repeated for a maximum of 6 credits.*

**THREMUS 403. Des&Prod Seminar**

*Permission of instructor / non-majors. (1). May not be repeated for credit.*

**THREMUS 404. Des&Prod Seminar**

*Permission of instructor / non-majors. (1). May not be repeated for credit.*

**THREMUS 427 / ENGLISH 427.****Advanced Playwriting**

*Consent of instructor required. ENGLISH 327. (3; 2 in the half-term). May be repeated for a maximum of 6 credits.*

Students write a full-length play. Skills are developed through technique assignments, rewrites, class readings and discussions, viewing of local plays.

**THREMUS 429. Playwr Production**

*Consent of instructor required.*

*THREMUS 327/P.I. (3). May not be repeated for credit. W.*

**THREMUS 440. Special Topics in African American Theatre and Drama**

*THREMUS 222. (3 in the half-term). May not be repeated for credit.*

This is a special topics course, which address various aspects of African American Theatre and Drama, such as: Comparing Black Aesthetics, African American Dramatic Literature, and Traditions and Modernity in African Drama.

**THREMUS 445. Stage Management: Music/Opera**

*Consent of instructor required.*

*THREMUS 351 and permission of instructor. (2 - 6). May be repeated for a maximum of 6 credits.*

This course covers methods of stage management including rehearsal coordination, prompt book or musical score preparation, record keeping, and director, conductor / orchestra, cast and crew relationships during the rehearsal period.

**THREMUS 452. Costume Construction**

*Consent of instructor required. Permission of instructor. (3). May not be repeated for credit. W.*

**THREMUS 462. Drafting**

*Consent of instructor required.*

*THREMUS 250. (3). May not be repeated for credit. No credit granted to those who have completed or are enrolled in THREMUS 362. Undergraduates must elect THREMUS 362.*

**THREMUS 464. Sc Paint for Theatr**

*THREMUS 250. (3). May not be repeated for credit.*

**THREMUS 466. History of Decor**

*Permission of instructor. (3). May not be repeated for credit. W.*

This course is a chronological study of the decorative styles of interiors and exteriors in Western architecture and their applications to the stage.

**THREMUS 468. History of Theatre Architecture**

*Permission of instructor. (3). May not be repeated for credit.*

**THREMUS 471. Women's Pattern Drafting**

*Consent of instructor required. Permission of instructor. (3). May not be repeated for credit.*

This experiential craft course covers the techniques for drafting women's slopers based on standard measurements. Using basic bodice, sleeve, and skirt slopers students develop patterns for contemporary and historical garments. Students investigate dart and seam manipulation to produce patterns, and then make and fit muslin mockups. Final projects could include developing patterns from the garments in the Zelma Weisfeld Historic Collection or patterning garments for a Theatre Departmental production.

**THREMUS 476. Costume Crafts**

*Consent of instructor required. Permission of instructor. (3). May not be repeated for credit.*

An introduction to the materials and techniques used in the design and construction of craft work associated with theatrical costumes. Specific topics explored include millinery, mask making and dyeing and painting of fabric. Class consists of lectures and demonstrations providing a survey of possible techniques and materials as well as specific projects designed to develop practical skills.

**Technology & Operations (TO)****TO 518 / IOE 510 / MATH 561. Linear Programming I**

*MATH 217, 417, or 419. (3). (BS). May not be repeated for credit.*

Formulation of problems from the private and public sectors using the mathematical model of linear programming. Development of the simplex algorithm; duality theory and economic interpretations. Postoptimality (sensitivity) analysis application and interpretations. Introduction to transportation and assignment problems; special purpose algorithms and advanced computational techniques. Students have opportunities to formulate and solve models developed from more complex case studies and to use various computer programs.

**Turkish Studies (TURKISH)****TURKISH 101. Elementary Turkish I**

*(4). May not be repeated for credit. No credit granted to those who have completed or are enrolled in TURKISH 103 (AAPTIS 155).*

An introduction to Turkish language, this course aims to equip students with a basic understanding of Turkish grammar, pronunciation, vocabulary, and culture.

**TURKISH 102. Elementary Turkish II**

*TURKISH 101 (AAPTIS 151) or equivalent. (4). May not be repeated for credit. No credit granted to those who have completed or are enrolled in TURKISH 103 (AAPTIS 155).*

**TURKISH 201. Intermediate Turkish I**

*TURKISH 102 (AAPTIS 152) or TURKISH 103 (AAPTIS 155). (4). May not be repeated for credit. No credit granted to those who have completed or are enrolled in TURKISH 203 (AAPTIS 255).*

Part of the department sequence in modern Turkish, this course will be an immediate continuation of Elementary Turkish II. The aim is to further improve proficiency skills in listening, speaking, reading and writing.

**TURKISH 202. Intermediate Turkish II**

*TURKISH 201 (AAPTIS 251). (4). (Lang Req). May not be repeated for credit. No credit granted to those who have completed or are enrolled in TURKISH 203 (AAPTIS 255).*

**TURKISH 410. Topics in Turkish Language**

*Advanced Turkish proficiency or permission of instructor. (3). May be elected three times for credit.*

This course is aimed at undergraduate and graduate students with advanced Turkish language proficiency. Topics will vary, focusing on aspects of culture, linguistics, literature, music, religion, film, history, etc.

All material will be in Turkish, and the class will be taught in Turkish.

**TURKISH 499. Independent Study in Turkish**

*Consent of department required. (1 - 4). (INDEPENDENT). May be elected three times for credit. May be elected more than once in the same term.*

An independent study course in the area of Turkish language. The intended language of instruction is Turkish. Approval from the department is required.

**TURKISH 504. Modern Turkish Readings and Communication**

*TURKISH 202 (AAPTIS 252) or TURKISH 203 (AAPTIS 255). (3). May be elected three times for credit.*

Intensive linguistic practice in modern Turkish with thorough literary, historical, and philological analysis.

## University Courses (UC)

**UC 101 / NAVSCI 102. Seapower and Maritime Affairs**

*(2). May not be repeated for credit.*

This course focuses on the historical role of sea power, emphasizing the U.S. Navy. Topics include: development of naval power and applications as an instrument of foreign policy; historical relationship of navies with their respective domestic, political, and economic environments; and the rise of the U.S. as a maritime power.

**UC 109 / SI 106. Programs, Information and People**

*(4). May not be repeated for credit.*

Introduction to programming with a focus on applications in informatics. Covers the

fundamental elements of a modern programming language and how to access data on the internet. Explores how humans and technology complement one another, including techniques used to coordinate groups of people working together on software development.

**UC 110 / SI 110. Introduction to Information Studies**

*(4). (SS). May not be repeated for credit.*

This course will provide the foundational knowledge necessary to begin to address the key issues associated with the Information Revolution. Issues will range from the theoretical (what is information and how do humans construct it?), to the cultural (is life on the screen a qualitatively different phenomenon from experiences with earlier distance-shrinking and knowledge-building technologies such as telephones?), to the practical (what are the basic architecture of computing networks?). Successful completion of this "gateway" course will give you the conceptual tools for an initial understanding of the politics, economics, and culture of the Information Age, providing a foundation for later study in Information or any number of other disciplines. You will be more thoughtful about thorny information issues, and more "information literate" than you were before.

**UC 150. First-Year Humanities Seminar**

*Enrollment restricted to first-year students, including those with sophomore standing. (3). (HU). May not be repeated for credit.*

Designed to introduce entering students to the intellectual life of the university in a small course taught by an experienced member of the faculty. Topics vary according to the interests of the instructors. Whatever their subject matter, first-year seminars emphasize critical thinking through class discussion and regular practice in writing. UC 150, UC 151, UC

152, and UC 153 differ only in their area distribution designation.

**UC 151. First-Year Social Science Seminar**

*Enrollment restricted to first-year students, including those with sophomore standing. (3). (SS). May not be repeated for credit.*

Designed to introduce entering students to the intellectual life of the university in a small course taught by an experienced member of the faculty. Topics vary according to the interests of the instructors. Whatever their subject matter, first-year seminars emphasize critical thinking through class discussion and regular practice in writing.

**UC 152. First-Year Natural Science Seminar**

*Enrollment restricted to first-year students, including those with sophomore standing. (3). (NS). (BS). May not be repeated for credit.*

Designed to introduce entering students to the intellectual life of the university in a small course taught by an experienced member of the faculty. Topics vary according to the interests of the instructors. Whatever their subject matter, first-year seminars emphasize critical thinking through class discussion and regular practice in writing.

**UC 154. First-Year Interdisciplinary Seminar**

*Enrollment restricted to first-year students, including those with sophomore standing. (3). (ID). May not be repeated for credit.*

Designed to introduce entering students to the intellectual life of the university in a small course taught by an experienced member of the faculty. Topics vary according to the interests of the instructors. Whatever their subject matter, first-year seminars emphasize critical thinking

through class discussion and regular practice in writing.

**UC 170. UC Special Topics**

*(1 - 3). May be elected three times for credit. May be elected more than once in the same term. Offered mandatory credit/no credit.*

This course is intended to house interdisciplinary courses that do not fit into any specific department or courses taught by non-LSA faculty from various units across the university.

**UC 201 / AERO 201. Team and Leadership Fundamentals I**

*AERO 102/Permission of Instructor. (1). May not be repeated for credit. (non-LSA credit).*

Topics allow students to improve their leadership personally and within teams, instill a leadership mindset and transition from cadet to officer candidate. The course prepares students for field-training, where they will put concepts into practice

**UC 202 / AERO 202. Team and Leadership Fundamentals II**

*AERO 201/Permission of Instructor. (1). May not be repeated for credit. (non-LSA credit).*

Topics allow students to improve their leadership personally and within teams, instill a leadership mindset and transition from cadet to officer candidate. The course prepares students for field-training, where they will put concepts into practice.

**UC 203 / MILSCI 201. Innovative Tactical Leadership**

*(1). May not be repeated for credit. Counts as credit toward LSA degree.*

This course considers military government leadership with a focus on leadership development and interpersonal and group

dynamics. It explores the dimensions of creative and innovative tactical leadership strategies and styles through lecture, historical case studies, and interactive student exercises.

**UC 204 / MILSCI 202. Leadership in Changing Environments**

*Permission of professor. (1). May not be repeated for credit. Counts as credit toward LSA degree.*

This course examines the challenges of leading in complex contemporary operational environments. Dimensions of the cross-cultural challenges of leadership in a constantly changing world are highlighted and applied to practical Army leadership tasks and situations.

**UC 205 / NAVSCI 203. Leadership and Management**

*NAVSCI 101,102 OR PI. (3). May not be repeated for credit.*

This course is specifically designed to teach introductory-level leadership and management concepts and applications to sophomore-level university students. The course starts with a basic overview of leadership and management and then moves into basic skills including professional reading, writing, briefings, problem solving, team building, situational leadership, morality, ethics, and communications. After the basic skills are covered, the curriculum explores leader-subordinate and peer relationships, while taking an in-depth look at professional and unprofessional relationships. The course emphasizes ethics in leadership and management and explores subjects in power and influence, counseling, supervision, accountability, responsibility, and core values.

**UC 227. Practicum**

*(1 - 3). (EXPERIENTIAL). May be elected three times for credit. Offered mandatory credit/no credit.*

This practicum focuses on active and engaged learning associated with a student's course of study. It involves supervised applications of previously studied principles and methods in challenging field settings.

**UC 250. Sophomore Humanities Seminar**  
*Completion of FYWR. (3). (HU). May not be repeated for credit.*

Taught by a regular faculty member. Course content focuses on central topics and theories in the disciplines and introduces students to the teaching and practicing of critical reading, in addition to and in correlation with the heavy emphasis on writing. The course also includes practice in the skills of verbal presentation and discussion; critical thinking is emphasized and practiced.

**UC 252. Sophomore Natural Science Seminar**

*Completion of FYWR. (3). (NS). (BS). May not be repeated for credit.*

Taught by a regular faculty member. Course content focuses on central topics and theories in the disciplines and introduces students to the teaching and practicing of critical reading, in addition to and in correlation with the heavy emphasis on writing. The course also includes practice in the skills of verbal presentation and discussion; critical thinking is emphasized and practiced.

**UC 254. Sophomore Interdisciplinary Seminar**

*Completion of FYWR. (3). (ID). May be elected four times for credit. May be elected more than once in the same term.*

This course focuses on the questions and methods characteristic of the major disciplines - humanities, natural sciences, social sciences. It uses an interdisciplinary approach to address complex topics using



tools such as: critical reading of multiple kinds of texts; an emphasis on written and oral presentations; and a robust exchange of reflections and ideas, both in class and on-line.

**UC 270. University Courses Special Topics**

*(1 - 3). May be elected four times for credit. May be elected more than once in the same term.*

This course is intended to house interdisciplinary courses that do not fit into any specific department or courses taught by non-LSA faculty from various units across the university.

**UC 275. Global Intercultural Experience for Undergraduates**

*Consent of instructor required. (1 - 2). (EXPERIENTIAL). May be elected twice for credit. Continuing Course. Y grade can be reported at end of the first-term to indicate work in progress. At the end of the second term, the final grade is posted for both term's elections. Offered mandatory credit/no credit.*

This course is an interdisciplinary experiential introduction to intercultural learning that prepares diverse undergraduate students from various colleges for field experience interactions, and then helps students bring these experiences back to campus in socially and academically productive ways. It is a series of concentrated seminars of orientation, debriefing, and symposium.

**UC 280. Undergraduate Research**

*Consent of instructor required. First or second year standing. (1 - 4). (EXPERIENTIAL). May be repeated for a maximum of 8 credits. Credit is granted for a combined total of 8 credits in any UROP research courses. Continuing Course. Y grade can be reported at end of the first-term to indicate work in progress. At the*

*end of the second term, the final grade is posted for both term's elections.*

This course offers research experience to first- and second-year students in an area of mutual interest to the student and to faculty member from any unit in the University. The course is intended for use when departmental offerings do not accommodate a student's needs.

**UC 299. Directed Study**

*Permission of instructor. (1 - 3). (INDEPENDENT). May be repeated for a maximum of 6 credits.*

A program of supervised study agreed upon by a student and a member of the faculty.

**UC 300. College Practicum**

*Consent of instructor required. (1 - 4). (EXPERIENTIAL). May not be repeated for credit. Offered mandatory credit/no credit.*

For an activity or internship clearly linked some aspect of the student's course of study but not covered by a departmental experiential course number. The project must be approved in advance and recommended by a faculty sponsor who agrees to evaluate the experience and the work submitted by the student.

**UC 301 / MILSCI 301. Leading Small Organizations I**

*Permission of Army OEP chair. (2). May not be repeated for credit. Counts for credit toward LSA degree.*

This course is a continuation to the study of military organizational leadership focusing on leadership development and interpersonal and group dynamics. Lecture-discussion course (with lab) provides insights into methods of visualizing, planning and leading organizations to achieve set goals.

**UC 302 / MILSCI 302. Leading Small Organizations II**

*MILSCI 301/UC 301. (Prerequisites enforced at registration.) Permission of program chairman. (2). May not be repeated for credit. Counts as LSA credit toward LSA degree.*

This course is a continuation of the study of organizational leadership focusing on organizational behavior as well as interpersonal and small group relationships. This lecture-discussion course (with lab) provides the student with an insight into formal methods of visualizing, planning, and leading organizations to achieve set goals.

**UC 307 / AERO 310. Leading People and Effective Communication I**

*(3). May not be repeated for credit. (non-LSA credit).*

The course provides juniors and seniors with the opportunity to apply leadership and management techniques in a supervised environment. The course enhances leadership and communication skills.

**UC 310 / NAVSCI 310. Fundamentals of Warfare**

*Consent of instructor required. (3). May not be repeated for credit.*

Analysis and application of fundamental maneuver warfare concepts that are critical to the success of the contemporary war-fighter. Students will study fire and maneuver and associated concepts at the individual and small unit level.

**UC 327. Advanced Practicum**

*(1 - 3). (EXPERIENTIAL). May be elected three times for credit. Offered mandatory credit/no credit.*

This advanced practicum focuses on active and engaged learning associated with a student's course of study and involves

supervised applications of previously studied principles and methods in challenging field settings.

**UC 370. UC Special Topics**

*(1 - 3). May be elected twice for credit.*

This course is intended to house interdisciplinary courses that do not fit into any specific department or courses taught by non-LSA faculty from various units across the university.

**UC 380. Let's Talk Undergraduate Research: Communicating Scholarly Inquiry Within Academia and Beyond**

*Consent of department required. UC 280 or a significant research experience. (1 - 4). May not be repeated for credit.*

Students build upon the knowledge gained in their first undergraduate research experience to explore the connections between research, liberal arts education, and communicating their skills for future professional goals. Students are expected to explore various written and oral possibilities for communicating their research process.

**UC 390. Disciplinary Study in a Second Language**

*Fourth-term language proficiency, and permission of instructor. (1). May be elected six times for credit. May be elected more than once in the same term.*

**UC 399. Directed Study**

*Permission of instructor. (1 - 3). (INDEPENDENT). May be repeated for a maximum of 6 credits.*

A program of supervised study agreed upon by a student and a member of the faculty.

**UC 401 / MILSCI 401. Leadership and Management**

*MILSCI 302 or UC 302. (Prerequisites enforced at registration.) Permission of*

*chair of Army OEP. (2). May not be repeated for credit.*

This course studies military leadership, with a focus on development and interpersonal and group dynamics. Lecture-discussion course (with lab) provides insights into methods of visualizing, planning, and leading to achieve set goals.

**UC 402 / MILSCI 402. Military Professionalism and Professional Ethics**  
*MILSCI 401/UC 401. (Prerequisites enforced at registration.) (2). May not be repeated for credit.*

This is an interdisciplinary course that integrates history, political science, ethics and morality, law, leadership and management. It prepares students to ethically lead and manage complex organizations by focusing on the moral, ethical, legal, and regulatory aspects of being a commissioned officer in the U.S. Army.

**UC 403 / NAVSCI 402. Leadership and Ethics**  
*NAVSCI 203. Non-ROTC students need permission of instructor. (2). May not be repeated for credit.*

This course is designed to prepare future leaders to make sound, timely, and reliable decisions in any environment, including combat, by use of dialectic reasoning and through exploration and application of a diverse range of leadership and ethical tools and frameworks. Students will study western ethical frameworks and real-life case studies as they explore how best to navigate ethical dilemmas. The course's aim is for students to use dialectic reasoning and effective written and aural communications to convincingly ascertain and articulate the truest path forward for difficult challenges. Students will work to determine what relationship exists between successful

leadership and ethics (and leader's adherence to high standards of character and integrity) as they develop their own leadership philosophy. NS 402 is the capstone course for the NROTC academic curriculum but is open to all students.

**UC 410 / NAVSCI 410. Evolution of Warfare**

*Consent of instructor required. Completion of Naval Science 310 The Fundamentals of Maneuver Warfare. (3). May not be repeated for credit.*

Introduction to development of military thought, theory, and technology over time. Utilizes historical case studies to discern patterns and principles for professional understanding of war-fighting doctrine. Educates student in characteristics, requirements, and problems of modern and amphibious warfare. Uses historical lessons to make practical judgments about present and future. Challenging reading load; writing regularly and extensively to demonstrate analysis, synthesis, and original thought.

**UC 415. Methods in Research for the Natural Sciences**

*Consent of department required. (1). (BS). May be elected twice for credit. May be elected more than once in the same term. Offered mandatory credit/no credit.*

This course covers the approaches to conducting research in the natural sciences. It includes the tools and methods of research, the processes for performing research, and the mechanisms for communicating research results. The responsible conduct of research is discussed.

**UC 416. Methods in Research for the Social Sciences or Humanities**

*Consent of department required. (1). May be elected twice for credit. May be elected more than once in the same term. Offered*

*mandatory credit/no credit. Rackham credit requires additional work.*

This course covers the approaches to conducting research in the social sciences or Humanities. It includes the tools and methods of research, the processes for performing research, and the mechanisms for communicating research results. The responsible conduct of research is discussed.

**UC 427. Capstone Practicum**

*(1 - 3). (EXPERIENTIAL). May be elected three times for credit. May be elected more than once in the same term. Offered mandatory credit/no credit.*

This capstone practicum focuses on active and engaged learning associated with a student's course of study and involves supervised applications of previously studied principles and methods in challenging field settings.

**UC 455. IMP Senior Seminar**

*Consent of department required. (3). May not be repeated for credit.*

This course is designed for seniors in the Individual Major Program (IMP). Its main goal is to address what it means to study across disciplines and how to effectively integrate knowledge from various disciplines represented in each student's individual IMP. What are the interdisciplinary research methods that allow synthesizing the ideas, theories, and concepts from multiple disciplines?

**UC 470. UC Special Topics**

*(1 - 3). May be elected twice for credit. Rackham credit requires additional work.*

This course is intended to house interdisciplinary courses that do not fit into any specific department or courses taught by non-LSA faculty from various units across the university.

**UC 499. Directed Study**

*Permission of instructor. (1 - 3). (INDEPENDENT). May be repeated for a maximum of 6 credits.*

A program of supervised study agreed upon by a student and a member of the faculty.

**UC 500 / BIOMEDE 500. Biomedical Engineering Seminar**

*(1). (BS). May not be repeated for credit. This course has a grading basis of "S" or "U".*

This seminar will feature various bioengineering-related speakers.

## **Ukrainian (UKR)**

**UKR 151. First-Year Ukrainian**

*(4). May not be repeated for credit. May not be repeated for credit. No credit granted to those who have completed or are enrolled in UKR 103.*

Fundamentals of Ukrainian grammar, reading, writing, and oral drills.

**UKR 152. First-Year Ukrainian**

*UKR 151. (4). May not be repeated for credit. May not be repeated for credit. No credit granted to those who have completed or are enrolled in UKR 103.*

Fundamentals of Ukrainian grammar, reading, writing, and oral drills.

**UKR 251. Second-Year Ukrainian**

*UKR 152 or 103. (Prerequisites enforced at registration.) (4). May not be repeated for credit. May not be repeated for credit. No credit granted to those who have completed or are enrolled in UKR 203.*

Continuation of fundamentals, Ukrainian grammar, extensive reading, writing, and oral drills.

**UKR 252. Second-Year Ukrainian**

*UKR 251. (Prerequisites enforced at registration.) (4). (Lang Req). May not be repeated for credit. May not be repeated for credit. No credit granted to those who have completed or are enrolled in UKR 203.*

Continuation of fundamentals, Ukrainian grammar, extensive reading, writing, and oral drills.

**UKR 320. An Introduction to Ukrainian Poetry**

*Basic Ukrainian reading knowledge. (3). (HU). May not be repeated for credit. May not be repeated for credit.*

Course covers the history of Ukrainian poetry in the first half of the 20th century, ranging from neoclassicism to panfuturism, within the context of the development of Ukrainian literature and national identity, with particular emphasis on 20th century high modernism. Poetry will be read in the original Ukrainian. The basic principles of Ukrainian versification and its evolution will be applied in explicating and translating the poetry into English. The course will thus further students' knowledge of the language itself as well as of Ukrainian culture. Poets to be read include Shevchenko ("To the Living, Dead, and Unborn Compatriots of Mine, My Friendly Epistle"), Antonych, Bazhan, Drai-Khmara, Fylypovych, Pluzhnyk, Ryl's'kyi, Semenko, Tychnya, and Zerov.

**UKR 351. 3rd Year Ukrainian I**

*UKR 252 with a minimum grade of C. (Prerequisites enforced at registration.) (3). May not be repeated for credit. May not be repeated for credit.*

This course is part one of a two-semester series intended for students who wish to further develop their proficiency in the Ukrainian language through conversation, writing, and reading. Topics for discussion

deal with recent political, social, economic, and cultural issues facing Ukraine.

**UKR 352. 3rd Year Ukrainian II**

*UKR 351 with a minimum grade of C. (Prerequisites enforced at registration.) (3). May not be repeated for credit. May not be repeated for credit.*

This course is part two of a two-semester sequence intended for students who wish to further develop their proficiency in the Ukrainian language through conversation, writing, and reading. Topics for discussion deal with recent political, social, economic, and cultural issues facing Ukraine.

**UKR 421. Directed Reading in Ukrainian Literature**

*Consent of instructor required. Open to non-concentrators. A knowledge of Ukrainian is not required. (1 - 4). (INDEPENDENT). May be repeated for a maximum of 8 credits.*

Readings of works by major Ukrainian authors. Program can deal with either the old or the modern period and includes weekly one-hour discussion meetings and several short papers. Reading can be done in Ukrainian or English.

**UKR 450. Internship in Ukraine**

*Consent of instructor required. UKR 152. (1 in the half-term). (EXPERIENTIAL). May be elected twice for credit. Offered mandatory credit/no credit. Rackham credit requires additional work.*

Students will participate in internships involving the extensive use of Ukrainian language. Students will take the initiative to locate and plan the internships under the sponsorship of a faculty member. Some of the internships may be arranged by nonprofit organizations.

## **Urban and Regional Planning (URP)**

### **URP 357 / ARCH 357. Architecture, Sustainability and the City: Ideas, Forces and People Shaping the Built Environment**

*(HU). May not be repeated for credit.*

An introduction to the design of the built environment, society's largest investment and biggest consumer of energy, the course's focus will range from the room to the building to the city to the metropolis, including spaces and places that are consciously planned and intentionally designed, as well as ones that are vernacular and organic. In addition to the fundamentals, history, theory and practice of design and urban planning, case studies of buildings and cities of different periods and cultures will be presented to deepen the student's understanding of the environmental, economic, socioculture and aesthetic impacts of architecture and urbanism. Contemporary problems and opportunities in sustainable building and community design will be considered, including energy and water conservation, waste management and recycling. Livability, walkability, bikeability and transit, as well as the importance of a vibrant and diverse public realm, will also be studied.

### **URP 423 / ARCH 423 / ENVIRON 370. Introduction to Urban and Environmental Planning**

*May not be repeated for credit.*

## **Women's and Gender Studies (WGS)**

### **WGS 119 / PSYCH 119. Gender, Sex, and Sexuality in Science and Medicine**

*First year students only. (Prerequisites enforced at registration.) (3). (NS). (BS). May not be repeated for credit.*

This first year seminar explores current bioscientific research (e.g. neuroscientific, biomedical, evolutionary, etc.) on gender, sex, and sexuality, as well as ongoing feminist insights into how scientists and the public come to develop and understand this body of knowledge.

### **WGS 150. Humanities Seminar on Women and Gender**

*Enrollment restricted to first-year students, including those with sophomore standing. (3). (HU). May not be repeated for credit.*

### **WGS 153. Interdisciplinary Seminar on Women and Gender**

*(3). (ID). May not be repeated for credit.*

First-year seminar on a topic within Women's Studies scholarship. Topics will be thematic and focus on interdisciplinary issues and research concerning women and gender.

### **WGS 211 / HISTART 211. Gender and Popular Culture**

*(4). (HU). May not be repeated for credit. (Gender, Culture, and Representation).*

### **WGS 212 / HS 225. Global Perspectives on the HIV and AIDS Epidemic**

*May not be repeated for credit. (non-LSA credit).*

Beginning in 1981 when the first case of HIV was diagnosed, the HIV and AIDS epidemic has dramatically altered the social, cultural, economic, political and demographic landscape worldwide. Understanding the drivers and the implications of this epidemic of individuals,

families, communities and countries requires insight into the myriad of biological, socio-cultural and political factors that shape individual knowledge and behavior, access to preventive and treatment modalities, as well as the political and international responses to the epidemic. The purpose of this course is to provide an overview of the social and behavioral factors that influence the transmission and prevention of HIV and AIDs worldwide. Topics to be covered include the natural history and epidemiology of the AIDS virus, the mechanisms of transmission, high risk and vulnerable populations, social determinants of risk and vulnerability, theoretical foundations for HIV prevention programs, primary and secondary HIV prevention strategies, treatment of HIV and AIDS, and implications of HIV and AIDS for individuals, families, communities and countries.

**WGS 213. Topics in Gender and the Humanities**

(1 - 4). (HU). *May not be repeated for credit.*

This course takes up a topic in gender and the humanities of a specific or contemporary nature.

**WGS 215 / HISTART 216.**

**Contested Spaces: Art, Architecture, Politics**

(4). (HU). (R&E). *May not be repeated for credit.*

This course examines "contested spaces" in the Americas, and encourages students to think critically about how specific sites and objects participate in the construction of class, race, and gender. It focuses on spaces that were central to the formation of modernity and that served to index broader networks of power.

**WGS 216 / SOC 216. Thinking Class: Inequality in Media, Bodies,**

**Environment, and More**

(3). *May not be repeated for credit.*

According to ideals of American exceptionalism, we live in a classless society. But according to mounting evidence, 21st Century America is a class-bound society with historic, widening gulfs between upper and lower strata. Through readings, discussion, and audiovisual materials, this seminar examines class "on the ground" in various sites and contexts.

**WGS 220 / NURS 220.**

**Perspectives in Women's Health**

(3). (SS). (R&E). *May not be repeated for credit. (Gender and Health).*

A feminist perspective on concepts and issues in women's individual and aggregate health. Course will include definitions of women's health, women's health concerns, and impact of multiple factors on health.

**WGS 224 / HISTORY 222 /**

**JUDAIC 224. Sex and Sexuality in Jewish History and Culture**

(3). (HU). *May not be repeated for credit.*

Jewish approaches to gender/sexuality questions in historical, religious, legal, ethical, and imaginative dimensions; Studying historical and received traditions (Bible, Talmud, Kabbalah), their transformations in early modern Jewish communities, contemporary Jewish movements, medieval Jewish practices, imaginaries in Christian and Islamic worlds, the complexities of modern Jewish formations in US and Israel/Palestine.

**WGS 225 / PSYCH 225.**

**Psychology of Human Sexuality**

(3). (SS). *May not be repeated for credit. Does not count as a breadth course for Psychology or BCN majors.*

This course addresses social and psychological aspects of sexuality,

including sexual orientations, sexual adjustment and satisfaction, alternative sexualities, sexually transmitted infections, sexual disorders, sex work and the social construction of sexuality.

**WGS 233 / AMCULT 233.**

**Genes and Society: Comparative and International Perspectives**

(3). (ID). *May not be repeated for credit.*

This course explores genes and society from a global perspective including case studies from Iceland, Argentina, Cyprus, Germany, India, United States and China. Students learn about historical and contemporary perspectives and think critically about the medical benefits and moral quandaries generated by rapidly advancing genetic knowledge and technologies.

**WGS 235 / AMCULT 235 /**

**ARABAM 235. From Harems to Terrorists: Representing the Middle East in Hollywood Cinema**

(4). (HU). (R&E). *May not be repeated for credit.*

An overview of representations of Arabs and Arab-Americans in Hollywood cinema over the last century. Course traces a shift in stereotypes from the rich Arab sheik with a harem to the Arab terrorist, examining the connection between representations and the historical-political moment in which they are created, from European colonialism to 9/11.

**WGS 239 / AMCULT 239.**

**Gender, Sexuality, and Health in America**

(3). (ID). *May not be repeated for credit.*

This course explores gender, sexuality, and health in America over time and in terms of contemporary issues and controversies.

**WGS 240 / AMCULT 240.**

**Introduction to Women's Studies**

(4; 3 in the half-term). (HU). (R&E). *May not be repeated for credit.*

**WGS 242 / AMCULT 242.**

**Gender Violence in a Global Context**

(4). (SS). (R&E). *May not be repeated for credit.*

Students will study various human rights debates related to racial, sexist, and homophobic violence on a global scale. Course themes include: human trafficking; law enforcement and criminal justice-based violence; armed conflict and war; medicalized violence; and socio-economic violence. Students will learn to apply course material to their analysis of and involvement in the world around us. Course materials draw upon several disciplines ranging from anthropology and sociology to cultural studies, literature, and film and incorporate scholarly studies as well as policy, advocacy, and community-based based publications and reports.

**WGS 243 / AMCULT 243 /**

**LATINOAM 243. Latina Women in the U.S.**

(3). (HU). *May not be repeated for credit.*

This course will serve to introduce the study of gender, culture, and identity among Latinas in the U.S. It will grapple with the cultural forces that have historically created and re-created Latina identities.

**WGS 245. Introduction to Lesbian, Gay, Bisexual and Transgender and Queer+ Studies**

(4; 3 in the half-term). (ID). *May not be repeated for credit. (LGBTQ and Sexuality Studies).*

This interdisciplinary course introduces students to the study of genders and sexualities from the perspective of lesbian, gay, bisexual, transgender, queer, and other



scholarship. Throughout, we consider the interplay between gender and sexuality with ethnicity, culture, race, and class.

**WGS 250. Race, Gender and Nation**

(3). (SS). (R&E). *May not be repeated for credit.*

This interdisciplinary course introduces students to the study of race and gender in comparative contexts. Topics include colonialism, inequality, the politics of prisons, militarization, human rights, visual culture and a focus on women of color and Third World feminist thought. The course adopts both a comparative perspective (for countries such as the United States, Egypt, India, and Brazil) and a transnational perspective on contemporary issues.

**WGS 257. Special Topics in the Social Sciences**

(1 - 4). (SS). *May be elected twice for credit.*

This course considers a specific or contemporary social science topic.

**WGS 258. Special Topics in Interdisciplinary Women's Studies**

(1 - 4). (ID). *May be elected twice for credit.*

This course considers an interdisciplinary topic in women's and gender studies.

**WGS 270 / SOC 270. Gender and the Law**

(4; 3 in the half-term). (SS). (R&E). *May not be repeated for credit.*

This course explores contemporary legal responses to gender inequality in the U.S., with particular attention to the ways that feminists have tried to use law for social change. Topics include equal protection under the U.S. constitution, sex and race discrimination on the job, pay equity,

regulations of pregnancy and abortion, and transgender rights.

**WGS 285 / ASIAN 285. Love and Intimacy in Asia**

(3). (SS). *May not be repeated for credit.*

This course offers an introduction to recent scholarship on romance and intimacy in Asia to examine how intimate relationships shape human experiences.

**WGS 291 / PSYCH 291.**

**Introduction to the Psychology of Women and Gender**

*PSYCH 111, 112, 114, 115, 116 or WGS 220. (Prerequisites enforced at registration.)* (4). (SS). (R&E). *May not be repeated for credit.*

This course focuses on feminist theories and empirical findings on the psychology of women and gender. Specifically, the lived experiences of women, the social construction of gender, the gendered nature of social institutions, and the way that gender intersects with race/ethnicity, sexual orientation, social class, and other social categories.

**WGS 293 / AMCULT 293. 20th Century Writing by Women of Color**

(3). (HU). *May not be repeated for credit.*

In this class we explore the narrative practices of Latinas, African American, Native American, and Asian American women, paying special attention to the way in which their writing has given voice to their experiences as women of color. Over the course of the semester we consider the cultural, linguistic, and familial traditions that have informed their respective approaches to feminism, antiracism, and oppositional politics.

**WGS 295 / AMCULT 295.**

**Sexuality in Western Culture**

(3). (SS). *May not be repeated for credit.*

This is an introductory course on human sexuality and its role in Western culture. The focus is theories about sexuality, the history of sexual beliefs and practices, and the relationship of these beliefs and practices to other aspects of society such as the economy, the class system, gender roles, etc. Texts are drawn from literature, history, contemporary social theory, the Bible, and pornography.

**WGS 296 / HISTORY 296 / PSYCH 296. Gender, Sex Differences, and Addiction: Girls Gone Wild**  
(3 - 4; 3 in the half-term). (SS). *May not be repeated for credit.*

This course will unpack the concepts of sex differences, gender, and addictions and place current scientific findings in a historical perspective. Focusing on the U.S., we will look at examples of compulsive behaviors from the colonial era to the present, tracing how they and ideas about gender have changed over time.

**WGS 297 / PSYCH 297. Promoting Equity and Inclusion in the University and the Workplace**  
(3). (SS). (R&E). *May not be repeated for credit.*

The course enlists students in advancing diversity, equity and inclusion. Students explore how diversity, equity and inclusion arise in particular settings, the academy, corporate, government, laboratory, and non-governmental organizations. We examine the impact of social identities, inclusion/belonging, unconscious bias and stereotypes, the role of allies, community engagement, and leadership.

**WGS 300. Men's Health**  
(3). (ID). *May not be repeated for credit.*  
(Gender and Health).

Introduces the health issues, cultural, and cross-cultural aspects of topics related to men's health. Topics include cardiovascular disease, cancer, AIDS, and other health issues. Issues of race, gender, social class, and ethnicity are central to this course.

**WGS 302 / ANTHRCUL 302 / HISTART 302. Sex and Gender in Japan**  
(3). (SS). *May not be repeated for credit.*

Explore attribution and construction of gender in Japan historically and in the present time.

**WGS 303 / CLCIV 303 / HISTORY 303. Women in the Ancient Mediterranean**  
(3). (HU). *May not be repeated for credit.*

This is a course about women's lives during approximately 1,000 years of history (c. 600 BCE - 400 CE). Our focus will be the multicultural world of the Roman Empire, which, at its height, encompassed the entire Mediterranean region. We will examine the changing roles of women in the political, domestic, and religious spheres, as well as how women were implicated in major cultural transformations, such as the rise of Christianity. Students will explore issues of status, power, sexuality, and the family through sources that include literary texts, medical treatises, material culture, and works of art.

**WGS 304 / AAS 304. Gender and Immigration: Identity, Race, and Place**  
(3). (SS). *May not be repeated for credit.*

This course examines crucial questions related to how mobility, border-crossing, dislocation, and displacement are gendered and are given cultural and political meanings in the era of globalization and transnationalism. We carefully examine the embedded meanings and histories of the

terms, "diasporas," "transnationalism," and "globalization," and their usefulness in analyzing social constructions of gendered-identities, race, caste, and ethnicity, and reproduction, socialization, and health.

**WGS 305 / ALA 306.**

**Interdisciplinary and Intersectional LGBTQ Health**

(3). (ID). *May not be repeated for credit.*

LGBTQ people face health disparities including cancer, HIV, depression, suicide, and more. Biological, sociological, and historical factors perpetuate them. Race and socioeconomic status play major roles in intragroup disparities. This course uses interdisciplinary approaches to understand historical and contemporary disparities, with special attention to racial disparities within the LGBTQ population.

**WGS 307 / ANTHRCUL 327 / RCSSCI 327. Critical Theory in Medicine and Healing**

*One course in ANTHRCUL or RCSSCI or WGS 240 or WGS with an SS designation. (4). (SS). May not be repeated for credit.*

This course introduces students to the critical anthropological analysis of illness, health, healing, and medicine. We explore current and past medical anthropological approaches--political economic, phenomenological, symbolic, feminist, post-structural--in order to evaluate how well these frameworks convey the lived experience of bodies in their local worlds.

**WGS 309 / PSYCH 309.**

**Psychology of Social Change: Gender & Global Feminisms**

*One course in either Women's Studies or Psychology. (3). May not be repeated for credit.*

In this course we will consider how individuals generally and feminists in

particular, are shaped by changing political and economic conditions, especially during times of upheaval and rapid social transformation. We will also examine how this is different for individuals who are not raised to adulthood in such times. Second, we will examine how and why some individuals become engaged in creating social change (and others do not).

**WGS 311 / ASIAN 310. Family in Japan**

(3). (SS). *May not be repeated for credit.*

What is the importance of family in contemporary Japan? This course begins to answer this central question by exploring both families as lived experience and Family as a powerful symbol for national unity. Focusing on the ways in which families have been imagined, legislated, lived, and refused, we will examine legal structures and social norms that shape these very personal groups. Including social scientific theory about kinship, the course traces the centrality of family in contemporary life while analyzing debates about family change, social conflict, and personal preferences. Topics include the household registry system, parent-child relationships, family-owned businesses, queer families, divorce, and domestic violence. Course materials include readings and required films, two short papers, and a final paper.

**WGS 312. Queering U.S. Immigration History**

*One course in Women's Studies or permission of the instructor. (Prerequisites enforced at registration.) (3). May not be repeated for credit.*

What does it mean to "queer" the history of immigration and immigrant communities in the United States? Queering, as practice that makes explicit and then de-centers norms, first leads us to question who has been

normalized as an "immigrant" in the United States. First, this class examines women's roles in immigration. Second, we examine sexual practices, identities, and desires in immigrant communities and in immigration policy. Finally, we question the normative frameworks of U.S. immigration history, including the "nation of immigrants" discourse, and the relationship of immigrant paradigms to indigeneity and Blackness.

**WGS 313. Special Topics in Gender and the Humanities**

*(1 - 4). (HU). May be elected twice for credit.*

Offers a perspective on gender in print and/or visual culture that focuses on how cultural artifacts are made and received. It acquaints students with how meaning is produced in works of literature, art history, drama, or film.

**WGS 314 / ENGLISH 314.  
Gender and Sexuality Studies in Literature**

*(3 - 4; 2 - 3 in the half-term). May be repeated for a maximum of 6 credits. May be elected more than once in the same term.*

A broad survey of a major literary or cultural theme, focusing on gender and/or sexuality as categories of analysis central to the understanding of human life and society.

**WGS 315 / ENGLISH 315.  
Women and Literature**

*(3 - 4; 3 in the half-term). (HU). May be repeated for a maximum of 6 credits.*

This course considers a wide variety of literature on women and literature often through the relation between the socio-historical existence of women and textual representation of women literary institutions and literary texts.

**WGS 316 / HISTORY 316 /  
MEMS 316. Women and Gender in  
Medieval Europe: 500-1500**

*One course in Women's Studies or History.  
(3). (SS). May not be repeated for credit.*

The Middle Ages have a bad reputation with respect to women, but just how bad were they? This course explores the history of women and gender relations in medieval European society and culture from roughly 500 to 1500.

**WGS 317 / HISTORY 317 /  
MEMS 317. Women and Gender in  
Early Modern Europe, 1500-1800**

*At least one course in WGS or HISTORY.  
(3). (HU). May not be repeated for credit.*

This course explores the history of women and gender relations in European society and culture from the Protestant Reformation and the opening out to the New World through the French Revolution.

**WGS 318. Women, Politics and Society  
in India**

*One course in Women's Studies or South Asian Studies. (3). May not be repeated for credit.*

The course will focus on the construction of gender/sexuality and on women's experiences, lives and identities in contemporary India. We will use in-depth study of India to address ways in which feminist analysis can approach the cross-cultural and transnational study of women in nuanced ways.

**WGS 319. Race, Class, and Reproductive  
Health WGS/AMCULT 240 Introduction to  
Women's Studies OR WGS 220 Perspectives  
in Women's Health. (3). (ID). May not be  
repeated for credit. Pass/Fail with  
Narrative Evaluation.**

This course uses an intersectional framework to understand women's reproductive experiences in the U.S., examining how women's experiences are shaped by social identities of race/ethnicity, socioeconomic class, sexual orientation, dis/ability, and/or religious affiliation.

**WGS 322. Black Feminist**

**Approaches to Health**

*WGS/AMCULT 240 Intro to*

*Women's Studies or WGS/NURS 220*

*Perspectives in Women's Health or WGS*

*250 Race, Gender and Nation. (3). May not be repeated for credit.*

This course examines black women's health, longevity, and well-being from a black feminist perspective and focuses on how the interlocking systems of racism, poverty, violence, and sexism influence the embodied health experiences of black women. We will survey black feminist and proto-feminist coping strategies of historical and contemporary health crises.

**WGS 324 / ANTHRCUL 325.**

**Childbirth & Culture**

*Sophomore standing. (4). (SS). May not be repeated for credit. (Gender and Health).*

This course focuses on the distinctive sociocultural configurations of childbirth practices and beliefs in several different societies. The cross-cultural study of childbirth provides a basis for understanding the cultural logic underlying these practices and beliefs and expands our knowledge of women's perspectives on social change and the medicalization of childbirth.

**WGS 327 / HISTORY 327. The**

**History of Sexuality**

*(4; 3 in the half-term). (HU). May not be repeated for credit.*

Does sex have a history? This course proposed to respond to this provocative question by demonstrating how modern notions of sexuality have emerged historically. In that sense, sex is not part of nature, it is part of culture, or rather cultures and their histories. This lecture course will introduce students to an exciting new field of historical research. Our approach will be both topical and chronological; from ancient times to the present.

**WGS 328 / AAS 328. Women, Agency and Sexual Safety**

*One course in WGS or AAS. (3). May not be repeated for credit.*

This course takes a transnational perspective on the purpose, development, and utilization of different kinds of reproductive technologies. Feminist critiques and analyses of the role of reproductive technologies in Africa, U.S., and global contexts are central to the course.

**WGS 330. Feminist Thought**

*WGS 240 or AMCULT 240; OR*

*WGS 250. (Prerequisites enforced at registration.) (3). May not be repeated for credit.*

This interdisciplinary course explores multiple perspectives on gender, sexuality, feminism, and feminist theory. We will study movements and theoretical frameworks that are often defined as the "foundations" of feminism in the U.S. Students will examine women of color, post-colonial, and transnational feminisms.

**WGS 331. Feminist Theoretical Perspectives in Gender and Health**

*WGS 220 Perspectives in Women's Health.*

*(Prerequisites enforced at registration.)*

*(3). May not be repeated for credit.*

This course focuses on feminist theory in the context of gender and health. Topics include reproduction, men's health, addiction, intersex, environmental health. A range of theories central to feminism will be discussed, including intersectionality, post-modernism, feminist standpoint theory and related theories such as minority stress, disability theory, and script theory.

**WGS 332 / ASIAN 342. Gender and Power in Southeast Asia**

(3). (HU). May not be repeated for credit.

This course draws from a wide range of material including primary source documents, ethnography, literature, and film, to examine the topics of gender and sexual identities in historical and contemporary Southeast Asia.

**WGS 334 / HISTART 334.**

**Women in the Visual Arts: Images and Image-Makers**

*One course in Women's Studies or History of Art. (3). (HU). May not be repeated for credit. (Gender, Culture, and Representation).*

The course studies women as both image-makers and role-players in the visual arts, examining their histories from the mid-18th to the beginning of the 20th century. It offers an introduction to how meanings about women and gender are produced through visual representation and how gender structures critical writing on art.

**WGS 335. Gender and Globalization**

(3). May not be repeated for credit. (Gender in a Global Context).

This course offers a critical and feminist examination of globalization as an ongoing and historical process, as discourse, and as representation. We will examine the impacts of the responses to the global reach

of capitalism through the lens of gender relations, especially as it affects constructions of the subject 'women' cross culturally.

**WGS 336 / AAS 336 / HISTORY**

**336. Black Women in the United States, Part I: From the American Revolution through the Women's Era**

*AAS 201 (CAAS 201). (3). May not be repeated for credit. No credit granted to those who completed AAS 337 prior to Winter 2012.*

This course explores the history of African-American women from the American Revolution through the passage of the nineteenth amendment in 1920. Through the secondary work of historians and readings of primary sources, students will examine a variety of topics including work, the family, the construction of race and gender, politics, the law and sexuality. The course will also consider the various ways in which historians have theorized about black women's pasts and ask how those theories may help to inform our approaches to the telling of history.

**WGS 341. Special Topics in LGBTQ Studies**

*WGS 240 or 245. (3 - 4). May be elected twice for credit. May be elected more than once in the same term.*

This course offers an interdisciplinary approach to sexuality in light of a religious belief, legal code, medical construction, social movement, or cultural representation.

**WGS 342. Special Topics in Gender and Health**

*WGS 220 or 240. (3 - 4). May be elected twice for credit. May be elected more than once in the same term. (Gender and Health).*

This course promotes an understanding of health as a construct shaped by history and

ideas grounded in varying interpretations of the body and disease.

**WGS 343. Special Topics in Gender, Race, and Ethnicity in the U.S.**

*WGS 240. (3 - 4). May be elected twice for credit. May be elected more than once in the same term.*

This course examines the effects of race and ethnicity on gender through the intersection of differences by considering interracial and interethnic relations as well as the mutual influence of social movements.

**WGS 344. Special Topics in Gender, Culture, and Representation**

*WGS 240. (3 - 4). May be elected twice for credit. May be elected more than once in the same term. (Gender, Culture, and Representation).*

Offers a perspective on women and gender in music, print and visual culture that focuses on how cultural artifacts are made and received. It acquaints students with how meaning is produced in works of literature, art history, drama, music, film or other forms of mass media.

**WGS 345. Special Topics in Gender in a Global Context**

*WGS 240 or AMCULT 240. (3 - 4). May be elected twice for credit. May be elected more than once in the same term. (Gender in a Global Context).*

Offers a comparative cross-cultural perspective on the construction and meaning of gender. The current forces of globalization and their complementary ideologies of imperialism and colonialism will serve as an analytic frame.

**WGS 348 / SOC 345. Sociology of Sexualities**

*One introductory course in Sociology. (4; 3 in the half-term). (SS). May not be repeated for credit.*

This course is an introduction to the sociology of sexuality in contemporary American society. Different theoretical perspectives for thinking about sexuality in the social sciences will be examined, issues of studying sexuality empirically will be reviewed, and how people construct a variety of social identities and relationships will be explored.

**WGS 350. Nonprofit Management, Community Engagement, and Feminist Practice**

*WGS 240 or AMCULT 240 or WGS 220 or NURS 220. (4; 3 - 4 in the half-term). (EXPERIENTIAL). May not be repeated for credit. (Practice Course). F.*

This course aims to address the gaps and misconceptions that often exist between feminism as an academic discourse and feminism in practice. Through classroom engagement and community involvement, students explore the intersection of academia and activism as it pertains to improving the lives of women and their communities. Students commit to volunteering in an area community-based organization.

**WGS 351. Leading Feminism**

*One course in Women's Studies. WGS 350 is recommended, but not required. (4; 3 in the half-term). (EXPERIENTIAL). May not be repeated for credit. W.*

This course builds on WS 350's examination of nonprofit management, community engagement, and feminist practice to a focused exploration of feminist practice and leadership.

**WGS 352 / ASIAN 352. Gender, Sexuality, and Power in Premodern China**

*At least one course in Asian studies or*

*Women's studies. (3). (HU). May not be repeated for credit.*

This course explores gender and sexuality in China before the 20th century. We examine treatises, poetry, letters, plays, novels, and short stories from premodern China by male and female authors to investigate how people conceived of gender and sexuality in China, and how those conceptions changed over time.

**WGS 354 / AAS 354 / HONORS 354 / RCHUMS 354. Race and Identity in Music**  
*(3). (HU). (R&E). May not be repeated for credit.*

This course explores the parameters of racial and ethnic identities in music; primarily but not exclusively in Western art music (commonly known as "classical music"). The focus is on understanding how racial and ethnic differences can be portrayed musically. Case studies are drawn from the late eighteenth century through the present with a strong emphasis on the nineteenth century and opera.

**WGS 357. Feminist Practices in a Global Context**  
*One course in Women's Studies. (3). (SS). May not be repeated for credit.*

How do we understand feminist practices in various locations as well as the relationships between feminisms in the east and west, and the local and global? This course adopts a comparative approach to the investigation of particular historical processes of women's movements in three countries, the United States, India, and China. Focusing on the feminist activism in the three countries, this course attempts to ground our understanding of globalization in local history, and to present in a concrete way that feminisms have histories and

meaning that extend far beyond the North American continent.

**WGS 358. Selected Topics in Interdisciplinary Women's Studies**  
*(1 - 4). (ID). May be elected twice for credit.*

This course considers a specific or contemporary interdisciplinary topic in women's and gender studies.

**WGS 360 / AMCULT 342 / HISTORY 368. History of the Family in the U.S.**  
*(4; 3 in the half-term). (ID). (R&E). May not be repeated for credit.*

An interdisciplinary course providing perspective on the contemporary family by studying its historical development. The course includes consideration of changing gender roles; sexuality; childrearing; work patterns; race, ethnicity and class; the changing role of state in family relations.

**WGS 363 / AMCULT 363 / ASIANPAM 363. Asian/Pacific Islander American Women**  
*(3). May not be repeated for credit. (Gender, Race, and Ethnicity in the U.S.).*

This is an upper-division, interdisciplinary course focusing on the experiences of Asian American and Pacific Islander American women in the United States from historical, anthropological, sociological, and psychological and literary perspectives.

**WGS 365 / AAS 365. Global Perspectives on Gender, Health, and Reproduction**  
*One course in either Women's Studies or AAS. (3). (SS). May not be repeated for credit.*

Examines constructions and meanings of gender, health, reproduction and social difference. By using various cross-cultural



examples, we discuss how gender, racial, and class differences are enacted and manifested in the divisions of social spaces, and in bodily conduct, function, hygiene, and sickness.

**WGS 366 / AMCULT 366 /**

**HISTORY 353. Sex and Sexuality in U.S. Popular Culture**

(3). (HU). *May not be repeated for credit.*

We will explore how changing ideas about sex, sexuality, and gender appeared in certain types of twentieth-century popular culture. As a group, we will learn to interpret media, such as movies or television, as historical texts that provide insight into past notions about sex in the United States.

**WGS 370 / AMCULT 375 /**

**HISTORY 370. Queer Histories of the United States, 1850 to the Present**

(4; 3 in the half-term). (SS). *May not be repeated for credit.*

To teach queer history or to queer the teaching of history? This question- posed by historian John Howard- reflects the central teaching objectives of Queer Histories of the United States, 1850 to the Present. Course participants will survey the diverse social, political, cultural and economic histories of lesbian, gay, bisexual, transgender and queer (LGBTQ) communities in the United States from the middle of the nineteenth century through the early twenty-first century. Moreover, the instructor and students will collectively interrogate the historical production of categories of "deviancy" and "normalcy" within American life as it relates to certain acts, desires, identities and bodies. Course topics include but are not limited to the historical development of queer communities, homophile organizations, gay liberation politics, the histories of queer communities of color, the AIDS Crisis and

related activism, transgender political communities, the role of federal and state law/policy in the production of heteronormativity and the movement for marriage equality. This course utilizes lectures, discussions and writing assignments alongside interdisciplinary scholarship and primary source materials (including photographs, art, newspapers, memoirs, film and political ephemera).

**WGS 371 / AMCULT 371 /**

**HISTORY 371. Gender and Sexuality in the US**

*Students will not receive credit for this course if they've taken HISTORY 328 with the title " Sex and Gender in U.S. History, 1600-2000" (topic ID #48). (Prerequisites enforced at registration.) (3 - 4). (HU). (R&E). May not be repeated for credit.*

This course will focus upon the experiences of American women, examining how constructions of gender, race, class, and sexuality have shaped women's lives. We will explore family structure, gender expectations, and cultural practices, and will look closely at intersections of gender, race, sexuality, and class and the role they play in the development of self-identity. The changing concepts of equality and difference, as employed by women and men in articulating gender relations, will serve as a theoretical framework for our examination. We will emphasize the diversity women's historical experiences by region as well as by social category, and will situate those experiences in the larger contexts of social, economic, and political change on local, national, and even global levels.

**WGS 372 / HISTORY 372.**

**Women and Gender in European History**

(3). *May not be repeated for credit.*

This course explores the history of women and gender relations in European society

and culture. Topics to be covered will vary, but might include: women and gender in politics, society, economy, culture, and family; the historical construction of femininity and masculinity; gender and power.

**WGS 374. Gender, Race, and Incarceration**

*WGS/NURS 220 Perspectives in Women's Health, or WGS/AMCULT 240 Intro. to Women's Studies, or WGS 250 Race, Gender and Nation. (3). May not be repeated for credit.*

Engaging social scientific and humanistic scholarship, theories of surveillance and power, and cultural texts, this course explores gendered experiences and gendered dehumanizations in the prison; the intersection of these mechanisms with other social structures (e.g., race, class, and ableism); and how these are obscured in the popular imaginary.

**WGS 375 / HISTORY 375. A History of Witchcraft: The 1692 Salem Trials in Historical and Cross-Cultural Perspective**

*(4). (HU). May not be repeated for credit.*

In 1692, the notorious witchcraft trials took place in Salem, Massachusetts. While this case would become America's most famous witchcraft episode, it drew on a long history of witchcraft belief, accusation, and prosecution in Europe and the New World. In order to understand Salem and the phenomenon of witchcraft more generally, this course explores the long context of European witchcraft belief through the present day.

**WGS 376 / JUDAIC 376. Women and the Bible**

*(3). (HU). May not be repeated for credit. (Gender, Culture, and Representation).*

There are many ways to read the Bible and ways of reading the Bible, and modes of interpretation have led to radically different constructions of women among various religious and ethnic groups and in diverse historical and geographical settings. Through names, languages, fiction, poetry, ritual objects, folklore, music, and other cultural expressions, this course considers the burgeoning feminist literature and cultural productions about women in monotheistic traditions, such as Eve, Sara, Hagar, Miriam, and Ruth.

**WGS 377. Topics in Gender and Social Science**

*(1 - 4; 1 - 3 in the half-term). (SS). May be elected twice for credit. May be elected more than once in the same term.*

This course takes up a social science topic of a specific or contemporary nature.

**WGS 381 / AAS 381 / ENGLISH 380. Intersections: Fictions and Feminisms of the African Diaspora**

*AAS 111 (CAAS 111). (3). May not be repeated for credit.*

Focusing on fiction written by women in the African Diaspora, this course explores how works of fiction can contribute to an understanding of feminisms, and how various feminist perspectives can contribute to an understanding of fictional texts.

**WGS 384. Independent Research**

*Consent of department required. WGS 240 and one additional Women's Studies course. (1 - 3). (INDEPENDENT). May be elected six times for credit.*

This course provides students with the opportunity of either conducting their own research under the supervision of a Women's Studies faculty member or

working with a Women's Studies professor on a pre-existing research project. More specifically, students may develop a critical analysis of a set of readings or follow a research plan that includes collecting, analyzing, and interpreting original data.

**WGS 385. Directed Reading**

*Consent of instructor required. WGS 240, and one additional Women's Studies course. (1 - 3). (INDEPENDENT). May be repeated for a maximum of 9 credits. (Reading/Research Course).*

This course offers students the opportunity to pursue an independent, interdisciplinary reading project on any subject related to women and gender. A final written report is required, but the format (e.g. a research paper, with an annotated bibliography, etc.) is up to the discretion of the faculty supervisor. Students are responsible for finding a Women's Studies faculty member who will sponsor their independent reading course.

**WGS 389. Junior Honors Seminar**

*Consent of department required. (3). May not be repeated for credit.*

This course is designed to help students develop the research and analytical skills necessary to complete an interdisciplinary Honors thesis. Through reading assignments and guest speakers, we explore research methods, argument formulation, and standards of evidence in different disciplines. The bulk of the work, however, focuses on each student formulating her/his thesis topic, conducting a literature review, identifying sources, and writing a research proposal outlining the problem or hypothesis and research design for the thesis. In individual meetings, the instructor assists each student in identifying an appropriate faculty member to advise

her/his thesis research and writing during their senior year. Students also read and comment on each others' research proposals.

**WGS 394 / PSYCH 394. Sex, Sexuality, and Public Policy**

*PSYCH 111 or any WGS course. (3). (SS). May not be repeated for credit.*

This course examines a series of U.S. policies that aim to shape the sexual lives of young people and adults. We examine policies concerning how we learn about sex, engage in sex, and form families. Topics include HPV vaccines, sex education, school-based bullying, same-sex marriage, contraception, and abortion.

**WGS 397 / HISTORY 397 /**

**MIDEAST 387. Religion and Politics in Contemporary Iran**

*(3). (ID). May not be repeated for credit.*

The Iranian Revolution of 1979 transformed Iran into a theocracy, put an end to American colonial rule and made political Islam a force to be reckoned with globally. Thirty years later, the custodians of the Islamic Republic have had to contend with a civil rights movement (the Green Movement of 2009) that demanded a government characterized by voting rights, gender equality, and freedom of assembly and of expression. This course will explore 40 years of revolutionary change in Iran through public spaces where popular social and political visions were articulated and shaped. In this course we will employ ethnographic studies of daily life in the capital city of Tehran to explore piety, sexuality, the occult and politics in modern Iran. Using the media of cinema, blogs, painting, and photography, we will investigate both the challenges Iranians have faced in a radically changed society as well as the language of resistance with which they have experimented.

**WGS 400. Women's Reproductive Health**

*Upperclass standing. (3). May not be repeated for credit. (Gender and Health). W.*

WGS 400 will explore the current biomedical understanding of major conditions affecting the reproductive health of women, e.g. pregnancy, STDs and menopause. Course discussion will develop within a feminist and socio-political context.

**WGS 402. Gender and Health Policy**

*One course in Women's Studies. (3). May not be repeated for credit. Rackham credit requires additional work.*

This course examines how gender influences health status, health care, and health policy from a feminist and sociopolitical context and a life course perspective. In addition to reviewing the main historic, legislative, organizational, and financial bases for programs, we address the limitations of the current health care infrastructure.

**WGS 404 / HS 404. Gender Based Violence: From Theory to Action**  
(2 - 3). *May not be repeated for credit.*

In this course we will examine gender based violence and the skills necessary to provide advocacy services to survivors. This course will introduce students to the roots of gender based violence, the social and cultural context in which it occurs, the mental and physical health impacts, justice and restitution frameworks, and will explore approaches to changing those structures in order to reduce or end it. Students will develop the skills to think critically about the local and global impact of gender based violence, how it intersects with other forms of oppression, and to

develop an understanding of these issues that will be useful intellectually, personally, and professionally.

**WGS 410. Reproductive Justice: Legal and Ethical Issues**

*WGS 220, 240, 270 or 400, or AMCULT 240 or NURS 220 or SOC 270. (3). May not be repeated for credit. Rackham credit requires additional work.*

This course surveys legal and ethical issues surrounding decisions about pregnancy and childbirth, with a focus on reproductive injustice. We will look at current issues in the news, U.S. law on the rights of women, childbearing issues, maternal-fetal questions, as well as laws and practices restricting access to services.

**WGS 411 / AMCULT 411.****Rednecks, Queers, and Country Music**

*One course in Women's Studies or American Culture. (3). May not be repeated for credit.*

Queer identity is associated with urban, bourgeois, coastal lifestyles. Country music is linked to heterosexual white, rural, working-class, Southern, and Midwestern cultures and often to "redneck" bigotry. How has music that many people perceive as homophobic and racist become a medium for multicultural queer social and sexual exchange?

**WGS 414 / ENGLISH 415.****Studies in Women and Literature**

*(3). May not be repeated for credit.*

An intensive study of women and literature. A particular section might focus on a group of women writers defined by a period, a literary form, or a particular tradition; on representations of women in literature in some period or form, or a specific image of women present in a range of literature; or some combination of these topics.

**WGS 417. Race, Gender, and Mental Health in the 19th Century**

*Womenstd/Nursing 220 Perspectives in Women's Health or Womenstd/Amcult 240 Intro to Women's Studies or Womenstd 250 Race, Gender and Nation. (3). May not be repeated for credit.*

This course examines how U.S. conceptions of mental illness and the care of those labeled insane were shaped by both institutions such as slavery and asylums and period-specific conceptions of race, gender, and class. It considers the various overlaps between key subject positions including insane persons, women, blacks, and whites.

**WGS 422 / POLSCI 401.**

**Feminist Political Theory**

*Junior standing. (3). May not be repeated for credit.*

**WGS 425 / AMCULT 425.**

**Feminist Practice of Oral History**

*One course in WGS or AMCULT.(3). May not be repeated for credit. Rackham credit requires additional work.*

This course focuses on the theory and practice of collecting oral histories of women. We examine various theories and methods of conducting interviews, with a concentration on the feminist perspective. We also explore issues such as "insider-outsider" perspectives, relationships between the interviewer and interviewee, our role as "narrator," legal and ethical issues, the reliability of memory, and how the complex intersection of race, class, gender, and sexuality are reflected in women's life stories.

**WGS 428 / ANTHRCUL 428 /**

**RCSSCI 428. Sex Panics in the US and UK since 1890**

*One course in WGS or ANTHRCUL or RCSSCI, SOC, or HISTORY. (3). May not be repeated for credit.*

This course explores the paradigm of "sex panics" and examines several case studies, including anti-prostitution movements in Britain and the US, progressive era conflicts over age of consent, female sexual precocity and juvenile justice in the US, the eruption of concern over sexual psychopaths in the 1930s-1950s, and anti-homosexual crusades in the 1940s and 1950s. The lingering legacies of these conflicts and their imprint on more contemporary conflicts will be explored.

**WGS 429 / COMM 429. Sexual Identities and the Media**

*(3). May not be repeated for credit.*

This course introduces students to some of the major debates about LGBTQ representation in the United States, including how gender, race, class, and economic factors shape how we understand sexuality and its representation. We look at both mainstream and alternative media to consider the role of LGBTQ producers and audiences in shaping queer images. This course asks students to look and think queerly -irrespective of sexual identification- through a series of creative assignments.

**WGS 431. Advanced Topics inLGBTQ Studies**

*WGS 245 or 295. (3 - 4). May be elected twice for credit. May be elected more than once in the same term. Rackham credit requires additional work.*

This advanced special topics seminar offers an interdisciplinary approach to sexuality in light of a religious belief, legal code, medical construction, social movement, or cultural representation.

**WGS 432. Advanced Topics inGender and Health**

*WGS 220 or NURS 220. (3 - 4). May be elected twice for credit. May be*

*elected more than once in the same term. Rackham credit requires additional work.*

This advanced special topics course promotes an understanding of health as a construct shaped by history and ideas grounded in varying interpretations of the body and disease.

**WGS 433. Advanced Topics in Gender, Race and Ethnicity in the U.S.** WGS 240. (3 - 4). *May be elected twice for credit. May be elected more than once in the same term. Rackham credit requires additional work.*

This special topics course examines the intersection of gender, race, and ethnicity in the U.S. in order to consider differences among women and men, as well as the impact of multiple categories of identity on experience and on the formation and contestation of gender itself.

**WGS 434. Advanced Topics in Gender, Culture, and Representation** WGS 240. (3 - 4). *May be elected twice for credit. Rackham credit requires additional work.*

This advanced special topics course explores ways in which meanings about women and gender are produced through cultural images, artifacts, and/or performances.

**WGS 435. Advanced Topics in Gender in a Global Context** WGS 240. (3 - 4). *May be elected twice for credit. Rackham credit requires additional work.*

This advanced special topics in Gender in a Global Context course offers a comparative cross-cultural perspective on the construction and meaning of gender, race, class, and sexuality. It examines current forces of globalization and empire, the

histories of imperialism and colonialism, and postcolonial resistance and theory.

**WGS 438. Gender, Health, and Well-being in Africa**

*One course in Women's Studies. (3). May not be repeated for credit. Rackham credit requires additional work.*

This course focuses on how gender is intertwined with health and well-being in sub-Saharan Africa. It emphasizes the importance of situating health issues within broader social contexts, with special attention to women's sexual health. It engages a range of materials, including ethnographies, journalistic accounts, novels, films, and public health interventions.

**WGS 440. Women's Studies Senior Capstone**

*Women's Studies majors with senior status. (Prerequisites enforced at registration.) (3). May not be repeated for credit. Interdisciplinary seminar required for all senior majors.*

This seminar is designed to help graduating WS seniors look back, synthesizing what they have learned in WS, and look ahead, envisioning how they might apply their knowledge and experience in postgraduate lives and careers. The topic will be explored through readings, discussions, writing assignments, and a series of speakers.

**WGS 441. Senior Honors Seminar I**

*Consent of department required. (1). May not be repeated for credit. Offered mandatory credit/no credit.*

In this seminar, students consider and discuss issues related to conducting independent research for their honors theses. Seminar topics may include all aspects of conducting independent research such as writing literature reviews, applying for research funds, seeking IRB approval,

the data collection process, the presentation of research findings, and attending conferences.

**WGS 442. Senior Honors Seminar II**

*Consent of department required. (1). May not be repeated for credit. Offered mandatory credit/no credit.*

In this seminar, students consider and discuss issues related to conducting independent research for their honors theses. Topics may include all aspects of conducting independent research, such as the presentation of research findings and attending conferences. Additionally, students prepare and practice their oral presentations for the annual Honors Colloquium held in April.

**WGS 443 / AAS 443. Pedagogy of Empowerment: Activism in Race, Gender, and Health**

*AAS 201, WGS 240 or 220, AMCULT 240, NURS 220. (3). May not be repeated for credit. (Gender and Health).*

This course will explore the intersections of health, gender, and race by focusing on the epidemic of HIV and the epidemic of violence in the African American community. Students will explore the theory and practice surrounding an intervention module on HIV prevention and violence.

**WGS 446 / ANTHRCUL 446. Sex and the City: Urban Geography and Sexual Locations**

*At least one course in Anthropology, History, Women's Studies, Sociology, LGBTQ Studies, or Urban Studies/Urban Planning. (3). May not be repeated for credit.*

This course examines contemporary sexual diversity in the context of urban geography, urban studies, and the political economies

of sexuality and space. It addresses issues of the spatial locations of sexual populations and situates the formation and disappearance of sexual neighborhoods and territories in terms of the larger dynamics of urban life. Topics include relationships between urban size to sexual specialization, impact of redevelopment and gentrification on the texture of urban neighborhoods, and specific studies of red light districts, prostitution, and homosexuality.

**WGS 447 / SOC 447. Sociology of Gender**

*One introductory course in sociology or women's studies. (3). May not be repeated for credit.*

This course asks: Why is there gender inequality? and what are women's experiences of that inequality? The course will examine politics, the state, work, family, body, and sexuality, all areas of social life that have been theorized as the locus of women's oppression.

**WGS 449 / SOC 445. Diagnosis, Sex, and Society**

*(3). May not be repeated for credit. Rackham credit requires additional work.*

Diagnoses are often seen as objective, "natural" entities valid across time and space. With a focus on sex, gender, and sexuality-related diagnoses, this course instead approaches diagnoses as social objects -- products of collective action shaped by group interests, history, and culture that serve practical and political purposes.

**WGS 451 / SOC 451. Women, Inequality, and Work**

*WGS 240 (or AMCULT 240) or SOC 100, and one other course in SOC or WGS. (3). May not be repeated for credit. (Gendered Lives).*

This course will draw on empirical research and theory to analyze a wide range of issues regarding gender and work.

**WGS 452 / PSYCH 414.**

**Sexuality and Science**

*One of: PSYCH 111 or PSYCH 112 or any WGS course. (Prerequisites enforced at registration.) (3). (BS). May not be repeated for credit. Rackham credit requires additional work.*

This interdisciplinary course focuses on sexuality and science from two perspectives. We discuss current biological and neuroscientific research about sexuality, as well as feminist scholarship on these topics and critical responses to this research. Topics cover the intersections between biology, sexuality, and feminist/critical scholarship about this research.

**WGS 461 / FTVM 461.**

**Explorations in Feminist Film Theory**

*WGS 240 or AMCULT 240; and junior standing. (3). May not be repeated for credit. (Gender, Culture, and Representation).*

This course offers an in-depth exploration of feminist theories that address film in relation to gender. Discussion focuses on contemporary feminist scholarship that draws upon a variety of viewpoints, including psychoanalysis, cultural theory, postmodernism, historical research and ideological theory.

**WGS 465 / PSYCH 488 / SOC**

**465. Sociology of Deviance: From Sin to Sickness**

*One introductory course in sociology. (4; 3 in the half-term). May not be repeated for credit.*

This course is a sociological examination of the social construction of deviant categories

and their consequences, using analysis of conventional values and modes of social control. Students are expected to develop a critical perspective and facilitate reflective thought about deviance.

**WGS 471 / HISTORY 429 /**

**MIDEAST 432 / RELIGION 496.**

**Gender and Sexuality in Pre-Modern Islam**

*Students should preferably have had one course in Islamic Studies. (3). May not be repeated for credit. Taught in English. (Gender in a Global Context).*

An introduction to Muslim understanding of gender and gender relations, first through a study of those sacred texts (Qur'an and Hadith) that came to define the ideal woman and man, as well as their roles and relationships. Then, gender participation in the political and cultural life of the Safavi, Ottoman and Mughal Courts shall be explored to view the interplay between theory and practice.

**WGS 487 / MIDEAST 441.**

**Gender and Society in Ancient Egypt**

*Some familiarity with Egypt is helpful. (3). May not be repeated for credit. (Gender in a Global Context).*

Using ancient texts in translation, secondary readings and artifacts in the Kelsey Museum of Archaeology, students in this course will examine the definitions of gender, gender roles and relations and the impact of status, religion, sexuality and ethnicity on ancient Egyptian understandings of gender.

**WGS 490. Honors Thesis** *Consent of department required. (3).*

*(INDEPENDENT). May not be repeated for credit. (Reading/Research Course).*

*Continuing Course. Y grade can be reported at end of the first-term to indicate work in progress. At the end of the second term of WGS 491, the final grade is*



*posted for both term's elections. F, W, Sp, Su.*

In this independent study course, a WS honors student conducts research and writing for a thesis under the close supervision of their faculty thesis advisor.

**WGS 491. Honors Thesis** *Consent of department required. (3). (INDEPENDENT). May not be repeated for credit. (Reading/Research Course). F, W, Sp, Su.*

In this independent study course, a WS honors student conducts research and writing for a thesis, under the close supervision of their faculty thesis advisor.

**WGS 494 / PSYCH 494. Adolescent Sexuality**  
*(3). May not be repeated for credit. Rackham credit requires additional work.*

This course addresses a wide range of issues that affect young people and their sexual development. We look at early lessons regarding sexuality as the basis for individuals' attitudes regarding sex and potential sexual/relational partners throughout their lifetime.

**WGS 496 / ISLAM 433 / MIDEAST 433. Gender and Representation in the Modern Middle East**  
*(3). May not be repeated for credit. (Gender in a Global Context).*

An examination of the construction of gender as pertains to the contemporary Middle East (predominately but not exclusively the Arab Middle East) as found in a wide array of literary and cultural representations (fiction, travel accounts, photographs, painting, film) produced both in the Middle East and outside of it.

## **Sweetland Center for Writing (WRITING)**

**WRITING 100. The Practice of Writing**  
*(3). May be repeated for a maximum of 6 credits. Offered mandatory credit/no credit.*

This course offers students the chance to gain confidence with every aspect of the writing process, from selecting a topic to drafting and revising.

**WRITING 119. Style and Editing for International Students**  
*(1). May be elected three times for credit. Offered mandatory credit/no credit.*

In this course, students explore stylistic elements commonly found in American academic writing and learn editing strategies that help them incorporate such elements into their own writing. Students practice the application of this knowledge and these skills by editing the papers that they write in their first-year writing requirement course or another course that requires writing.

**WRITING 120. College Writing for International and Multilingual Students**  
*(3). May be elected twice for credit. A maximum of two elections of ELI 120 and WRITING 120 is allowed.*

This course is designed to help international and multilingual students develop their general and academic writing abilities in English as an additional language. Students will develop written fluency and improve command over textual, rhetorical, grammatical, and discursive conventions common in a variety of academic disciplines.

**WRITING 200. Writing with Digital and Social Media**

*(3). May be elected three times for credit. May be elected more than once in the same term.*

In this course, students analyze and apply rhetorical principles in their writing with digital and social media. A variety of topics and innovation in pedagogy are hallmarks of this course. Why pay attention to multimedia in a writing course? As members of a media-saturated culture, we know that print text is only one form of "writing" and communication, and sometimes it is not the most effective choice. Because all of us make sense of texts and issues in a variety of ways, this course will ask students to utilize multimodal (visual, aural, kinetic, etc.) forms of communication and become more informed and critical consumers of digital and social media writing themselves.

**WRITING 201. Writing with Digital and Social Media Mini Course**

*(1). May be elected three times for credit. May be elected more than once in the same term.*

In this course students learn how to integrate new technologies into their writing and to write with and in digital and social media platforms. Depending on the specific topic, it incorporates a variety of media, including websites, electronic portfolios, visual texts, blogs, podcasts, audio and video. The emphasis of the course, however, is not on the technologies themselves, but on how writers can use rhetorical strategies to write effectively with digital and social media.

**WRITING 220. Introduction to the Minor in Writing**

*Consent of department required. (3). May not be repeated for credit.*

In this course, students admitted to the Minor in Writing investigate why we write, how we write, and how writing shapes us. Through peer review, instructor feedback, blogging, creation of an electronic writing portfolio, and other new media forms of writing, students learn to be effective and self-reflective writers.

**WRITING 229. Editing and Style for International and Multilingual Students**

*(1). May not be repeated for credit.*

This course helps international and multilingual students practice editing skills and develop style in academic and professional writing in English. Students individually and collaboratively practice fundamental editing strategies, sharpen knowledge about core grammar, and read and discuss exemplary essays in different contexts (e.g., literature, science, business, and psychology).

**WRITING 240. Professional and Technical Presentation for International and Multilingual Students**

*(1). May not be repeated for credit.*

This course is designed to prepare international and multilingual students to present professional and technical information. Students will, along with other course work, design presentations for experts and lay audiences, analyze and practice techniques for creating engaging introductions and impactful conclusions, and discuss and practice persuasive strategies in presentations.

**WRITING 300. Seminar in Peer Writing Consultation**

*Application process and permission of department. (3). May not be repeated for credit.*

This seminar aims to help students become theoretically informed and well-practiced

peer consultants. Students learn about writing, teaching, community service, cultural differences, and literacy practices. Activities and experiences include: reading and critiquing peer consulting pedagogy; examining student papers and conferences together in class; writing extensively, from short explorations (e.g., daily reading logs) to lengthy exposition (e.g., seminar papers); workshopping each other's papers; conferencing with the instructor; observing OWL Consultations; observing Writing 301 students in the Peer Writing Center and Sweetland faculty during Writing Workshop; practicing peer consulting onsite and online; and sharing (online and off) our experiences as writers and consultants.

**WRITING 301. Practicum in Peer Writing Consultation**

*WRITING 300 or SWC 300. (Prerequisites enforced at registration.) (1). (EXPERIENTIAL). May not be repeated for credit. Offered mandatory credit/no credit.*

This course provides students who have been trained in Writing 300 with the opportunity to consult in a supportive environment. Students sign up for one credit for which they consult two hours per week and attend a weekly one-hour meeting. In the weekly meeting, students share questions about difficult or unusual consulting sessions, get feedback and advice from their peers and the instructor, review their student evaluations for the week, and discuss how consulting can run more smoothly. It is also used for further professional development carried out through reading and writing assignments and projects.

**WRITING 302. Global Communication: Rhetorical Approaches to Multilingual Conversation**

*Consent of department required. (1). May not be repeated for credit.*

This course prepares students to lead conversation groups with multilingual undergraduates. Students in this course lead weekly conversation groups beginning in the second week of the semester. Students also observe one other conversation group and develop a creative outreach project that builds upon bi-weekly blog posts.

**WRITING 303. Special Topics in Coaching Writers**

*(1). May be elected four times for credit. May be elected more than once in the same term. Offered mandatory credit/no credit.*

This special topics course offers peer writing consultants and interested others the opportunity to gain writing and tutoring skills in specialized areas of writing through reading, class discussion, and practice consultations. Topics covered in various sections might include professional writing, multimodal writing, working with multilingual writers, and science writing.

**WRITING 305. MWrite Writing Fellows**

*Consent of department required. (1). (EXPERIENTIAL). May be elected three times for credit. Offered mandatory credit/no credit.*

This course is designed to help students who have been appointed as Writing Fellows gain the skills and concepts needed to participate in the MWrite Program.

**WRITING 340. Professional and Technical Writing and Communication in International Contexts**

*(1). May not be repeated for credit.*

This advanced writing course is designed for all students who will write and communicate professionally in international contexts, where different cultures interact. We will learn and practice how text, images, and other sign systems can be used to mediate knowledge, values, and actions

in international professional communication.

**WRITING 350. Excelling in Upper-Level Writing**

*Upper-level transfer students concurrently enrolled in at least one course for which they write on a regular basis. (1). May be elected twice for credit. Offered mandatory credit/no credit.*

This course serves upper-level transfer students and upper-division students who want to meet the expectations for writing in upper-level courses, especially courses that meet LSA's Upper-Level Writing Requirement. It addresses the writing challenges that students bring to the course, thereby providing immediate and direct assistance to upper-division student writers.

**WRITING 400. Advanced Rhetoric and Research**

*Completion of the First-Year Writing Requirement. (3). May not be repeated for credit. Rackham credit requires additional work.*

In this advanced critical writing and research course students study practical and rhetorical dimensions of the research process, learning at an advanced level how to define a topic; identify, critically evaluate, and analyze sources; formulate an incisive critical argument; and effectively address rhetorical concerns such as audience, purpose, and convention.

Students produce a 15-20 page research paper based on a course-related topic of their choice. Graduate students produce an additional 10-15 page paper.

**WRITING 405. Contemporary Topics and Multidisciplinary Writing**

*Students must have fulfilled their first-year writing requirement. (Prerequisites enforced at registration.) (3). May not be repeated for credit.*

What is writing across academic disciplines? This class synthesizes and analyzes rhetorical structures and disciplinary conventions by examining them through the filter of a contemporary topic. Students produce a variety of assignments, both formal and informal, individual and collaborative, including rhetorical analyses, portfolios, and multimedia presentations.

**WRITING 410. Quantitative Analysis and Writing in the Disciplines**

*Completion of the First-Year Writing Requirement. (3). (QR/2). May be repeated for a maximum of 6 credits. Rackham credit requires additional work.*

In various disciplinary iterations, this course provides instructions for logic and reasoning in both numbers and language. Different versions of this course examine numeracy and literacy as they are manifested in the humanities, the natural sciences, and the social sciences. Graduate students produce two 7-8 page papers in addition to undergraduate requirements.

**WRITING 420. Minor in Writing Capstone**

*Consent of department required. Completion of WRITING 220 and a majority of course requirements for the Minor in Writing program. (3). May not be repeated for credit.*

In this course, students enrolled in the Minor in Writing will complete the journey they began in the Minor gateway course, WRITING 220. The capstone course asks students to aggregate, synthesize and evaluate writing they have completed both for the Minor and across their undergraduate curriculum by producing a cumulative electronic writing portfolio that will showcase their skills and development. The capstone course also presents students

an opportunity to create an individualized, intensive writing project that concentrates their interests and compositional strengths. As with all courses in the Minor, emphasis will be placed on reflection, multimodal and multimedia composition, and workshop collaboration.

**WRITING 430. The Teaching of Writing**  
*Consent of department required. (3). May not be repeated for credit. Rackham credit requires additional work.*

This course aims to help students to become theoretically informed and well-practiced teachers of writing. During that process, students learn about writing, teaching, community service, cultural differences, and literacy practice.

## **Yiddish (YIDDISH)**

**YIDDISH 101 / GERMAN 127 / JUDAIC 101. First Year Yiddish I**  
*(4). May not be repeated for credit. No credit granted to those who have completed or are enrolled in JUDAIC 431 or YIDDISH 431. Graduate students elect JUDAIC 431 or YIDDISH 431. F.*

This is the first of a two-term sequence designed to develop basic skills in speaking, understanding, reading, and writing Yiddish. Active class participation is required as are periodic quizzes, exams, a midterm, and a final.

**YIDDISH 102 / GERMAN 128 / JUDAIC 102. First Year Yiddish II**  
*JUDAIC/YIDDISH 101. (4). May not be repeated for credit. No credit granted to*

*those who have completed or are enrolled in JUDAIC 432 or YIDDISH 432. Graduate students elect JUDAIC 432 or YIDDISH 432. W.*

This is the second of a two-term sequence designed to develop basic skills in speaking, understanding, reading, and writing Yiddish. Active class participation is required as are periodic quizzes, exams, a midterm and final.

**YIDDISH 201 / GERMAN 227 / JUDAIC 201. Second Year Yiddish I**  
*JUDAIC/YIDDISH 102. (4). May not be repeated for credit. No credit granted to those who have completed or are enrolled in JUDAIC 531 or YIDDISH 531. Graduate students elect JUDAIC 531 or YIDDISH 531. F.*

This is the third term of a language sequence in Yiddish. The course is designed to develop fluency in oral and written comprehension, and to offer a further understanding of the culture within which Yiddish has developed. Special emphasis will be devoted to reading material.

**YIDDISH 202 / GERMAN 228 / JUDAIC 202. Second Year Yiddish II**  
*JUDAIC/YIDDISH 201. (4). (Lang Req). May not be repeated for credit. No credit granted to those who have completed or are enrolled in JUDAIC 532 or YIDDISH 532. Graduate students elect JUDAIC 532 or YIDDISH 532. W.*

This is the fourth term of a language sequence in Yiddish. The course is designed to develop fluency in oral and written comprehension, and to offer a further understanding of the culture within which Yiddish has developed. Special emphasis will be devoted to reading material.

**YIDDISH 301 / GERMAN 327 / JUDAIC 301. Advanced Yiddish I**  
*JUDAIC 102 or YIDDISH 202. (3). May not*

*be repeated for credit. No credit granted to those who have completed or are enrolled in JUDAIC 631 or YIDDISH 631. Graduate students elect JUDAIC 631 or YIDDISH 631. F.*

This is the third year of the language sequence, focusing on reading and speaking Yiddish. Literary, historical and other texts will be considered, along with film, folklore, and music. Students will also learn how to approach handwritten documents.

**YIDDISH 302 / GERMAN 328 / JUDAIC 302. Advanced Yiddish II**

*JUDAIC/YIDDISH 301. (3). May not be repeated for credit. No credit granted to those who have completed or are enrolled in JUDAIC 632 or YIDDISH 632. Graduate students elect JUDAIC 632 or YIDDISH 632. W.*

This is the third year of the language sequence, focusing on reading and speaking Yiddish. Literary, historical and other texts will be considered, along with film, folklore, and music. Students will also learn how to approach handwritten documents.