LSA Departments and Programs:
Majors and Minors

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www.lsa.umich.edu/students/academicsrequirements/majorsminors

Course Information:
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African Studies Center (ASC)

The African Studies Center is a unit of the International Institute within the University of Michigan. ASC supports and promotes the work of more than 120 faculty members engaged in scholarship related to Africa. The African Studies Center enriches and provides additional support for teaching and research by organizing lectures, workshops, conferences and outreach events and by serving as the focal point for U-M faculty and students engaged in African studies on campus and in Africa.

Afroamerican and African Studies

4700 Haven Hall
505 South State Street
(734) 763-0543 (fax)
www.lsa.umich.edu/daas
e-mail: daas-info@umich.edu

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.

Roster of Afroamerican and African Studies Area and Cross-Area Courses


Cross-Area Courses: 211, 304, 322, 328 (appropriate sections), 331, 348, 354 (appropriate sections), 365, 373, 390 (appropriate sections), 394, 410, 411, 420, 421, 426, 495 (appropriate sections), 596 (appropriate sections).

Afroamerican and African Studies

May be elected as an interdepartmental major

Majoring in Afroamerican and African Studies will allow you to gain a broad understanding of the African Diaspora – the varied cultures of African-descended people around the globe – while at the same time allowing you to develop specialized knowledge about one of three major geographic areas within the African Diaspora: Africa, the Americas, or the Caribbean.

Prerequisite to the Major

AAS 111: Introduction to Africa and Its Diaspora (4 credits).

Requirements for the Major

A minimum of 34 credits, to include:

1. Two courses at the 200 level (6 credits total):
   - One Area Course. This course must focus on one of three major geographic areas of the African Diaspora: Africa, the Americas, or the Caribbean. The following courses best satisfy this requirement:
     - AAS 200, “Introduction to African Studies”
     - AAS 201, “Introduction to African American Studies”
     - AAS 202, “Introduction to Caribbean Studies”
   - One Cross-Area Course OR Second Area Course. If you choose to take a cross-area course, it must focus on at least two geographic areas of the African Diaspora. Those geographic areas include Africa, the Americas, the Caribbean, Europe, and Asia. AAS 211, “Dynamics of the Black Diaspora,” satisfies this cross-area requirement.
   - If you choose to take a second area course, it must focus exclusively on one geographic area of the African Diaspora not covered in your first area course.

2. Eight courses at the 300 or 400 level (24 credits total):
   - Six Area Courses (focusing on one geographic area of the African Diaspora). All six of these courses must focus on the same geographic area: Africa, the Americas, or the Caribbean. The area that you choose as your focal point is your submajor area. Among these six courses, you may include some cross-area courses if they include substantial coverage of your submajor area.
   - One Cross-Area Course. This course must examine diasporic issues across at least two geographic areas of the African Diaspora. Those geographic areas include Africa, the Americas, the Caribbean, Europe, and Asia.
   - One Second Area Course. This course must focus exclusively on one geographic area of the African Diaspora that is not your submajor area.

3. One Senior Seminar: AAS 495 (4 credits). This writing-intensive course offers a capstone experience for seniors. Students writing an AAS Honors thesis must enroll in AAS 495-Honors, an advanced section of the course.

Suggested Specializations. In selecting courses for your submajor, we recommend that you:

1. Cluster your 300- and 400-level courses around a particular specialization. Many AAS courses relate to one or more of the following specializations:
   - Health and Education
   - Expressive Cultures: Literature, Media, Arts, Religion, Languages
   - Gender and Sexuality
   - Globalization, Transnationalism, and Citizenship
   - Development, Politics, Law, and Environmental Studies
   - Urban Studies and Social Inequality
2. Include courses that represent different disciplines. For instance:

- If you are especially interested in African anthropology, you would benefit from taking a course in African sociology or African literature.
- If you are especially interested in African American film and visual art, you would benefit from taking a course in African American psychology, history, or communication studies.
- If you are especially interested in Caribbean or Latin American Studies, you would benefit from taking courses offered by the Department of Romance Languages or the Center for Latin American and Caribbean Studies. (In order to receive credit for courses offered by other programs or departments, you must seek permission from your DAAS advisor.)

For more information, please contact: daasadvising@umich.edu

Honors Plan. Students wishing to pursue DAAS Honors must have a 3.4 overall GPA and a 3.5 GPA in AAS courses. In addition to requirements set for the major, students seeking Honors need to:

- Contact the DAAS Honors Coordinator to apply for the program by the first term of their junior year, and no later than the end of the second term of their junior year. As part of the application process students also select a Faculty Thesis Advisor, who should be a member of the DAAS faculty.
- Take a special section of the Senior Seminar (AAS 495), titled “Advanced Research in African American & African Studies,” in the Fall term of their senior year. The student’s work in the Senior Seminar will focus on drafting a portion (approximately 25 pages) of the Honors thesis.
- Take AAS 410, “Supervised Reading and Research,” in the Winter term of their senior year, when they will expand, revise, and complete the thesis. The student’s faculty advisor will normally oversee this independent study. The finished Honors thesis should be 40 to 60 pages.
- Submit their final thesis to the DAAS office by the end of March. All theses must have the final approval of the faculty advisor. All theses are also read by at least one and in many cases two additional members of the faculty who will offer feedback and assess the quality of the thesis. If the thesis meets the criteria of excellence for receiving Honors, it will be assigned one of the following rankings: “Honors,” “High Honors,” or “Highest Honors.” The final determination of Honors ranking is made by the Honors Program Coordinator in consultation with the Director of Undergraduate Studies.

Seniors earning Honors are invited along with their guests and advisors to the AAS Graduation Ceremony, at which the students present brief summaries of their theses and receive a special certificate of achievement.

Advising. The DAAS Advising Center (5511 Haven Hall) is staffed with faculty and staff eager to provide academic advising on the DAAS curriculum for any student interested in these fields of study, whether pursuing a major, a minor, or one course. Call (734) 764-5513 or drop by during the posted hours. The DAAS Advising Center also sponsors final exam study breaks, informational meetings on graduate study, and other such events.

Afroamerican and African Studies Minor

A minor in Afroamerican and African Studies is not open to students with a major in the Department of Afroamerican and African Studies.

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. Appointments are scheduled at the Advising Office.

Afroamerican and African Studies is an ideal unit for the student interested in a minor in one of the fields concerned with the study of Africa and its Diaspora. Students can use an AAS minor to supplement and make more coherent their understanding of the knowledge in a traditional discipline. For instance, students concentrating in U.S. history could enhance and deepen their course work by taking a systematic course of study in AAS focusing not only on the many cross-listed courses between AAS and History but also on other non-cross-listed courses that the student might otherwise overlook if not affiliated with AAS. A course in African politics after colonialism, for example, would work well for such a History major.

Because of the plethora of disciplines, interdisciplinary faculty, and geographic connections designed into the DAAS curriculum, an AAS minor can become a valuable intellectual resource for majors in any field where DAAS has faculty strengths, including history, literature in English, anthropology, political science, sociology, education, psychology, art, and communications. Students in other disciplines, such as languages, could also find an asset in the range of AAS courses. A student of French language and literature would benefit from being able to take a series of courses related to Francophone Africa and the West Indies. Students in fairly regulated majors (such as chemistry) who have an interest in African history and culture would be able to pursue such an interest without jeopardizing the major.

Prerequisites to the Minor: None

Minor Program. A minimum of 17 credits. Students interested in pursuing a minor in Afroamerican and African Studies must meet the following requirements:

1. AAS 111.
2. One course at the 200 level (3 credits). The following courses best satisfy this requirement: AAS 200, 201, 202
3. Two courses at the 300 or 400 level (6 credits). These courses must focus on two of three major geographic areas of the African Diaspora (Africa, the Americas, or the Caribbean) or they may be cross-area courses that focus on at least two geographic areas of the African diaspora.
4. One senior seminar: AAS 495 (4 credits).

For further information, please contact: daasadvising@umich.edu

American Culture

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.

Ojibwe Language & Literature Program
The Ojibwe Program was started at U-M in the early 1970s and is one of the strongest in the country. The Program in American Culture is pleased to serve as the home unit for instruction in the Ojibwe (Anishnaabemowin) language and culture at U-M. Students interested in learning this endangered language have the opportunity to do so through a six-course sequence that also educates participants on the rich cultural history of these people:

- AMCULT 222/223: Elementary Ojibwe
- AMCULT 322/323: Intermediate Ojibwe
- AMCULT 422/423: Advanced Ojibwe

We also offer a course that focuses on the literature of the Anishnaabemowin tribe.

American Culture

May be elected as an area major

Prerequisites to the Major. None.

Requirements for the Major. A minimum of 28 credits. No more than 9 credits at the 200 level can be counted toward the major.
1. Core course: AMCULT 275, American Culture at Work.
3. Breadth Requirements: Students must also have classes focused on the following Breath 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)

Advising. Students are encouraged to consult with the undergraduate advisor. For appointments regarding the major, visit www.lsa.umich.edu/ac/undergraduate/advising.

American Culture 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 an Honors plan. Students usually apply in the fall term of their junior year.

Honors requirements span 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).

Latina/o Studies

May be elected as an area major

A component of the Program 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, Indian and African descent. Soon to become 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. Latinas,” “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.

Prerequisites to the Major. AMCULT 213 / LATINOAM 213. Introduction to Latino Studies

Requirements for the Major. An interdisciplinary degree, the Latina/o Studies major consists of 27 credits beyond the introductory prerequisite. The objective of this major 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. Latina/o Studies Second Language Proficiency Requirement for the Major: 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. Students will be required to take one 3 credit course, focusing on Latinas in the U.S., in each of the following areas (Note: the courses listed below the distribution areas are courses that are regularly offered through Latina/o Studies. Students, however, can use courses not listed here to satisfy distribution area requirements, pending approval from the program advisor).

History and Society
- AMCULT 205. American Cultures, section titled “Latina/o Religions & Cultures”
- AMCULT 315 / LATINOAM 315. History of U.S. Latinos
- AMCULT 301. Topics in Chicana/o History
- AMCULT 226 / LATINOAM 226. The Latin Tinge: Latin Music in Social Context in Latin America and the United States
- AMCULT 304. American Immigration
- AMCULT 313 / LATINOAM 313. Cuba and its Diaspora
American Culture Minors
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 Minor
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.

Prerequisites to the Minor: None.

Requirements for the Minor:
1. One AMCULT course (3 credit) at 200-level, or higher (AMCULT 222 and 223 are excluded).
2. AMCULT 275: Practices of American Culture (3 credits).
3. Three additional courses (9 credits total) at 300-level or higher. In consultation with the AC undergraduate advisor, students will plot their own path toward the minor through these additional courses.

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.

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 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

Prerequisites to the Minor: None

Requirements for the Minor: A minimum of 5 courses (15 credits). 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. One required survey course (3-4 credits): either
   - AMCULT / ARABAM 215 Introduction to Arab American Studies
   - AMCULT / ARABAM 235 The Middle East in Hollywood Cinema
2. 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 Kahil: 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 Kahil: 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. 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:
   - AAPTIS 100 / ACABS 100 / HISTORY 132 / HJCS 100. Peoples of the Middle East
   - AAPTIS 325 / HISTORY 325 / ASIAN 324 / MEMS 325 / RELIGION 325. The History of Islam in South Asia
   - AAPTIS 363 / RELIGION 363. The Qur'an and Its Interpretations
   - AAPTIS 365. The Prophet Muhammad in Islam
   - AAPTIS 381. Introduction to Arab Literature in Translation
   - AAPTIS 383. The Arab-Israeli Conflict in Middle Eastern Literature
   - AAPTIS 486. Topics in Modern Arabic Literature in Translation
   - AAPTIS 487 / HISTORY 443. Modern Middle East History
   - AAPTIS 493 / MENAS 493. Comparative Perspectives of the Middle East and North Africa
   - ACABS 100 / AAPTIS 100 / HISTORY 132 / HJCS 100. Peoples of the Middle East
   - ANTHRCUL 409. Peoples and Cultures of the Near East and North Africa
   - ASIAN 324 / HISTORY 325 / AAPTIS 325 / 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"
   - HISTORY 132 / AAPTIS 100 / ACABS 100 / HJCS 100. Peoples of the Middle East
   - HISTORY 241. America and Middle Eastern Wars
   - HISTORY 243 / MENAS 243. Islamic World History
   - HISTORY 324. Muslims in Contemporary Europe
   - HISTORY 325 / AAPTIS 325 / ASIAN 324 / MEMS 325 / RELIGION 325. The History of Islam in South Asia
   - HISTORY 443 / AAPTIS 487. Modern Middle East History
   - HISTORY 449. Topics in Middle Eastern History
   - HJCS 100 / AAPTIS 100 / ACABS 100 / HISTORY 132. Peoples of the Middle East
   - MEMS 325 / HISTORY 325 / AAPTIS 325 / ASIAN 324 / RELIGION 325. The History of Islam in South Asia
   - MENAS 243 / HISTORY 243. Islamic World History
   - MENAS 493 / AAPTIS 493. Comparative Perspectives of the Middle East and North Africa
   - REEES 490 / SOC 490 / WOMENSTD 492. Women and Islam: A Sociological Perspective
   - RELIGION 325 / HISTORY 325 / AAPTIS 325 / ASIAN 324 / MEMS 325. The History of Islam in South Asia
   - RELIGION 363 / AAPTIS 363. The Qur'an and Its Interpretations
   - SOC 218 / UC 218. Foundations of Intergroup Relations
   - SOC 490 / REEES 490 / WOMENSTD 492. Women and Islam: A Sociological Perspective
   - UC 218 / SOC 218. Foundations of Intergroup Relations
   - WOMENSTD 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.
   - 300- or 400-level Arabic language (no more than three credits can be applied toward the minor)

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.

Asian/Pacific Islander American Studies Minor

A minor in Asian/Pacific Islander American Studies is not open to students with any minor in the Department of American Culture.

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.

Prerequisites to the Minor: None.

Requirements for the Minor: At least 15 credits, in the following categories as stated:
1. ASIANPAM 214 / AMCULT 214: Introduction to Asian/Pacific American Studies
2. Core: 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-
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 the department’s designated advisors.

Prerequisites to the Minor: None

Requirements for the Minor: A minimum of 16 credits, to be chosen from the following categories as stated:

1. Core Course: AMCULT 202 Digital Culture

2. Electives: Four additional courses, three of which must be at the 300-level or above:
   - AMCULT 301 Topics in American Culture, sections titled “Digital Histories of America” and “Politics of Code”
   - AMCULT 334 / SAC 334 / COMM 334 Race, U.S. Culture, and Digital Games
   - AMCULT 498 Capstone Seminar in American Culture, sections titled “Numbers and Stories in American Experiences” and “Race on the Internet”
   - ARTDES 200, section titled “Programming for Poets”
   - ARTDES 372 Video Games
   - ASIAN 282 / SAC 282 / RCHUMS 283 Asia Goes Viral: Asian Pop Culture in the Age of Social Media
   - COMM 271 Communication Revolutions
   - COMM 315 Critical Approaches to the Internet
   - COMM 334 / AMCULT 334 / SAC 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
   - EDUC 222 Video Games and Learning
   - ENGLISH 280 Introduction to Digital Cultures
   - ENGLISH 403 Topics in Language and Rhetorical Studies, section titled “Digital Rhetorics”
   - ENGLISH 420 Technology and the Humanities
   - HISTORY 379 / RCCSCI 379 / SI 379 History of Computers and the Internet
   - RCHUMS 283 / SAC 282 / ASIAN 282 Asia Goes Viral: Asian Pop Culture in the Age of Social Media
   - RCCSCI 379 / HISTORY 379 / SI 379 History of Computers and the Internet
   - SAC 282 / RCHUMS 283 / ASIAN 282 Asia Goes Viral: Asian Pop Culture in the Age of Social Media
   - SAC 334 / AMCULT 334 / COMM 334 Race, U.S. Culture, and Digital Games
   - SAC 367 Introduction to Digital Media Studies
   - SAC 368 Topics in Digital Media Studies, section titled “Video Games as Culture / Form” and “Virtuality and Digital Identity”
   - SAC 376 New Media Theory
   - SI 379 / RCCSCI 379 / HISTORY 379 History of Computers and the Internet
   - SI 410. Ethics and Information Technology
   - SI 429 eCommunities: Analysis and Design of Online Interaction
   - WRITING 200 New Media Writing
   - WRITING 201 New Media Writing Mini-Course

Other courses as approved by the department advisor.
Latina/o Studies

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.

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.

Prerequisites to the Minor (must be taken for a letter grade): LATINOAM 213 / AMCULT 213: Introduction to Latina/o Studies.

Requirements for the Minor: At least 15 credits (must be taken for letter grade), chosen from the following categories as stated:

1. Latina/o Studies Core. At least two courses chosen from any of the following:
   - LATINOAM 327 / AMCULT 327 / ENGLISH 387 / SPANISH 327. Latina/Latino Literature of the United States
   - LATINOAM 381 / AMCULT 381 / SAC 381. Latinas/Latinos and the Media
   - LATINOAM 243 / AMCULT 243 / WOMENSTD 243. Introduction to Study of Latinas in the United States

2. Latina/o Studies Electives: Three courses (minimum of 9 credits), at least one of which must be at the 300-level. Only one course below the 300-level (including a first-year seminar on Latina/o Studies topic) may be used to satisfy this requirement.

Courses that a student did not use in Requirement 1 can be used to satisfy the elective requirement.

Students may elect a comparative ethnic studies course that includes a Latina/o component.

Native American Studies (NAS) Minor

A minor in Native American Studies is not open to students with any minor in the Department of American Culture.

The Native American Studies Program offers undergraduate and graduate courses in the field with an emphasis on Native American literature. 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.

Prerequisites to the Minor: None.

Requirements for the Minor: 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 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 428. Native American Literature
   - AMCULT 496. Social Science Approaches to American Culture, section subtitled “Native American Mental Health”
   - 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
   - ENGLISH 417, section subtitled “Contemporary Native American Women Writers”
   - RELIGION 262 / AMCULT 262. Introductory Study of Native Religious Traditions

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.”

Anthropology

101 West Hall
1085 South University Avenue
(734) 764-7274 (phone)
(734) 763-6077 (fax)
www.lsa.umich.edu/anthro

Anthropology is a field of study that deals with both the biological and cultural aspects of humanity. Its basic concerns include the organic evolution of the human species; the origin, development, and integration of customs, techniques, social relationships, and beliefs that define a way of life (or
culture) of human social groups; and the interrelations among these biological and cultural factors in human behavior.

The subject matter of anthropology is divided into four major areas of study: Anthropological Archaeology (ANTHRARC), Biological Anthropology (ANTHRBIO), Linguistic Anthropology, and Sociocultural Anthropology (ANTHRCUL).

Biological Anthropology considers human evolutionary history, the causes of present genetic diversity, and biological aspects of human behavior. It uses the evidence and concepts of paleontology, primate studies, population genetics, growth and nutrition, and ecology.

Anthropological Archaeology seeks to understand human behavior in the past, by examining the remains of human activity (such as settlements, tools, pottery) that have survived from earlier times. Through the analysis of material remains, archaeologists explore the cultural forms and social organization of human societies over the longest possible time span.

Sociocultural Anthropology describes, analyzes, and compares the widest possible range of human cultures and social institutions, with emphasis on the present day. While some sociocultural anthropologists concentrate on societies that differ from our own in scale or cultural history and way of life, others examine contemporary European and American societies with the wider perspective gained from looking at other cultures and societies.

Linguistic Anthropology views language as one of the most distinctive characteristics of human beings. It studies language in the context of human evolution, social relationships, and cultural forms, and it explores the role of languages and ways of speaking in cultural difference and social action.

Roster of Anthropology courses, by subgroup

### Cultural Anthropology

#### Introductory Courses: ANTHRRCUL 101, 158, 222, 225, 226, 256, 272, 298, 299


#### Sociocultural Anthropology – Theory/Method: ANTHRRCUL 230, 327, 330, 331, 447


### Museum, Honors, Reading, Research, and Field Courses

ANTHRARC 258, 392, 398, 399, 400, 401, 480, 487, 494, 496, 497, 499

ANTHRBIO 371, 398, 399, 463, 471

ANTHRRCUL 258, 300, 301, 398, 399, 499

### 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

### Anthropology

**May be elected as a departmental 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.

### Prerequisites to the Major

None, but ANTHRRCUL 101 is recommended.

### Requirements for the Major

At least 34 credits at the 200-level or above are required:

Choose at least one course in each of the following subfields:

#### A. Anthropological Archaeology:

- ANTHRARC 282 Introduction to Prehistoric Archaeology
- ANTHRARC 386 Early Civilizations

#### B. Biological Anthropology:

- ANTHRBIIO 201 Introduction to Biological Anthropology

#### C. Linguistic Anthropology:

- ANTHRRCUL 272, Language in Society
- ANTHRRCUL 273 Language and Culture

#### D. Sociocultural Anthropology:

- ANTHRRCUL 222 The Comparative Studies of Culture
- ANTHRRCUL 226 Introduction to Historical Anthropology
- ANTHRRCUL 230 Fundamentals of Social Theory
- ANTHRRCUL 330 Culture, Thought, and Meaning

The remaining credits are taken in the subfield of your choice with a minimum of five courses at the 300-level or above, at least one of which must be at the 400-level.

At least 20 credits must be completed in residence at the University of Michigan.

A maximum of 6 credits of independent research can be counted toward the major.

### Honors Plan

Students interested in scholarly research are encouraged to consider the Honors plan. Previous participation in the College Honors program is not a prerequisite. Seniors admitted to the Honors plan normally elect a seminar in their special field of interest: biological anthropology (ANTHRBIO 398), archaeology (ANTHRARC 398) or sociocultural or linguistic anthropology (ANTHRRCUL 398). The seminars give students an opportunity for intensive training and research experience; the Honors plan 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.

### Evolutionary Anthropology

**May be elected as an interdepartmental major**

Evolutionary Anthropology is a joint major, with 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.

Prerequisites to the Major.

- ANTHR BIO 201
- BIOLOGY 171, 172, 173; or BIOLOGY 195 and 173

Requirements for the Major. 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:
   ANTHR BIO 351, 360, 365, 366, 465, 466, 471, 474, 475, 476, 477, 479

2. Ecology and behavior:
   ANTHR BIO 342, 361, 368, 373, 467, 468, 471, 472, 478

3. Human adaptation:
   ANTHR BIO 364, 366, 373, 462, 471, 472

4. Evolution and genetics:
   ANTHR BIO 342, 360, 361, 363, 450, 452, 461, 467, 471, 475, 476, 479

* Courses taken as ANTHR BIO 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
   BIOCHEM 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 438, 532

2. Ecology, Evolution, and Behavior:
   BIOLOGY 252, 256, 281, 288
   CMPLXSYS 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.

At least 20 credits must be completed in residence at the University of Michigan.

A maximum of 6 credits of independent research can be counted toward the major.

Honors Plan. 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.

Minors in Anthropology

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. 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.

Anthropology

The Anthropology minor is not open to students with any major or any other minor in the Department of 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.

Prerequisites to the Minor: None.

Requirements for the Minor: 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 course must be at the 400-level, one course 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 in the LSA Course Catalog or under Course Info at: www.lsa.umich.edu/anthro/undergraduates/courses/undergraduatecoursesinanthropology_ci.

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, 286, 288, 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 undergraduate advisor for more information. Field courses (ANTHRARC 400 or 487) and Independent Reading and Research (ANTHRARC 499) may not be used toward the minor.
Biological Anthropology

The Biological Anthropology minor is not open to students with any major or any other minor in the Department of Anthropology.

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.

Prerequisites to the Minor: None.

Requirements for the Minor: At least five courses (no fewer than 16 credits), to be chosen from the following categories as stated:

1. ANTHRBIO 161.
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.

Medical Anthropology

Not open to students electing the Science, Technology, and Society minor in the Residential College or any other minor in the Department of 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.

Prerequisites to the Minor: None, but ANTHRCUL 101 or 222 are recommended.

Requirements for the Minor: At least five courses (no fewer than 16 credits), to be chosen from the following categories as stated:

1. ANTHRCUL 344, Medical Anthropology
2. Choose four courses from the following list of area and topical courses:
   - ANTHRBI 342 / ANTHRCUL 342. Nature/Culture Now!
   - ANTHRBI 363, Genes, Disease, Culture
   - ANTHRBI 364, Nutrition & Evolution
   - ANTHRCUL 212/WOMENSTD 212/NURSING 225, The Global HIV/AIDS Epidemic
   - ANTHRCUL 232, Genes, Genealogies, Identities: Anthropological Perspectives
   - ANTHRCUL 256, Culture, Adaptation and Environment
   - ANTHRCUL 258, section subtitled “Culture & Medicine”
   - ANTHRCUL 325/WOMENSTD 324, Childbirth & Culture
   - ANTHRCUL 327/RCSSCI 327, Critical Theory in Medicine and Healing
   - ANTHRCUL 342 / ANTHRBIO 342. Nature/Culture Now!
   - ANTHRCUL 352, Anthropology of the Body
   - ANTHRCUL 354 / HISTART 354. Art, Science, and Technology
   - ANTHRCUL 355/AAS 355/HISTORY 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
   - AAS 355/HISTORY 355/ANTHRCUL 355, Health & Illness in African Worlds
   - AAS 365/WOMENSTD 365, Global Perspectives on Gender, Health, & Reproduction
   - AAS 409/ANTHRCUL 408, Maternal/Child Health & Environmental Pollution in Africa
   - HISTART 354 / ANTHRCUL 354. Art, Science, and Technology
   - HISTORY 355/AAS 355/HISTORY 355, Health & Illness in African Worlds
   - NURSING 225/ANTHRCUL 212/WOMENSTD 212, The Global HIV/AIDS Epidemic
   - RCSSCI 327/ ANTHRCUL 327, Critical Theory in Medicine and Healing
   - WOMENSTD 212/ANTHRCUL 212/NURSING 225, The Global HIV/AIDS Epidemic
   - WOMENSTD 324/ANTHRCUL 325, Childbirth & Culture
   - WOMENSTD 365/AAS 365, Global Perspectives on Gender, Health, & Reproduction

3. or a course(s) approved by the Undergraduate Advisor.

The minor must include at least two courses at the 300-level or above.

Applied Physics

2071 Randall Laboratory
450 Church Street
(734) 936-0653 (phone)
(734) 764-2193 (fax)
www-applied.physics.lsa.umich.edu
e-mail: cyndia@umich.edu

Not a major

Applied Physics is a graduate intercollegiate program with participating faculty in the College of Literature, Science, and the Arts, the College of Engineering, and the Medical School. It combines coursework in the fundamentals of physical theory, its applications to technology, and practical “hands-on” training in the research laboratories leading to the Ph.D. degree.

Arab American Studies (see American Culture)

Architecture + Urban Planning

A. Alfred Taubman College of Architecture + Urban Planning (TCAUP)
2000 Bonisteel Boulevard
(734) 764-1300 (phone)
(734) 763-2322 (fax)
taubmancollege.umich.edu
e-mail: TaubmanCollegeStudentServices@umich.edu
Professor Monica Ponce de Leon, Dean

Not a major

Architectural education at the University of Michigan prepares students to participate actively in the design of buildings and 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.

Joint degree programs with LSA provide opportunities for students whose educational goals include:

- undergraduate degrees in both LSA and Architecture [see “Architecture (Joint Program in Liberal Arts and B.S. in Architecture)” under “Special Joint Degree Programs” on the LSA website],
- an undergraduate degree in LSA and a Masters in Architecture [see “Architecture (Joint Program in Liberal Arts and M.Arch. in Architecture)” on the LSA website].

Pre-Architecture Advising. The architecture program provides academic advising to current students at the University of Michigan and those enrolled at other colleges wishing to transfer into the undergraduate program. Students enrolled at U-M are encouraged to discuss their academic plans with both their current academic advisor (through their home department) and with a Taubman College Student Services Representative. You can schedule a visit online, email TaubmanCollegeStudentServices@umich.edu, or call (734) 615-0431. Appointments are held Monday – Friday from 9:00 AM – 4:00 PM. All appointments are held at the Art and Architecture Building (Room 2150) on north campus and should be scheduled three business days in advance of desired meeting time. Please take bus/driving time into consideration when scheduling your appointment time. Those students with pre-scheduled appointments will be served first.

Architecture Program: www.tcaup.umich.edu/architecture/about/the_program/

Armenian Studies Program

1080 South University Avenue, Suite 2603
(734) 763-0622 (phone)
(734) 763-4918 (fax)
www.ii.umich.edu/asp
email: armenianstudies@umich.edu

May be elected as an option in the major “Arabic, Armenian, Persian, Turkish, and Islamic Studies.” See Near Eastern Studies departmental listing for further details.

The Armenian Studies Program at the University of Michigan, Ann Arbor, began in 1976 with the introduction of courses in the Western Armenian language and a survey of Armenian history. In 1981 the Alex Manoogian Chair in Modern Armenian History was established, thanks to the generous gift of Mr. and Mrs. Alex Manoogian. Six years later, the Marie Manoogian Chair in Armenian Language and Literature was created, making the University of Michigan—Ann Arbor a major center of Armenian Studies in the United States. The activities of the program were enhanced by more recent gifts by the Manoogian family and others.

Courses taught by Professors Bardakjian and Libaridian constitute the core of this program. Instruction in Armenian studies is supplemented by courses offered by Professor Ronald Suny, the Charles Tilly Collegiate Professor of Social and Political History at the University of Michigan, as well as by post-doctoral fellows and visiting scholars in a variety of fields. In addition, the program offers graduate and post-doctoral fellowships and an extensive list of outreach activities such as public lectures, conferences, and workshops.

Art & Design

Penny W. Stamps School of Art & Design (A&D)
2038 Art & Architecture Building
2000 Bonisteel Boulevard
(734) 764-0397 (phone)
(734) 936-0469 (fax)
stamps.umich.edu
email: a&d@umich.edu
Professor Gunalan Nadarajan, Dean

Not a major

The Penny W. Stamps School of Art & Design (A&D) offers (1) an innovative media-rich and intellectually challenging bachelor of fine arts (BFA) degree that integrates traditional techniques with contemporary technologies and provides extensive opportunities for exhibition, community engagement, and international study; and (2) a bachelor of arts (BA) in Art & Design that provides a rigorous education in art and design with the flexibility of a liberal arts education.

Joint degree programs with LSA provide opportunities for students whose educational goals include undergraduate degrees in both LSA and A&D [see “Art & Design (Joint Program in Liberal Arts and Art & Design)” on the LSA website.]

The Stamps School of Art & Design offers dual admission to entering students who wish to pursue two degree programs.

Cross-Campus Transfer. The Stamps School of Art & Design requires prospective joint degree and cross campus transfers to attend an info session, held twice each term. Interested students should call (734) 936-0671 to find out the current schedule and reserve a seat. After attending an info session a student will be able to schedule the portfolio review (required for admission). Successful cross-campus applicants must have earned a cumulative GPA of 2.5 and at least 30 credits of coursework. Joint degree students will need a cumulative GPA of 3.0 and at least 30 credits of coursework.

Minor in Art & Design

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.
Class election
Declared minors cannot be guaranteed enrollment in a given Stamps School course, but are given preference in registration over students who have not declared the minor.

Classes marked with an (*) are defined as non-LSA, and count toward the limitations on non-LSA course work.

Advising. The Stamps School of Art & Design is committed to providing the entire undergraduate student body in LSA with a compelling opportunity to understand, appreciate and create art and design more fully, through a well-directed program of study. Students who wish to earn the minor in art and design must work with an art & design advisor to develop a coherent program of study based on the individual educational aspirations of the student. The Stamps academic advisor will consult with students enrolled in the minor to develop the focus of their plan of study. The assistant dean for undergraduate programs will exercise oversight of the minor and will certify each minor as complete. Peer advisors will provide supplemental and secondary advising assistance.

Smucker • Wagstaff Academic Programs Center
(734) 764-0397
web: stamps.umich.edu/undergraduate-current
e-mail: AskAnAdvisor@umich.edu

2038 Art and Architecture Building
2000 Bonisteel Boulevard

Appointments are scheduled online: stamps.genbook.com.

Exclusions. Majors in the Stamps School of Art & Design may not enroll in the minor. The Stamps School of Art & Design suggests that students in the Arts & Ideas in the Humanities major in the Residential College and those students engaged in the American Culture minor in Digital Studies receive express written permission from those department before adding a minor in Art & Design to ensure that the focus of the minor in Art & Design is not redundant.

Prerequisites to the Minor. Select one course from either A or B, below.

A. Drawing courses. One of:
- ARTDES 100 Drawing I (observational) *
- ARTDES 105 Drawing II (ideational) *

B. Fundamental Dimensional courses. One of:
- ARTDES 115 Studio 2D (two-dimensional work) *
- ARTDES 120 Studio 3D (three-dimensional work)
- ARTDES 125 Studio 4D (time-based work) *

Requirements for the Minor. A minimum of 5 courses (and 15 credits), distributed as follows:

A. One additional course selected from the prerequisite choices (3 credits).
- Fundamental Dimensions. Students who took a drawing course as a prerequisite to the minor must select a dimensional course: ARTDES 115*, 120 or 125*.
- Drawing. Students who took a dimensional course as a prerequisite to the minor must select a drawing course: ARTDES 100* or 105*.

B. Two studio courses at the 200 level (minimum of 6 credits).
- ARCH 211 Digital Drawing *
- ARTDES 200-219 *
- ARTDES 225-299 *
- MECHENG 250 Design and Manufacturing I *
- PAT 201 Introduction to Computer Music
- PAT 221 Computer Music *
- PAT 280 Sound Reinforcement *
- RCARTS 285 Photography
- RCARTS 286 Sculpture
- RCARTS 287 Printmaking
- RCARTS 289 Ceramics
- SAC 290 Introduction to Media Production
- THTREMUS 240 Introduction to Design
- THTREMUS 256 Lighting Design I
- THTREMUS 260 Scene Design I
- THTREMUS 270 Costume Design I
- UARTS 250 Creative Process

C. Capstone: One studio course at the 300 level (or higher, with approval of the assistant dean for undergraduate programs in the Stamps School of Art & Design) (minimum of 3 credits).
- ADABRD 300-399 *
- ARCH 312 Architectural Design
- ARTDES 300-397 *
- 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
- THTREMUS 356 Lighting Design II
- THTREMUS 360 Scene Design II
- THTREMUS 370 Costume Design II

D. Electives. A minimum of three credits selected from the following courses:
- ARTDES 130 Methods of Inquiry
- ARTDES 150 Art and Design in Context
- ARTDES 151 Art and Design History
- ARTDES 155 Intersections *
- ARTDES 160 Penny W. Stamps Lecture Series (3 iterations) *
- HISTART 271 Origins of Modernism: Art and Culture in Nineteenth Century France
- HISTART 272 Modern Art: Avant-Garde to Contemporary

Residency Requirement
Transfer courses cannot be counted toward the minor without the approval of the assistant dean for undergraduate programs in the Stamps School.

Constraints
Courses from other units within the University cannot be counted toward the minor without approval of the Assistant Dean.

With the exception of the foundation courses already mentioned as part of the minor, Stamps School 100-level courses may not be included in a program of study, because these courses do not progress beyond introductory instruction and so do not provide the level of rigor required by the minor.

Asian Languages and Cultures (ALC)

6111 South Thayer Building
202 South Thayer Street
(734) 764-8826 (phone)
(734) 647-0157 (fax)
www.lsa.umich.edu/asian
e-mail: um-alc@umich.edu

The department offers instruction in the languages, literatures, linguistics, and cultures of China, Japan, Korea, Tibet, South Asia, and Southeast Asia, including courses in traditional and modern Chinese and Japanese literature, Chinese, Japanese, and Korean civilization, Chinese philosophy, courses in the literatures and cultures of South and Southeast Asia, and a sequence of courses on the religions of China, Japan, Korea, Tibet, South and Southeast Asia. The department offers an undergraduate major in Asian Studies as well as minors in Asian Studies and Asian Languages and Cultures. Undergraduates are encouraged to consult departmental advisors about appropriate electives, about introducing an Asian component into a major focused in another department, as well as developing a plan of study leading to a major in Asian Studies.
The department’s core courses in the modern languages of East, South and Southeast Asia are designed to develop proficiency in the basic skills of speaking, aural comprehension, reading, and writing. To speed students’ progress toward a working knowledge of language, intensive work in Chinese and Japanese is usually offered during the summer (students must apply for admission to the summer program).

The faculty and staff in the department reserve the right to require students with previous background in an Asian language to take a placement test. Students will be placed in language classes according to the department’s best assessment of the student’s language skill and previous training. The department’s first-year language courses are designed for students with minimal or no previous exposure to the language in question. Students having previous experience with a language may be required to begin study at a higher level of instruction.

Please Note: Undergraduates with native or near native ability in an Asian language taught in the department (e.g., Chinese or Japanese) should not use that language to fulfill the language requirements for their submajor if they decide to major in Asian Studies. For information on these language requirements, see the description of the major in Asian Studies below.

Asian Studies

May be elected as a departmental 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.

Submajors: Chinese Studies, Japanese Studies, Korean Studies, South Asian Studies, Southeast Asian Studies

Suggested Fields of Study: Cultural Studies, Film, Gender Studies, History/Civilization, Linguistics, Literature, Philosophy, Performing Arts, Religion, Visual Culture

Prerequisites to the Major

A. One year (or first-year proficiency) of an Asian language taught in the Department of Asian Languages and Cultures.

B. ASIAN 235. Introduction to Asian Studies.

Prerequisites to Declaration. ASIAN 235 must be completed before declaring the major.

Requirements for the Major

Asian Studies Language Requirement for the Major. 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.

Course Requirements. 30 credits at the 200-level and above, 15 of which must be at the 300-level or above (At least 15 credits must be taken in residence at the University of Michigan.). The major is designed in consultation with, and approved by, a department advisor.

A. 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 sub-major 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.

B. Breadth requirement. [9 credits]

(1) ASIAN 381. Junior/Senior Research Seminar for Majors.

(2) At least six credits from either or both of the following two categories:

(a). 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

(b). 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).

C. 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.

Advising. Appointments are scheduled on the department’s online advising calendar. Please go to 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.

Honors Plan: Candidates for the Honors plan 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.

Minors in Asian Languages and Cultures

Students wishing to pursue a minor in the Department of Asian Languages and Cultures must develop a specific plan for its completion in consultation with a department advisor. Appointments are scheduled in the department.

Asian Languages and Cultures

A minor in Asian Languages and Cultures is not open to students with another minor in the Department of Asian Languages and Cultures

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.

Prerequisites to the Minor: Two years (fourth-term proficiency) in an Asian Language.

Requirements for the Minor: At least 15 credits, chosen in consultation with and approved by a department advisor, in the following categories, as stated:

1. Two terms of an Asian language, taught in the Department of Asian Languages and Cultures, at the third-year level or above.

2. Asian Studies: At least two courses on Asian culture that will familiarize the student with the contexts of the language the student has studied; one of these courses must be at the 300-level or above.
At least six of the credits must be elected at the University of Michigan or through an overseas program associated with the U-M.

Asian Studies

A minor in Asian Studies is not open to students with a major in Asian Studies or other minor in the Department of Asian Languages and Cultures. The 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 major, as well as the minor in Asian Languages and Cultures, this 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.

Prerequisites to the Minor: None.

Requirements for the Minor: At least 15 non-language credits chosen in consultation with and approved by a department advisor.

At least three courses in Asian Studies offered through ALC within one of the regional areas: Chinese Studies, Japanese Studies, Korean Studies, South Asian Studies, or Southeast Asian Studies. Two courses must be elected at the 300-level or above.

A 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.

Twelve of the credits counted toward the minor must be elected at the University of Michigan or at an overseas program associated with U-M.

Astronomy

311 West Hall
1085 South University
(734) 764-3440 (phone)
(734) 763-6317 (fax)
www.astro.lsa.umich.edu

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.

The Astronomy curriculum is useful to students seeking a general knowledge of astronomy as part of a liberal arts education as well as to those preparing for a professional career in the field. The introductory sequences provide an understanding of the structure and evolution of the universe, introduce basic concepts of science, and acquaint students with scientific methods. These introductory courses (ASTRO 101 and 102; 104; 115; 130; 201) both stimulate and satisfy intellectual curiosity and lay the foundation for advanced work.

The Astronomy and Astrophysics major and the Interdisciplinary Astronomy major require the same core courses, but whereas Astronomy and Astrophysics majors are required to take several upper-level physics courses, the Interdisciplinary Physics majors take their cognate program instead.

Astronomy has been pursued at the University of Michigan since 1856, and the historic Detroit Observatory still stands in its original location on Observatory Street as a reminder of the department’s longevity, although astronomical research is no longer performed there. The department operates a planetarium, undergraduate laboratories, and small telescopes located on the top floor of Angell Hall. It operates four research telescopes at three different sites: a 26 meter Radio Observatory located minutes away from campus, a 0.6 meter Curtis Schmidt telescope on Cerro Tololo, Chile, and two telescopes of 1.3 and 2.4 meter aperture at MDM (Michigan-Dartmouth-MIT) Observatory located on Kitt Peak near Tucson, Arizona. Graduate students have access to all of these instruments.

Student Astronomical Society (SAS). SAS provides a forum, primarily for undergraduate students, where they can learn about the astronomical profession. To further this end SAS holds regular meetings, sponsors lectures, provides tutoring in Astronomy classes, participates in Inreach/Outreach programs for local primary and secondary school students, and holds Public Viewing Nights at the Angell Hall Observatory.

Honors Research Tutorials. Students participating in the Honors Science Program may elect HONORS 291 and 292 through the Astronomy Department during the sophomore year. Professor Bergin assigns students on the basis of interests and background to participating staff members.

Astronomy & Astrophysics

May be elected as a departmental major; not open to those with a major in Interdisciplinary Astronomy

The major in Astronomy and Astrophysics is offered to students wishing to develop a comprehensive, physical understanding of astronomy, and is appropriate for students planning graduate studies in astronomy and related fields.

Prerequisites to the Major

1. Mathematics through MATH 216
2. PHYSICS 160/161 [or PHYSICS 140/141 and one of ECECS 183, ENGR 101, or an equivalent computing course approved by the Astronomy department advisor]
3. PHYSICS 240/241 or 260/261
4. PHYSICS 340/341 or 360/341

Requirements for the Major. A minimum of 36 credits, distributed as follows:

1. Astronomy Core:
   ASTRO 201, 361, 399, 402, 404, and 429
2. Physics Core:
   PHYSICS 390, 401, 405, 453
3. Quantitative Techniques:
   One of: PHYSICS 351 or 411
4. Astronomy Electives:
   One of: ASTRO 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.

Honors Plan. Students who are interested in scholarly research in astronomy and have a cumulative grade point average of 3.5 are encouraged to consider Honors plan. Students with a lower GPA may be admitted to the program at the discretion of the department advisor. The program 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.
Advising. The department advisor is Professor Bergin. Information about scheduling advising appointments is available from the department office.

Interdisciplinary Astronomy (B.A. or B.S.)

May be elected as a departmental major; not open to those with a major in Astronomy and Astrophysics.

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.

Prerequisites to the Major.
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 340/341 [or PHYSICS 360/341]

Requirements for the Major.
A minimum of 31 credits, distributed as follows:
1. **Astronomy Core:** ASTRO 201, 361
2. **Astronomy Electives.** At least six credits from: ASTRO 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.

Advising. Information about scheduling advising appointments is available from the Department office.

Minors in Astronomy
The minors in Astronomy are not open to students with a major in Department of Astronomy.

Students wishing to pursue a minor in the Department of Astronomy must develop a specific plan for its completion in consultation with the department’s designated advisor. Information about scheduling advising appointments is available from the department office.

Astronomy & Astrophysics

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.

Prerequisites to the Minor:
1. Mathematics through differential equations: MATH 216 or its equivalent
2. PHYSICS 140/141, 240/241, and 340/341.

Requirements for the Minor: At least 15 credits of courses to be selected from the following categories as stated:
1. No more than two Introductory Courses from this group
   a. Introduction to Astronomy and Astrophysics: ASTRO 201 (preferred) or 102.
2. Core Courses: at least two courses chosen from among: ASTRO 361, 402, 404.
3. Electives: Remaining credits can be selected from ASTRO 399, 401, 403, 405, 406, 427.

Interdisciplinary Astronomy

The minor in Interdisciplinary Astronomy is offered to students wishing to develop a broad overview of astronomy and understanding of science.

Prerequisites to the Minor: None.

Requirements for the Minor: At least 15 credits of courses to be selected from the following categories as stated:
1. **Planetary Science:** ASTRO 101 or 115
2. **Astrophysics:** ASTRO 102, 104, 105, or 142
3. 6 credits from: ASTRO 201, 205, 210, or 220
4. 3 credits from: A 300 or 400-level Astronomy course, or one of the Earth and Environmental Sciences, Philosophy, or Physics courses allowed for credit toward the major in Interdisciplinary Astronomy.

Students are encouraged to take introductory Physics courses in their earlier course of study.

Biological Chemistry

Biological Chemistry
U-M Medical School
5301 Medical Science Research Building III, Box 5606
1150 West Medical Center Drive
(734) 766-8584 (phone)
(734) 763-4581 (fax)

www.biochem.med.umich.edu/biochem
e-mail: umbiochem@umich.edu

Not a major

The Department of Biological Chemistry is a participating unit in the interdepartmental Biochemistry major listed under Chemistry.
Formal coursework is offered in both a four-week spring term and an eight-week summer term. Classes are taught by the Station's dedicated faculty, who concurrently carry out their own research projects. Enrolled students typically earn 5 credits in the spring and 10 credits in the summer, taking courses in all aspects of field biology such as limnology, entomology, parasitology, mammalogy, general ecology, evolution, ornithology, physiology, ichthyology, and terrestrial and aquatic sciences. Each formal course occupies the entire days assigned to it. Field work is supported by modern equipment, vehicles, boats, laboratories, and a fine library. Field work is supported by modern equipment, vehicles, boats, laboratories, and a library. There are typically about 150 students per season in these courses.

Be sure to request the most recent copy of the UMBS Bulletin for a complete list of courses. Meanwhile, please see below for an example of some of the courses typically offered at the station.

**SPRING:**
- EEB 330 Biology of Birds
- EEB 381 General Ecology
- EEB 455 Ethnobotany

**SUMMER:**
- BIOLOGY 482 Limnology: Freshwater Ecology
- EEB 320 / ENVIRON 311 Rivers, Lakes, & Wetlands
- EEB 348 / ENVIRON 348 Forest Ecosystems
- EEB 381 General Ecology

- EEB 390 Natural History & Evolution
- EEB 400 Advanced Research in Biology (1-3 credits)
- EEB 431 Biology of Animal Parasites (even years)
- EEB 442 Biology of Insects
- EEB 453 Field Mammalogy (even years)
- EEB 457 Algae in Freshwater Ecosystems (even years)
- EEB 486 Biology and Ecology of Fishes (odd years)
- EEB 492 Behavioral Ecology (odd years)
- EEB 556 Field Botany of Northern Michigan
- EEB 700 Advanced Studies in Biology (1-3 credits)
- ENGLISH 317 & 325 or ENVIRON 377 & 302 Environmental Writing & Great Lakes Literature
- ENVIRON 370 / ARCH 423 / UP 423 Introduction to Urban and Environmental Planning

**Majors in Biology or General Biology.** It is recommended that students with majors in Biology or General Biology give serious consideration to spending a summer at a field station, especially the University of Michigan Biological Station. The training and experience provided are particularly valuable for students interested in ecology, systematics, animal behavior, and evolutionary biology.

Many courses offered at the Biological Station can be used as part of a major in Biology or Plant Biology with approval from a department advisor.

**Research Programs for Students**
In addition to regular courses, the Biological Station offers a Research Experience for Undergraduates (REU) program. The REU program is an intensive nine-week program designed to provide hands-on experience and training in field biology and atmospheric science with all phases of research, including hypotheses formulation, data gathering, analysis, interpretation, and communication of scientific studies. Students receive a stipend.

**Specialized Research Facilities**
Specialized research facilities include a greenhouse and elevated carbon dioxide facility (open top chamber arrays for studying the responses of multiple trophic levels of terrestrial and aquatic ecosystems to elevated atmospheric CO₂), a soil biotron (a building built into the soil with 34 windows on the soil profile), an artificial stream facility on the east branch of the Maple River (water can be pumped out of the river to a concrete pad and distributed into small artificial streams in many ways), and stations for precipitation chemistry (NADP), ultraviolet monitoring (USDA UV-B), and mercury deposition.

A 31m tower was constructed in 1996 to study the atmospheric chemical and meteorological processes linked to tropospheric ozone and oxidant formation. Similarly in 1998 a 50m eddy flux tower was completed to study the movement of carbon dioxide and water in a forested ecosystem with continuous measurements of CO₂ and many environmental parameters. Specimen collections are available to researchers and are especially extensive in birds, fishes, insects, invertebrates and parasites, vascular plants, mosses and lichens.

**Scholarships & Financial Assistance**
The U-M Biological Station offers a wide range of scholarships and tuition support options to help qualified students who may need financial assistance. These include both merit-based and need-based awards.

We are committed to helping to make sure that students wanting to study at the station have an opportunity to do so. Please visit the UMBS website to learn about financial support options, or call the office at (734) 763-4461.
Program in Biology

1140 Undergraduate Science Building
204 Washtenaw Avenue
(734) 763-7984 (phone)
(734) 647-7892 (fax)
www.lsa.umich.edu/biology

Biology is an Interdepartmental Program administered jointly by the Department of Ecology and Evolutionary Biology (EEB) and the Department of Molecular, Cellular, and Developmental Biology (MCDB).

Majors and Minors. The Biology Program administers majors in Biology, General Biology, and Plant Biology and it administers minors in Biology and Plant Biology. Information on the Cell and Molecular Biology (CMB) major and the EEB major and minor is located under the listings for the Department of MCDB (CMB majors) or the Department of EEB (EEB major and minor).

Students interested in concentrating in Biology, General Biology, or Plant Biology must complete BIOLOGY 171, 172/174 and 173, or BIOLOGY 195 and 173, or equivalent.

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/.

Teaching Certificate. Students interested in obtaining a secondary teaching certificate with a teaching major or minor in Biology should consult the "Teacher Certification Program" section and the School of Education Teacher Education office.

Major GPA Calculation. For purposes of calculating grade point average, the term "field of the major" (for all majors) means the following:

1. All BIOL/EEB, MCDB, and Biological Station courses, including cross-listed ones, at the 200-level and above.
2. All required cognate courses (if any).
3. All mandatory prerequisites.

Biology

May be elected as an interdepartmental major

Exclusions: Students who elect a major in Biology may not elect the following majors: General Biology; Cell and Molecular Biology; Ecology and Evolutionary Biology; Microbiology; 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.

This major 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.

Prerequisites to the Major

- **Quantitative Analysis 1**: One of MATH 115, 120, 156, 175, 185, or 295
- **Quantitative Analysis 2**: One of
  - MATH 116, 121, 255, 176, 186, or 296
  - STATS 250; 400-level or above
  - BIOPHYS 290 / PHYSICS 290
  - EECS 203 or 280
  - EARTH 468
  - Any other course with a MATH 115 prerequisite chosen in consultation with a major advisor

[Note: any course used to meet this requirement cannot also be used as a major elective, i.e., a course cannot "double count".]

Requirements for the Major. 30 credits distributed as follows. At least 3 courses must be laboratory or field courses beyond the introductory level.

A. Laboratory or Field Courses in Biology Requirement (This requirement overlaps with other requirements): At least three courses beyond the introductory level. Library "research" and introductory biology laboratories do not qualify.

Three credits of independent research must be completed in one term to satisfy a laboratory requirement.

A maximum of three credits of independent research (EEB 300 or 400, or MCDB 300 or 400), under the direct supervision of a faculty member, or, under a faculty member of another University of Michigan department with an EEB or MCDB faculty co-sponsor, may be used as one of the laboratory experiences.

A maximum of three credits of any independent study course may count toward the major.

B. Other Requirements

1. Select at least one course from each of two groups I-II. (See Course Listings I-II for the available courses in each group.) Students should enroll in these courses as early as possible.

   I. **Molecular, Cellular, and Developmental Biology:**
      - BIOLOGY 205 (3) Developmental Biology
      - BIOLOGY 207* (4) Introductory Microbiology
      - BIOLOGY 225 (3) Animal Physiology
      - BIOLOGY 230* (4) Introduction to Plant Biology

      Note: Students taking BIOLOGY 225 also are encouraged to take BIOLOGY 226* – Animal Physiology Laboratory (2 credits).

   II. **Ecology, Evolution, and Organismal Biology:**
      - BIOLOGY 230* (4) Introduction to Plant Biology
      - BIOLOGY 252* (4) Chordate Anatomy/Phylogeny
      - BIOLOGY 255* (4) Plant Diversity
      - BIOLOGY 256* (4) Animals Functioning in Environments
      - BIOLOGY 281 (3) General Ecology
      - BIOLOGY 288* (4) Animal Diversity
      - BIOLOGY 381* (5) General Ecology (SU at U-M Biological Station)

      Note: Students taking BIOLOGY 281 also are encouraged to take EEB 372* – General Ecology Lab (3 credits).

An asterisk (*) indicates a laboratory course or a lecture course with a laboratory component.

2. **Required courses in genetics, biochemistry, and evolution:**
   a. Genetics: BIOLOGY 305;
   b. Biochemistry: one of MCDB 310 or BIOLCHEM 415 or CHEM 351;
   c. Evolution: EEB 390 or 391.

3. **Electives and Cognates**
   I. Select one course in EEB or MCDB at the 300- or 400-level
   II. Select additional BIOLOGY, EEB, or MCDB courses at the 200-level or above to bring the credit total for the major to at least 30 credits.

Two advisor-approved cognate courses may be used.
General Biology
May be elected as an interdepartmental major

Exclusions: Students who elect a major in General Biology may not elect the following majors: Biology, Cell and Molecular Biology, Ecology and Evolutionary Biology, Microbiology, Plant Biology, Biochemistry, Biomedical Science, or Neuroscience. They may also not elect a minor in Biology, Ecology and Evolutionary Biology, Plant Biology, Biochemistry, or Biochemistry.

General Biology has many of the same aims as Biology, but it is not recommended for students who wish to pursue graduate work in biology. It is an appropriate preprofessional major. It differs from Biology in that it requires fewer credits, less laboratory work, and has more breadth, particularly in the form of a non-science cognate course (see below).

Prerequisites to the Major
- BIOLOGY 171, 172/174 and 173; or BIOLOGY 195 and 173
- PHYSICS 125/127 and 126/128; or PHYSICS 135/136 and 235/236; or PHYSICS 140/141 and 240/241.
- CHEM 210/211 and 215/216;
- Quantitative Analysis 1: MATH 115, 120, 156, 175, 185, or 295
- Quantitative Analysis 2: One of
  - MATH 116, 121, 255, 176, 186, or 296
  - STATS 250; 400-level or above
  - BIOPHYS 290 / PHYSICS 290
  - ECE 203 or 280
  - EARTH 468
  - Any other course with a MATH 115 prerequisite chosen in consultation with a major advisor

[Note: any course used to meet this requirement cannot also be used as a major elective, i.e., a course cannot “double count”]

Requirements for the Major.
24 credits in biology and cognate fields, including:

1. Select at least one course from each of two groups I-II. (See Course Listings I-II for the available courses in each group.) Students should enroll in these courses as early as possible.

   I. Molecular, Cellular, and Developmental Biology:
   - BIOLOGY 205 (3) Developmental Biology
   - BIOLOGY 207* (4) Introductory Microbiology
   - BIOLOGY 225 (3) Animal Physiology
   - BIOLOGY 250 (4) Introduction to Plant Biology
   
   Note: Students taking BIOLOGY 225 also are encouraged to take BIOLOGY 226* – Animal Physiology Laboratory (2 credits).

   II. Ecology, Evolution, and Organismal Biology:
   - BIOLOGY 230* (4) Introduction to Plant Biology
   - BIOLOGY 252* (4) Vertebrate Evolution and Diversity
   - BIOLOGY 255* (4) Plant Diversity
   - BIOLOGY 256 (4) Animals Functioning in Environments
   - BIOLOGY 281 (3) General Ecology
   - BIOLOGY 288* (4) Animal Diversity
   - BIOLOGY 381* (5) General Ecology (SU at U-M Biological Station)

   Note: Students taking BIOLOGY 281 also are encouraged to take EEB 372* – General Ecology Lab (3 credits).

   An asterisk (*) indicates a laboratory course or a lecture course with a laboratory component

2. Required courses in genetics, biochemistry, and evolution:
   (a). Genetics: BIOLOGY 305;
   (b). Biochemistry: one of MCDB 310 or BIOLCHEM 415 or CHEM 351;
   (c). Evolution: EEB 390 or 391.

3. Two laboratory or field courses in biology beyond the introductory level. Library "research" and introductory biology laboratories do not qualify. A maximum of three credits of independent research (EEB 300 or 400, or MCDB 300 or 400), under the direct supervision of a faculty member, or, under a faculty member of another University of Michigan department with an EEB or MCDB faculty co-sponsor, may be used as one of the laboratory experiences. Three credits of independent research must be completed in one term to satisfy a laboratory requirement. A maximum of three credits of any independent study course may count toward the major.

4. One cognate course from the following list: (Note: This list, which is put together by the Biology Program Steering Committee, includes courses offered by non-natural science units that treat biology or natural science generally in the humanistic or social context. These are not science courses, but courses that treat science or scientific issues from a historical, cultural, ethical, or political perspective.)
   - ANTHRCUL 344 – Medical Anthropology
   - ENVIRON 256 / ANTHRCUL 256 – Culture, Adaptation, and Environment
   - ENVIRON 270 – Our Common Future: Ecology, Economics, and Ethics of Sustainable Development
   - PHIL 356 – Issues in Bioethics
   - PHIL 381 – Science & Objectivity
   - PHIL 420 – Philosophy of Science
   - PHIL 425 – Philosophy of Biology
   - RCNSCI 263 – Energy and the Environment
   - RCNSCI 270 – New Biotechnology: Scientific, Social, and Historical Perspectives
   - RCSSCI 275 / HISTORY 285 – Science, Technology, Medicine, and Society
   - SOC 330 – Population Problems
   - WOMENSTD 220 – Perspectives in Women’s Health
   - WOMENSTD 300 – Men’s Health

5. Select additional Biology, EEB, or MCDB courses at the 200-level or above (except EEB/MCDB 301, EEB/MCDB 302, or MCDB 412) to bring the major total to at least 24 credit.

Advising. To make an advising appointment, go to the Program in Biology website at www.lsa.umich.edu/biology/.

Plant Biology
May be elected as an interdepartmental major

Exclusions: Students who elect a major in Plant Biology may not elect the following majors: Biology, General Biology, Cell and Molecular Biology, Ecology and Evolutionary Biology, Microbiology, or Neuroscience. They may also not elect a minor in Biology; Ecology and Evolutionary Biology; Microbiology; or Neuroscience. They may also not elect a minor in Biology; Ecology and Evolutionary Biology; Microbiology; or Neuroscience. They may also not elect a minor in Biology; Ecology and Evolutionary Biology; Microbiology; or Neuroscience.

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.

Prerequisites to the Major
- BIOLOGY 171, 172/174, and 173; or BIOLOGY 195 and 173; or BIOLOGY 162 or 163;
- PHYSICS 125/127 and 126/128; or PHYSICS 135/136 and 235/236; or PHYSICS 140/141 and 240/241
- CHEM 210/211 and 215/216
- Quantitative Analysis 1: MATH 115, 120, 156, 175, 185, or 295
- Quantitative Analysis 2: One of
  - MATH 116, 121, 255, 176, 186, or 296

Exclusions:
Requirements for the Major. A minimum of 30 credits (Students who took BIOLOGY 162 or 163, or have AP credit for BIOLOGY 162 must take 33 credits), including: 

1. General Courses. Choose at least three of the following four courses (* indicates lab courses):
   a. Genetics: BIOLOGY 305.
   b. Biochemistry: one of MCD 310 or BIOLCHEM 415 or CHEM 351.
   c. Evolution: EEB 390 or 391.
   d. Ecology: BIOLOGY 281 [or EEB 381*].

2. Required Plant Biology Courses:
   a. Plant Biology: BIOLOGY 230*;
   b. Plant Diversity: BIOLOGY 255* [EEB 436* may be substituted];

3. Choose at least two plant biology elective courses from: EEB 401 (appropriate section), 420, 436*, 455*, 457*, 459*, 463*, 472, 489*; MCD 401 (when topic is appropriate), 405, 430, 433; at least one of these must be a lab course (indicated by *). Three credits of EEB 300/400 or MCD 300/400 can be included as one of these elective courses, and will count for laboratory credit as well, as long as the research is conducted in a plant biology research lab. Only three credits (total) of independent research credits may count toward the major.

4. Additional BIOLOGY, EEB, or MCDB courses at the 200-level or above (except: BIOLOGY 200, 262; EEB 301, 302; MCD 301, 302, 412) to bring the credit total for the major to at least 30 credits (33 credits for students who took BIOLOGY 162 or 163, or have AP credit for BIOLOGY 162). One cognate course may be used here (e.g., advanced math, chemistry, physics courses; STATS 400; BIOSTAT 503) with advisor approval. You are strongly encouraged to elect at least two credits of independent research and to enroll for a summer session at the Biological Station. The fourth course, from the required general courses listed in the first category (above) may also be taken and will count as an elective in this category.

Advising. To make an advising appointment, go to the Program in Biology website at www.lsa.umich.edu/biology/.

Honors Program

The Honors Program trains students to conduct independent research in Biology. In addition to completing all the requirements for the Biology major, an Honors degree requires a GPA in the major of at least 3.4, and the completion of a significant piece of independent research that is reported in an Honors thesis and presented in a public forum.

Admission to the Honors Program. It is recommended that students discuss the Honors Program with a department advisor early in their undergraduate career, and to meet with a department advisor to declare their Honors no later than six months prior to submission of the thesis.

The Honors Program

1. Research. The student must identify a research mentor, preferably by the end of the sophomore year. The research mentor can be a member of the Departments of EEB or MCDB, or a life scientist holding a faculty appointment in another unit of the University, such as the Medical School or the School of Public Health. If the mentor is not a member of the EEB or MCDB Departments, the student must also identify a co-sponsor from within the EEB or MCDB Departments.

   Students are encouraged to register for independent research (EEB 300 or 400, or MCD 300 or 400) for at least two terms; most students register for three or four terms of independent research. Students working in labs outside of EEB or MCDB will usually register for EEB or MCD 300 and 400 through their co-sponsor’s independent study number. It is permitted, however, to use the independent study number of another department if the co-sponsor approves it.

   It is highly recommended that students arrange to work full time on their Honors thesis during the summer between their junior and senior years. A limited amount of funds are available from university fellowships, so in most cases, support will have to come from the sponsoring lab. For students working in areas of field biology, it is often necessary to arrange for two field seasons to complete a project. For this reason, students working on field-based topics are urged to contact faculty about the possibility of starting work during the summer between their sophomore and junior years.

2. Readers. Prior to submitting the thesis, the student should identify three readers for the thesis, one of whom is the sponsor. At least two readers must be faculty members of the Departments of EEB or MCDB, unless the student receives the written approval of the Biology Honors Committee for an exception. Readers must agree to turn in their evaluations within ten days after the thesis is submitted.

3. The Honors Thesis. The thesis will be due on April 1, August 1, or December 1, depending on the anticipated graduation date. Based on the material presented in the Honors thesis and the student’s overall record, the readers of the thesis will recommend a rating of “No Honors,” “Honors,” “High Honors,” or “Highest Honors.” Readers of Honors theses are expected to file their reports with the Biology Program Honors Committee within ten days after the thesis is submitted. The reports of all readers should address the quality of the science reported in the thesis, as well as the quality of the written presentation. The report of the mentor should 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 that others in the lab played.

The Biology Program Honors Committee will meet approximately two weeks after the due date of theses to review the recommendations of the readers and decide on the appropriate level of Honors. The committee will attempt to maintain uniform standards for Honors and is not constrained by the level of Honors recommended by the readers. The Honors Committee may decide to table discussion and request the student to revise the thesis if they believe that a revised version might merit a higher rating.

4. Oral Presentation. The student will present the research results in an advertised public forum, such as a class, poster session, or a departmental seminar. The mentor will declare in the thesis evaluation letter when and where the student has made such a presentation.

Minors in the Program in Biology

Biology

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.

Exclusions: Students who elect a minor in Biology may not elect the following majors: Biology, General Biology, Plant Biology, Ecology and Evolutionary Biology, Cell & Molecular Biology, Microbiology, Neuroscience, or Biochemistry. They may also not elect a minor in Environmental Studies, Plant Biology, Ecology and Evolutionary Biology, or Global Change.

The minor in Biology is not intended for students interested in graduate work in the biological sciences.

Prerequisites to the Minor. BIOLOGY 171, 172/174 and 173; or BIOLOGY 195 and 173; or BIOLOGY 162 or 163.
Minor Program. Five courses totaling at least 15 credits in Biology at the 200-level and above, distributed as follows:

1. Two courses chosen from among:
   - Ecology: BIOLOGY 281
   - Genetics: BIOLOGY 305
   - Biochemistry: choose one course from
     - MCDB 310
     - BIOCHEM 415
     - CHEM 351
   - Evolution: EEB 390.

2. One laboratory or field course in BIOLOGY, EEB, or MCDB at the 200-level or above (EEB 300 or 400, or MCDB 300 or 400, independent study, elected for a minimum of 3 credits, may be used as the laboratory course. [Three credits of independent research must be completed in one term to satisfy a laboratory requirement]).

3. One additional BIOLOGY, EEB, or MCDB course at the 300-level or above except for:
   - EEB 301
   - EEB 302
   - EEB 399
   - EEB 499
   - MCDB 301
   - MCDB 302
   - MCDB 399
   - MCDB 412
   - MCDB 499

   A third course from Group One not used to satisfy Group One requirements may be used to satisfy this requirement.

4. Elective courses in BIOLOGY, EEB, or MCDB to bring minor credits to at least 15.

Plant Biology

A minor in Plant Biology provides undergraduates with exposure to several areas of science that are essential to an understanding of modern Botany. This program is well suited for those who wish to study plant biology as part of a liberal arts education, to prepare for a teaching career in secondary schools, as additional breadth for pre-professional students, or who simply have an interest in learning more about plants. It is not intended to provide preparation for graduate study in basic and applied areas of the plant sciences and related fields, such as ecology, microbiology, and biochemistry.

Exclusions: Students who elect a minor in Plant Biology may not elect the following majors: Biology, General Biology, Plant Biology, Ecology and Evolutionary Biology, Cell & Molecular Biology, Microbiology, Neuroscience, or Biochemistry. They may also not elect a minor in Environmental Studies, Biology, Ecology and Evolutionary Biology, or Global Change.

The minor in Plant Biology is not recommended for students interested in graduate work in the biological sciences.

Prerequisites to the Minor. BIOLOGY 171, 172/174, and 173; or BIOLOGY 195 and 173

Minor Program. A minimum of 15 credits in Ecology and Evolutionary (EEB), Molecular, Cellular and Developmental Biology (MCDB) or Program in Biology (BIOLOGY) at the 200-level or above (Students who took BIOLOGY 162 or 163, or have AP credit for BIOLOGY 162 must take 17 credits), distributed as follows:

1. Core courses in ecology, evolution, biochemistry, and genetics. Choose two courses from the following:
   - (a). Ecology: BIOLOGY 281 [or EEB 381 at the University of Michigan Biological Station (UMBS)]
   - (b). Evolution: EEB 390, offered in Ann Arbor or at the UMBS
   - (c). Genetics: BIOLOGY 305
   - (d). Biochemistry: MCDB 310 or BIOCHEM 415.

2. Plant Biology
   - (a). Plant Biology Core. Select one course from the following list
     - Plant Biology: BIOLOGY 230*
     - Plant Diversity: BIOLOGY 255*
     - Plant Physiology: MCDB 321
   - (b). Plant Biology Electives. Select additional electives from the following list of courses encompassing plant ecology, biodiversity, evolution, structure and development, and physiology, to bring credit total to at least 15(17).
     - BIOLOGY 230*, 255*
     - EEB 372*, 401, 412, 420, 436*, 459*, 463*
     - MCDB 321, 401 (when topic is appropriate), 405, 430

At least one course must be a 300- or 400-level course.

At least one lab course or course including a lab must be included (* indicates lab course or course including a lab).

Advising. To make an advising appointment, go to the Program in Biology website at www.lsa.umich.edu/biology/

Program in Biophysics

4028 Chemistry Building
930 North University Avenue
(734) 763-6722 (phone)
(734) 764-3323 (fax)
www.lsa.umich.edu/biophysics
e-mail: biophysics@umich.edu

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 Biophysics Student Services at biophysics@umich.edu.

Biophysics (B.S.)

May be elected as a departmental 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 cut-
ting-edge biophysical research and gain valuable experience for a future career.

**Gateway Courses.** Recommended but not required: One or two of BIOPHYS 115, 116, 120.

**Prerequisites to the Major.**
- MATH 115 and 116
- MATH 215 and 216; or CHEM 262
- PHYSICS 135 / 136 and 235 / 236 (or 140/141 and 240/241);
- BIOLOGY 162 or 171 or 172.

**Requirements for the Major.** A major in biophysics must include 32 credits:
1. **Core:** BIOPHYS 290, 370, 417, 450, 454, 495
2. **Outside Core:** BIOLOGY 305 and CHEM 351
3. **Electives:** One of BIOPHYS 430, 433, 435, 440, 463, MCDB 411. Other electives may be approved by a department advisor.
4. **Cognate:** One cognate course from PHYSICS 406, PHYSICS 453, CHEM 451 or BIOCHEM 451, MCDB 427, MCDB 428, MATH 404, MATH 471.
5. **Research:** At least two credits of BIOPHYS 399. Students wishing to do research in a laboratory outside the Biophysics Program must identify a co-sponsor.

**Honors Plan:** 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.**

**Double Major:** 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.

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**Business**

Ross School of Business
701 Tappan Street
(734) 763-5796 (phone)
(734) 763-7804 (fax)
www.bus.umich.edu

e-mail: BusinessMinor@umich.edu

The Ross School of Business offers a three-year Bachelor’s of Business Administration (BBA). It grounds students in the main areas of business while providing a broad liberal-arts education. Students enter the program after the equivalent of one or more years at the University of Michigan, then continue at Ross for three years of full-time enrollment (fall-winter). For further information, visit the Ross School of Business website (www.bus.umich.edu/Admissions/BBA/Whyross.htm) or our cross-campus transfer page: www.lsa.umich.edu/advising/academicplanning/crosscampustransfers/businesspreprofessionalundergraduateprogram_ci

The Ross School also offers a Minor in Business. The Minor in Business is neither a substitute for the BBA degree nor a fallback for students who are not accepted into the BBA program.

**Courses in Business.** Any undergraduate student may take business school courses without declaring the Minor in Business. However, students in the BBA program and students with a declared Minor in Business will have priority registration over other students.

**Minor in Business**

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.

**Admissions.** In order to declare the Minor in Business and have the minor listed on the official University record, students must first be admitted to the minor via a competitive application process. There is one admission cycle each year, and the Ross School plans to admit 100 students into the Minor in each of the first two years.

To be eligible to apply for admission to the minor, students must successfully complete the prerequisites and have junior standing or above by the end of the Winter term in which they apply. The application will be available in April and due in May for Fall Term admission. Following a pre-screening of applicants to verify eligibility, admission decisions will be based on a holistic review of the application form, transcript, and 1-2 essays.

**Recommendations:** Ross Undergraduate Admissions will pay particular attention to applications that explicitly and thoughtfully articulate why students are interested in the minor as a companion to their major.

**Summary of Requirements.** The Minor in Business curriculum consists of 15 credits and has flexible core and elective components; in addition, students must complete Microeconomics by graduation. Eligible courses taken prior to acceptance to the minor can be used to satisfy the 15-credit requirement. An overall grade point average of 2.0 or above within the minor must be achieved; and, all courses used to meet minor requirements.
must be elected both for credit and for a grade. At least 15 credits with a minimum of five courses (elective course credit-loads vary) to be chosen from core requirements and electives.

Prerequisites to Application to the Minor

- MATH 105, 115, or 120 (or equivalent) or upper-level calculus
- First-Year Writing Requirement Course or ENGR 100

Minor Program

1. **Core Requirements** (4 courses, 12 credits):
   - ACC 300 Financial Accounting (3)
   - or ACC 471 Accounting Principles (3)
   - FIN 302 Making Financial Decisions (3)
   - or TO 302 Managing Business Operations (3)
   - MKT 300 Marketing Management (3)
   - or MO 302 Positively Leading People and Organizations (3)
   - STRATEGY 302 (3)
   - or Action-Based Learning course from the following list (subject to change):
     - ES 395 Entrepreneurial Management (3)
     - ES 445 Base of the Pyramid – Business Innovation (3)
     - MKT 301 Strategic Marketing Planning (3)
     - MO 463 Leading Creativity and Innovation (3)
     - STRATEGY 470 Strategic Management of Knowledge in Professional Service Firms (3)
     - STRATEGY 492 Dynamic Capabilities Through Corporate Development (3)
     - TO 465 Business Systems Consulting (3)
     - TO 482 Projects in Operations, Purchasing and Supply Chain Management (7.5)

2. **Electives.** (Students must complete a minimum of 3 credits of electives from the following list, which is subject to change):
   - ACC 301 Managerial Accounting (3)
   - ACC 312 Intermediate Financial Accounting (3)
   - ACC 315 Cost Accounting (3)
   - ACC 318 Financial Statement Analysis (3)
   - BA 201 Business Thought and Action (3)
   - BE 311 Public Policies Toward Business (3)
   - BE 440 Risk Management & Insurance (3)
   - ES 250 Introduction to Entrepreneurship (3)
   - BL 305 Legal Environment (3)
   - BL 306 Law of Enterprise Organization (3)
   - BL 309 Business Ethics & Accountability (1.5)
   - BL 310 Negotiation & Dispute Resolution (1.5)
   - FIN 317 Corporate Financing Decisions (3)
   - FIN 320 Real Estate Fundamentals (1.5)
   - FIN 321 Commercial Real Estate Finance (1.5)
   - FIN 329 Financing Research Commercialization (3)
   - FIN 334 Applied Quant/Value Portfolio Management (3)
   - FIN 408 Capital Markets and Investment Strategy (1.5)
   - FIN 409 Fixed Income Securities and Markets (1.5)
   - FIN 415 Corporate Investment Decisions (3)
   - FIN 425 Entrepreneurial Finance (3)
   - FIN 440 Financial Trading (1.5)
   - FIN 480 Options and Futures in Financial Decisions (1.5)
   - MKT 303 Brand Management (1.5)
   - MKT 313 Consumer Behavior (3)
   - MKT 408 Pricing (3)
   - MKT 411 Advertising Management (3)
   - MKT 418 Marketing Research and Analysis (3)
   - MKT 425 New Product Management (3)
   - MO 321 Leadership in Organizations (3)
   - MO 414 Managing Change (3)
   - MO 415 Introduction to Managing Human Capital (3)
   - STRATEGY 310 The World Economy (3)
   - STRATEGY 361 International Management (3)
   - STRATEGY 411 Corporation in Society (3)
   - STRATEGY 417 Behavioral Processes of Strategic Management (3)
   - TO 410 Supply Chain Management (3)
   - TO 411 Decision Support with Excel (3)

Co-Requisite that must be completed prior to Graduation: ECON 101 Microeconomics (4).

Advising.** Students admitted to the Minor in Business should continue to meet regularly with academic advisors and career counselors in their home schools. Information sessions on the minor and the application process will be available for prospective minor applicants each Winter term. Once accepted into the minor, Ross advisors are available by appointment to review and develop plans to complete the Minor in Business and to verify completion of the Minor in Business. The Ross Academic Advising Director will communicate with LSA to officially coordinate the notation of the Minor in Business on student records.

Because admissions decisions will be made in July, after registration for the Fall term has occurred, students applying to the Minor in Business are advised to enroll in a full schedule of courses during the regular registration timeline. Students should select coursework in consultation with their home school academic advisors that will match both their degree requirements and interests.

During the regular Fall registration process, students may choose to enroll in Ross courses for which they meet prerequisites without being admitted to the minor. Those students who have applied to the minor will likely want to consider enrolling in one or more Ross classes prior to final decisions on minor admission. Students who are later admitted to the minor may want to make some adjustments to their schedules in July, if necessary, but will likely not need to make widespread changes to their course schedules. Students who are not admitted to the minor, but who have registered for Ross courses may still choose to complete business courses through Ross to align with their interests, so will also not need to make schedule adjustments during the summer, unless desired.

For more information visit [www.bus.umich.edu/MylImpactgateway/default.aspx?url=http%3A//www.bus.umich.edu/impact/CounselingCalendar/AcademicServices/](http://www.bus.umich.edu/impact/CounselingCalendar/AcademicServices/), or contact the Ross School of Business BBA Program Office at BusinessMinor@umich.edu.
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.

Majors and Minors. The Department of Chemistry offers programs leading to:

1. Minors in Biochemistry, Chemistry, Chemical Physics, Polymer Chemistry, and Chemical Measurement Science
2. a Bachelor of Science degree in a major in Chemical Science (B.S. degree, 120 credits);
3. a Bachelor of Science in Chemistry degree (B.S. Chem. degree, 124 credits);
4. a B.S. Chem. degree with Honors in chemistry. The Bachelor of Science in Chemistry (B.S. Chem.) degree requires a more rigorous and more specialized program of study. The program leading to Honors in chemistry is available to qualified students.
5. a Bachelor of Science or Bachelor of Arts in Interdisciplinary Chemical Sciences
6. a Bachelor of Science or Bachelor of Arts in Biomolecular Science
7. The department participates in and administers an interdepartmental major “Biochemistry.”

It is possible to incorporate a teaching certificate into any of these program options.

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

Information about the program leading to the joint degree with the College of Engineering and general information about teaching certificate requirements are described elsewhere; departmental requirements for these programs are described below.

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:

www.lsa.umich.edu/chem/undergraduate/advising

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.

Special Departmental 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 grade point average in the major of at least 2.0 is required; this includes chemistry courses, mathematics and physics prerequisites and advanced electives which are part of a 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.

B.S. in Chemistry (B.S. Chem.)

May be elected as a special degree program

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

The curriculum leading to a Bachelor of Science in Chemistry (B.S. Chem. degree) serves students who are interested in professional careers in chemistry, biochemistry, or related fields.

The B.S. in Chemistry is the most rigorous degree in pure chemistry offered by the department, and 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 4 credits (two semesters) of undergraduate research.

Chemistry Degree Credit and GPA Requirements

124 Credits. A 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 the major. Prerequisites must be taken for a grade.

Prerequisites to the Program

• CHEM courses through 215, 216, 241/242, and 260 or 370
• PHYSICS [135/136 or 140/141] and [235/236 or 240/241]
• MATH 115 (or 120), 116 (or 121), 215, 216, or an equivalent sequence.

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

Chemistry Degree Course Requirements include a minimum 124 credits, including CHEM 302 or 303, 402, 447, 461, 462, 463, 482, 483 and 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 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.

Advising. Students develop a degree program in consultation with a program advisor. Those interested in 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

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 online to see a chemistry department advisor.
Chemical Science (B.S.)

**May be elected as a departmental major**

**Exclusions:** Students who elect a major in Chemical Science may not elect the following majors: Interdisciplinary Chemical Sciences or Chemistry. They may also not elect any of the Chemistry minors.

This major 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 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.

**Prerequisites to the Major**

- 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 216, or equivalent

**Requirements for the Major**

- 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 453)
- Two of CHEM 399 (2 or 3 credits), 352, 436, 482, 483 to total a minimum of 5 credits. If a student chooses CHEM 399 to meet this requirement, the other course must be in an area of chemistry different from that of the CHEM 399 research.
- Additional 3-credit upper-level elective

**Advising.** Students develop a major in consultation with a program advisor. Those interested in a major in Chemical Science 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. Appointments are scheduled online at

[www.lsa.umich.edu/chem/undergraduate/advising](http://www.lsa.umich.edu/chem/undergraduate/advising)

Interdisciplinary Chemical Sciences (ICS)

**May be elected as a departmental major**

**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.

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.

**Prerequisites to the Major**

- PHYSICS 135/136 or 140/141 or equivalent
- MATH 115 (or 120) and 116 (or 121); or an equivalent sequence

**Requirements for the Major:**

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

**Honors Plan in Interdisciplinary Chemical Sciences.** 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.

**Advising.** Students develop a major in consultation with a program advisor. Advisor approval of 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.lsa.umich.edu/chem/undergraduate/advising](http://www.lsa.umich.edu/chem/undergraduate/advising)

Biochemistry (B.S.)

**May be elected as an interdisciplinary major**

**Exclusions:** Students who elect a major in Biochemistry may not elect the following majors: Biomolecular Science, Interdisciplinary Chemical Sciences, Biology, General Biology; Cell and Molecular Biology; 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.

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.

Prerequisites to the Major:
- BIOLOGY 171 and 172
- CHEM 210/211, 215
- MATH 115 (or 120), 116 (or 121), 215 (or the equivalent)
- PHYSICS 135/136 or 140/141 and [235/236 or 240/241];
  or the equivalent.

In cases where a student is transferring to Biochemistry from outside the University or is entering later, from another major, the student may be awarded an override for Genetics after completion of only one of either BIOLOGY 171 or 172, and where taking the other would be a burden for timely graduation. The override request must come from a Biochemistry department advisor along with the assurance that the student has been informed of the material from BIOLOGY 171 or 172 that he or she needs 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.

Requirements for the Major. 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.

2. Electives: A total of at least six credits chosen from:
- CHEM 417/BIPHYSICS 417 (3) Dynamic Biophysics
- CHEM 420 (3) Advanced Organic Chemistry
- CHEM 440/BIPHYSICS 440 (3) Biophysics of Disease
- CHEM 447 (3) Physical Methods of Analysis
- CHEM 454 (3) Biophysical Chemistry II: Macromolecular Structure, Dynamics
- CHEM 455 (3) Special Topics in Biochemistry
- CHEM 461 (3) Physical Chemistry I
- CHEM 467/AOSS 467/Earth 465/ENSCEN 467/ENVIRON 467 (3) Biochemical Cycles
- CHEM 521/BIPHYSICS 521 (3) Biophysical Chemistry II
- CHEM 528/BIOCHEM 528/MEDCHEM 528 (2) Enzyme Mechanisms, Ligand Binding,
- CHEM 673/BIOCHEM 673 (2) Enzyme Kinetics
- AOSS 467/CHEM 467/Earth 465/ENSCEN 467/ENVIRON 467 (3) Biochemical Cycles
- BIOCHEM 528/CHEM 528/MEDCHEM 528 (2) Enzyme Mechanisms, Ligand Binding,
- BIOCHEM 530/CHEMBIO 530 (3) Structural Biology
- BIOCHEM 541 (3) Molecular Genetics
- BIOCHEM 550 (3) Macromolecular Structure and Function
- BIOCHEM 576/PHYSIOLOGY 576/PHARMACOL 576 (1) Signal transduction
- BIOCHEM 640 (2) Post-transcriptional Gene Regulation
- BIOCHEM 650 (3) Mechanisms of Eukaryotic Gene Expression
- BIOCHEM 673/PHARMACOL 673 (2) Enzyme Kinetics
- BIOCHEM 675/CDB 675/MICROBIOLOGY 675 (2) Advanced Topics in Protein Trafficking and Localization
- BIOPHYSICS 417/PHYSICS 417 (3) Dynamical Processes in Biophysics
- BIOPHYSICS 435 (3) Biophysical Modeling
- BIOPHYSICS 440/CHEM 440 (3) Biophysics of Disease
- BIOPHYSICS 521/CHEM 521 (3) Biophysical Chemistry II
- CDB 675/BIOCHEM 675/MICROBIOLOGY 675 (2) Advanced Topics in Protein Trafficking and Localization
- CHEMBIO 530/BIOCHEM 530 (3) Structural Biology
- EARTH 465/CHEM 467/AOSS 467/ENSCEN 467/ENVIRON 467 (3) Biochemical Cycles
- ENSCEN 467/CHEM 467/AOSS 467/Earth 465/ENVIRON 467 (3) Biochemical Cycles
- ENVIRON 467/CHEM 467/AOSS 467/Earth 465/ENSCEN 467 (3) Biogeochemical Cycles
- MCB 405 (3) Molecular Basis of Development
- MCB 411 (3) Protein Biochemistry
- MCB 417 (3) Chromosome Structure and Function
- MCB 418 (3) Endocrinology
- MCB 427 (3) Molecular Biology
- MCB 428 (3) Cell Biology
- MCB 431 (3) Plant Biochemistry
- MCB 435 (3) Intracellular Trafficking
- MCB 436 (3) Introductory Immunology
- MCB 437 (3) Microbial Communities & Development
- MCB 441 (3) Cell Biology of Disease
- MCB 471 – Advanced Methods in Biochemistry
- MEDCHEM 528/BIOCHEM 528/Chemistry 528 (2) Enzyme Mechanisms, Ligand Binding,
- MICROBIOLOGY 675/BIOCHEMISTRY 675/CDB 675 (2) Advanced Topics in Protein Trafficking and Localization
- PHYSICS 417/CHEM 417/BIPHYSICS 417 (3) Dynamic Biophysics
- PHYSIOLOGY 576/BIOCHEMISTRY 576/PHARMACOL 576 (1) Signal transduction

3. An advanced laboratory or undergraduate research course. Recommended options for the advanced laboratory course are MCB 429, CHEM 482 or 483; or a total of four credits of undergraduate research elected as any combination of either CHEM 398 or BIOCHEM 398, by permission of the department advisor. Students elected the undergraduate research option must execute an extended research project under the supervision of a faculty member who agrees to oversee the project.

Honors Plan. Qualified students may elect an Honors plan. This program 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.

Advising. Appointments are scheduled online at the Chemistry website.

### Biomolecular Science (A.B. or B.S.)

May be elected as an departmental major

Exclusions: Students who elect a major in Biomolecular Science may not elect the following majors: Biology, General Biology, Neuroscience, Biochemistry, Interdisciplinary Chemical Sciences, Microbiology, or Cell and Molecular Biology. They may also not elect any of the Chemistry minors.

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 MCBDB. The major differs from the Biochemistry major in requiring fewer courses in chemistry if they decide to do so during the course of their studies.

**Biochemistry** / 25
Prerequisites to the Major:
- BIOLOGY 171, 172 and 173 (or the equivalent)
- 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) or STATS 250; or the equivalent
- PHYSICS [135/136 or 140/141] and [235/236 or 240/241] (or the equivalent).

Requirements for the Major. A minimum of 25 credits. The major must include:
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 MCB 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. List A. At least one course chosen from:
     - CHEM 303, 420, 451, 452, 453; 455
     - BIOLCHEM 451, 452
   - B. List B. At least one course chosen from:
     - BIOLOGY 305
     - BIOPHYS 440
     - CHEM 440;
     - MCB 405, 411, 422, 427, 428, 431, 437

Honors Plan. 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.

Advising. Appointments with the biochemistry advisors are scheduled online on the Chemistry website: www.lsa.umich.edu/chem/undergraduate/advising

Chemistry Minors
A minor offered by the Chemistry department is not open to students with a major in Chemistry, Interdisciplinary Chemical Sciences, Biochemistry, or Biomolecular Science.

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.

Students electing a minor within the Department of Chemistry may only elect ONE of the five minors offered by the Department.

Chemistry Minor
The Chemistry minor provides a broad and general exposure to the traditional areas of the chemical sciences.

Exclusions: The Chemistry Minor is not open to students majoring in Biochemistry, Biomolecular Science, Chemistry, Interdisciplinary Chemical Sciences, Cell and Molecular Biology, Biology, General Biology, Neuroscience, Ecology and Evolutionary Biology, Plant Biology, and Microbiology.

Prerequisite to the Minor:
- MATH 115 (or 120), or equivalent;
- PHYSICS 135 or 140, or equivalent.

Requirements for the Minor: at least 18 credits of courses as follows:
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 312 (2), 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. Neither CHEM 130, nor AP credits earned for CHEM 130, count toward the minor.

Biochemistry Minor
The Biochemistry minor provides a broad and general exposure to biochemistry from a chemical sciences perspective.

Exclusions: The Biochemistry Minor is not open to students majoring in Biochemistry, Biomolecular Science, Chemistry, Interdisciplinary Chemical Sciences, Cell and Molecular Biology, Biology, General Biology, Neuroscience, Ecology and Evolutionary Biology, Plant Biology, and Microbiology.

Prerequisites to the Minor:
- MATH 115 (or 120), or equivalent;
- PHYSICS 135 or 140, or equivalent;
- BIOLOGY 172.

Requirements for the Minor: at least 18 credits of courses as follows:
1. **Core:** CHEM 210/211, CHEM 215, CHEM 260 (or CHEM 261 and CHE 330) or CHEM 370, CHEM 351*.
2. **Electives:** CHEM 451* and 452, CHEM 241/242 or CHEM 245/246/247, BIOLOGY 305.
   *Students who have already taken any of the one-term biochemistry courses [MCBD 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 the electives.

Chemical Physics Minor
The Chemical Physics minor provides a concentrated exposure to physical chemical principles.

Exclusions: The Chemical Physics Minor is not open to students majoring in Biochemistry, Biomolecular Science, Biophysics, Chemistry, or Interdisciplinary Chemical Sciences.

Prerequisite to the Minor:
- MATH 115 (or 120), 116 (or 121), 215 (or the equivalent)
- PHYSICS 235 or 240, or equivalent.

Requirements for the Minor: 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 minor.

Polymer Chemistry Minor
The Polymer Chemistry minor provides a concentrated exposure to a sub-specialization within Materials Science from a chemical sciences perspective.

Exclusions: The Polymer Chemistry Minor is not open to students majoring in Biochemistry, Biomolecular Science, Chemistry, or Interdisciplinary Chemical Sciences.

Prerequisite to the Minor:
- MATH 115 (or 120), or equivalent;
- PHYSICS 135 or 140, or equivalent.

Requirements for the Minor: 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.
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.

Exclusions: The Chemical Measurement Science Minor is not open to students majoring in Biochemistry, Biomolecular Science, Chemistry, or Interdisciplinary Chemical Sciences.

Prerequisite to the Minor:
- MATH 115 (or 120), or equivalent;

Requirements for the Minor: at least 18 credits of courses as follows:
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.

The Kenneth G. Lieberthal and Richard H. Rogel Center for Chinese Studies (LRCCS)

1080 South University, Suite 4668
(734) 764-6308 (phone)
(734) 764-5540 (fax)
www.ii.umich.edu/lrccs
e-mail: chinese.studies@umich.edu

Not a major. Undergraduates may pursue Chinese Studies through the Asian Studies major or minor of the Department of Asian Languages and Cultures.

The Kenneth G. Lieberthal and Richard H. Rogel Center for Chinese Studies was founded in 1961, and since then has become one of the country's most prominent Centers devoted to a deeper understanding of China, past and present. The mission of the Center is to provide students, specialists and the public at large with expert resources and a deeper understanding of issues ranging from today's headlines to time-honored questions of value and meaning.

The Lieberthal-Rogel Center offers a broad, interdisciplinary approach to the study of China at the Master's Level. Undergraduates may pursue Chinese Studies through the Asian Studies major of the Department of Asian Languages and Cultures.

Classical Studies

2160 Angell Hall
435 South State Street
(734) 764-0360 (phone)
(734) 763-4959 (fax)
wwwlsa.umich.edu/classics
e-mail: classics@umich.edu

The Department of Classical Studies is concerned with every aspect of the worlds of the ancient Greeks and Romans – their languages and literatures, art and material cultures, philosophy, history, daily life, law and justice, political theory, and religion. The works and thoughts of the Greeks and Romans provide focus and historical perspective to questions which are heatedly debated in our time, making this field of study exciting and intellectually engaging. An ideal liberal arts education, Classical Studies is an excellent way to develop analytical abilities, to learn to make careful arguments and express them lucidly as well as come to a solid understanding of some of the greatest monuments of human thought and art.

Special Departmental 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.

Advising. Students interested in the department’s majors in Ancient Greek (Ancient) Language and Literature, Latin, Classical Languages and Literatures, Classical Archaeology, Classical Civilization, or Greek (Modern) Language and Culture 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 undergraduate advisors as early as possible in order to plan their programs and avoid unnecessary scheduling conflicts.

Honors Plans. 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.

Classical Archaeology

May be elected as a departmental major

Classical archaeology is the study of the material culture – the artifacts, sites, monuments, and landscapes – of the ancient Mediterranean world. While the civilizations of Greece and Rome tend to be our focus, other areas, notably Egypt and the Near East, also form part of what we study. Classical archeology deals with all periods from the Paleolithic through the Byzantine.

Courses in Classical Archaeology generally do not require knowledge of Greek or Latin.

Requirements for the Major. Requires a minimum of 9-10 courses (at least 3 credits each) including:
1. Two of the following introductory courses: CLARCH 220, 221, 222, 323.
2. Three upper-level courses (numbered 380 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.

Students interested in possibly continuing in the field of Classical Archaeology should discuss their plans (not least in the ancient languages) with the undergraduate advisor as early and as frequently as possible.

Honors Plan. In addition to the Honors plan requirements stated above, Honors candidates are required to take a minimum of eight credits in the second classical language (Greek if the major language is Latin; Latin if the major language is Greek).

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.

Classical Civilization

May be elected as a departmental major

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.

Prerequisites to the Major. 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, 102, HISTORY 200, 201, GTBOOKS 191.

Requirements for the Major. Requires a minimum of 9 courses (of at least 3 credits each) for approximately 29 credits including:

1. at least five upper-level courses (minimum 15 credits) in Classical Civilization at the 300- or 400-level, with at least two of these at the 400-level. These courses must include at least one course in literature and one course in religion/philosophy. One course in Latin or Ancient Greek may substitute for one of these Classical Civilization courses.
2. One course (minimum 3 credits) in Classical Archaeology.
3. One course (minimum 3 credits) in Ancient Greek or Roman history. This requirement is separate from any History course that may have been taken as a prerequisite to the major.

4. In consultation with an advisor, at least one upper-level elective/cognate course (minimum 3 credits) outside the division of Classical Civilization. LATIN 231, 232, 295 or GREEK 301, 302, 307, 308 may also count to meet this requirement.
5. The "Capstone Seminar," either CLCIV 480 or CLCIV 481. Honors candidates may substitute CLCIV 494 and 495 in place of the Capstone Seminar.

Honors Plan. In addition to the Honors plan requirements stated above, Honors majors must achieve fourth-term language proficiency, as defined by the LSA language requirement, in either ancient Greek or Latin. Students must also take two upper-level cognate courses deemed relevant (at the discretion of the thesis advisor) to the subject of the Honors thesis.

Classical Languages & Literatures

May be elected as a departmental major

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 major or 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 structured 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. See Ancient Greek Language and Literature and Latin Language and Literature, below.

Requirements for the Major. The major requires study of both Greek and Latin; the student chooses one language as the major 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 major language at least 3 courses at the 400-level or above; 300-level courses count toward the major in the major language only.
2. In the minor language, at least one course at the 400-level or above.
3. Two courses selected from CLARCH (221 or 222), CLCIV (101, 102, or 302), or HISTORY (200 or 201).

Three credits of Independent Study (GREEK 499 and LATIN 499) may be used with written approval of the undergraduate advisor.

Honors Plan. In addition to the Honors plan requirements stated above, Honors candidates must take one course, at or above the 450-level, in either Greek or Latin.

Greek (Ancient) Language & Literature

May be elected as a departmental major

Prerequisites to the Major. GREEK 101 and 102 or special placement examination.

Requirements for the Major. 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. Two courses selected from CLARCH 221, CLCIV 101, HISTORY 200.

Three credits of Independent Study (GREEK 499) may be used with written approval of the undergraduate advisor.

Honors Plan. In addition to the Honors plan requirements stated above, Honors candidates must take one course, at or above the 450-level, in Greek or Latin.

Latin Language & Literature

May be elected as a departmental major

Prerequisites to the Major. LATIN 194 or 232 or special placement examination.

Requirements for the Major. Requires a minimum of 9 courses (of at least 3 credits each) including:

1. Seven courses in LATIN at the 300-level or above; at least 4 of these courses must be at the 400-level or above and must include:
   (a) LATIN 401 or 402;
   (b) LATIN 409 or 410;
   (c) another course from (a) or (b) or another course at the 400-level or above.
2. Two courses selected from CLARCH 222, CLCIV 102 and 302, or HISTORY 201.

Three credits of Independent Study (LATIN 499) may be used with written approval of the undergraduate advisor.

Honors Plan. In addition to the Honors plan requirements stated above, Honors candidates must take one course, at or above the 450-level, in Latin.
Teaching Certificate. Students interested in a secondary school teaching certificate with a teaching major or minor in Latin must have Professor Deborah Ross approve their program of study.

Teaching Major in Latin. Thirty credits which must include:
1. Fifteen credits in LATIN beyond LATIN 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.

Professor Deborah Ross 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.

Modern Greek Studies

wwwlsa.umich.edu/modgreek

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. In addition to acquiring an in-depth knowledge of contemporary Greek language, culture, and history, students gain exposure to a number of disciplines and become aware of distinct methods (literary, historical, anthropological, theoretical / philosophical, etc.) used in the study of civilizations. 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, globalization, 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; interested students should contact Professor Vassilios Lambropoulos.

Greek (Modern) Language and Culture

May be elected as a departmental major

Prerequisites to the Major. GREEKMOD 101 and 102 (or MODGREEK 101 and 102).

Requirements for the Major. Minimum of ten courses, distributed as follows:
1. Modern Greek Language: Four (4) terms of Modern Greek language courses 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. At least one course must be selected in three of the areas listed below:
   A. Classical Civilization
   B. Byzantine History and Art
   C. Anthropology
   D. Political Science

Honors plan. Students holding a cumulative GPA of 3.5 and a GPA in the Modern Greek Studies major of 3.5, 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. In addition to the normal requirements for the major, students must complete an Honors Thesis and a reading list in their senior year.

Advising. Department advising is provided by Professors Vassilios Lambropoulos and Artemis Leontis. Information about scheduling appointments is available from the department office.

Classical Studies Minors

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.

Classical Archaeology

The Classical Archaeology minor is not open to students with a major in Classical Archaeology or Classical Civilization or any other minor in the Department of Classical Studies

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.

Prerequisites to the Minor: CLARCH 221, 222, or 323.

Requirements for the Minor: 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, 102, 302; HISTORY 200, 201).
3. Upper-Level Classical Archaeology courses: At least three courses at the 300- or 400-level in CLARCH.

Classical Civilization

The Classical Civilization minor is not open to students with a major in Classical Civilization or any other minor in the Department of Classical Studies

This 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.

Prerequisites to the Minor: 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 (The Ancient Greek World)
• CLCIV 102 (The Ancient Roman World)
• HISTORY 200 (Greece to 201 B.C.)
• HISTORY 201 (Rome)
• GTBOOKS 191 (Great Books)

Requirements for the Minor: At least five upper-level courses (minimum 15 credits) in Classical Civilization at the 300- or 400-level, with at least one of these at the 400-level. These courses must include at least one course that satisfies the Upper-Level Writing Requirement or be one of the “Capstone Seminars,” either CLCIV 480 or CLCIV 481.

One of the 300-level courses in Classical Civilization may be substituted for with any of the following:
1. One course (minimum 3 credits) in Classical Archaeology.
2. One course (minimum 3 credits) in Ancient Greek or Roman history (other than one taken as a prerequisite to the minor).
3. One course in ancient Greek or Latin at the third-term level or above.
4. MODGREEK 325, “Athens Present and Past”.

Greek (Ancient) Language and Literature
The Greek (Ancient) Language and Literature minor 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

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.

Prerequisite to the Minor: GREEK 301, or equivalent as determined by departmental placement examination.

Requirements for the Minor: At least 16 credits of courses, to be chosen from the following three categories as stated:
1. Greek Language and Literature courses: at least two upper-level courses, above GREEK 301.
2. Greek Civilization courses: at least one upper-level 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.

Latin Language and Literature
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

Modern Greek Studies
The Modern Greek Language and Culture minor is not open to students with a major in Greek (Modern) Language and Culture or any other minor in the Department of Classical Studies

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.

Prerequisite to the Minor: GREEKMOD 201 (or MODGREEK 201), or equivalent as determined by departmental placement examination.

Requirements for the Minor: At least 16 credits of courses, to be chosen from the following three categories as stated:
1. Modern Greek Language and Literature: at least two courses in modern Greek language and literature, above GREEKMOD 201 (or MODGREEK 201).
2. Modern Greek culture: at least one upper-level course.
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.

Climate and Space Sciences and Engineering (CSSE)

Climate and Space Sciences and Engineering
College of Engineering
2204 Space Research Building
(734) 763-6234 (phone)
(734) 763-0437 (fax)
aoss.engin.umich.edu
Not an LSA major

Climate and Space Sciences and Engineering, a department in the College of Engineering, is the only one that combines science and engineering, offering an integrated view of Earth and space. The blending of atmospheric and space sciences with engineering puts CSSE at the forefront of the movement to understand the Earth, atmosphere, planets, solar system and space weather in a whole systemic view, rather than individual components. Although Climate and Space Sciences and Engineering 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 Space Sciences and Engineering 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 in the Climate and Space Sciences and Engineering subsection and may be elected by LSA students as a part of non-LSA course work.

Students who have a serious professional interest in the field should consult the department.
Weinberg Institute for Cognitive Science

Weinberg Institute
6530 Haven Hall, Suite 6C51
505 South State Street
(734) 615-3275 (phone)
(734) 936-3406 (fax)
www.lsa.umich.edu/weinberginstitute
e-mail: cogsciprog@umich.edu

The Weinberg Institute for Cognitive Science is an institute co-sponsored by the Departments of Linguistics, Philosophy, and Psychology, and supervised by the Cognitive Science Executive Committee.

Cognitive Science

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, multidisciplinary 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, (c) language, and (d) philosophy of mind. 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.

Prerequisites to the Major.

1. COGSCI 200: Introduction to Cognitive Science. Students may declare the Cognitive Science major after they have completed COGSCI 200.
2. Each track has prerequisites for that track’s core courses. Courses used to satisfy track elective requirements may have additional prerequisites.

Special Program Policies

Distribution. Students in the Cognitive Science major may count introductory courses in PSYCH, LING, PHIL, ECON, EECS toward their College Area Distribution requirement, although these introductory courses cannot simultaneously count as core courses in the major. COGSCI 200 will not count toward distribution for Cognitive Science majors.

Double Majoring. Cognitive Science majors may double major in BCN, Linguistics, Neuroscience, Philosophy, Psychology, or any 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.

Major Program.

A minimum of 27 credits is required. 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. Five elective courses (chosen from a track-specific list)
3. Senior capstone experience (chosen from courses identified each year by the Cognitive Science Executive Committee)

The combined set of students’ required and elective courses must be selected from a minimum of three departments.

Prerequisites for required courses

1. One of:
   a. STATS 250: Introduction to Statistics and Data Analysis
   b. MATH 425/STATS 425: Introduction to Probability
2. ECON 401: Intermediate Microeconomic Theory (if select ECON 408/PHIL 408)
3. One course in calculus (MATH 115, 116, 121, 156, 175, 176, 185, 186, 215, 295, or 296)
4. One introductory course in Philosophy

Required Track Courses

1. PHIL 361: Ethics
2. One of:
   a. PHIL 443: Foundations of Rational Choice Theory
   b. ECON 408/PHIL 408: Philosophy and Economics
3. PSYCH 449: Decision Processes

Electives. Five courses selected from:

- ECON 309: Experimental Economics
- ECON 408/PHIL 408: Philosophy and Economics
- ECON 490: Topics in Microeconomics: Economics and Psychology
- EECS 492: Introduction to Artificial Intelligence
- PHIL 340: Minds and Machines
- PHIL 366: Introduction to Political Philosophy
- PHIL 408/ECON 408: Philosophy and Economics
- PHIL 429: Ethical Analysis
- PHIL 443: Foundations of Rational Choice Theory
- POLSCI 391: Modeling Political Processes
- POLSCI 490: Game Theory and Formal Models
- PSYCH 335: Introduction to Animal Behavior
- PSYCH 345: Introduction to Human Neuropsychology
- PSYCH 346: Learning and Memory
- PSYCH 348: Psychology of Thinking
- PSYCH 433: Biopsychology of Motivation
- PSYCH 448: Mathematical Psychology
- PSYCH 476: Positive Psychology

Computation 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.

Prerequisites for required courses

1. One of:
   a. STATS 250: Introduction to Statistics and Data Analysis
   b. MATH 425/STATS 425: Introduction to Probability
2. ECON 401: Intermediate Microeconomic Theory (if select ECON 408/PHIL 408)
3. One course in calculus (MATH 115, 116, 121, 156, 175, 176, 185, 186, 215, 295, or 296)
4. One introductory course in Philosophy

Required Track Courses

1. PHIL 361: Ethics
2. One of:
   a. PHIL 443: Foundations of Rational Choice Theory
   b. ECON 408/PHIL 408: Philosophy and Economics
3. PSYCH 449: Decision Processes

Electives. Five courses selected from:

- ECON 309: Experimental Economics
- ECON 408/PHIL 408: Philosophy and Economics
- ECON 490: Topics in Microeconomics: Economics and Psychology
- EECS 492: Introduction to Artificial Intelligence
- PHIL 340: Minds and Machines
- PHIL 366: Introduction to Political Philosophy
- PHIL 408/ECON 408: Philosophy and Economics
- PHIL 429: Ethical Analysis
- PHIL 443: Foundations of Rational Choice Theory
- POLSCI 391: Modeling Political Processes
- POLSCI 490: Game Theory and Formal Models
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- PSYCH 345: Introduction to Human Neuropsychology
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Prerequisites for the required courses
1. One of PSYCH 111, 112, 114, 115, or 116
2. EECS 203 Discrete Math
3. EECS 280 Programming and Introductory Data Structures

Required Track Courses
1. One of
   a. PSYCH 240 Introduction to Cognitive Psychology
   b. PSYCH 245 Cognitive Neuroscience
2. EECS 281 Data Structures and Algorithms
3. EECS 492 Introduction to Artificial Intelligence

Electives. Five courses selected from:
- EECS 445: Introduction to Machine Learning
- EECS 595/LING 541/SI 561: Natural Language Processing
- LING 313: Sound Patterns
- LING 315: Introduction to Syntax
- LING 316: Aspects of Meaning
- LING 342: Perspectives on Bilingualism
- LING 351/PSYCH 344: Second Language Acquisition
- LING 352/PSYCH 352: Development of Language and Thought
- LING 412: Speech Perception
- LING 421: Morphology
- LING 426/PHIL 426: Philosophy & Linguistic Theory
- LING 440: Language Learnability
- LING 441: Computational Linguistics I
- LING 442: Computational Linguistics II
- LING 446: Comparative
- LING 447/PSYCH 445: Psychology of Language
- LING 541/EECS 595/SI 561: Natural Language Processing
- PHIL 340: Minds and Machines
- PHIL 345: Language and Mind
- PHIL 409: Philosophy of Language
- PHIL 426/PSYCH 426: Philosophy & Linguistic Theory
- PHIL 414: Mathematical logic
- PSYCH 344/LING 347: Second Language Acquisition
- PSYCH 352/LING 352: Development of Language and Thought
- PSYCH 445/LING 447: Psychology of Language
- SI 561/EECS 595/LING 541: Natural Language Processing

Language and Cognition Track
Because human language is universal in the species and grounded in hu-
man 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 Cogni-
tion track gives students a solid theoretical introduction to language
through required coursework in linguistics, and in the philosophy and psy-
ology of language. Further coursework broadens the investigation of
language to include topics in computational linguistics and computer sci-
ence, formal methods, and language development and learning.

Prerequisites for the required courses
1. One introductory course in Linguistics (LING 111, 209, or 210)
2. Advisory: one of PHIL 296, 303, or 414
3. Advisory: one of PSYCH 111, 112, 114, or 115

Required Track Courses
1. One of:
   a. LING 313: Sound Patterns
   b. LING 315: Introduction to Syntax
   c. LING 316: Aspects of Meaning
2. One of:
   a. PHIL 345: Language and Mind
   b. PHIL 409: Philosophy of Language
   c. LING 347/PSYCH 349: Talking Minds

Electives. Five courses selected from:
- EECS 376: Foundations of Computer Science
- EECS 492: Introduction to Artificial Intelligence
- EECS 595/LING 541/SI 561: Natural Language Processing
- LING 313: Sound Patterns
- LING 315: Introduction to Syntax
- LING 316: Aspects of Meaning
- LING 342: Perspectives on Bilingualism
- LING 351/PSYCH 344: Second Language Acquisition
- LING 352/PSYCH 352: Development of Language and Thought
- LING 412: Speech Perception
- LING 421: Morphology
- LING 426/PHIL 426: Philosophy & Linguistic Theory
- LING 440: Language Learnability
- LING 441: Computational Linguistics I
- LING 442: Computational Linguistics II
- LING 446: Comparative
- LING 447/PSYCH 445: Psychology of Language
- LING 541/EECS 595/SI 561: Natural Language Processing
- PHIL 340: Minds and Machines
- PHIL 345: Language and Mind
- PHIL 409: Philosophy of Language
- PHIL 426/PSYCH 426: Philosophy & Linguistic Theory
- PHIL 414: Mathematical logic
- PSYCH 344/LING 347: Second Language Acquisition
- PSYCH 352/LING 352: Development of Language and Thought
- PSYCH 445/LING 447: Psychology of Language
- SI 561/EECS 595/LING 541: Natural Language Processing

Philosophy and Cognition Track
There is extensive interaction between contemporary philosophy, espe-
cially philosophy of mind and ethics, and cognitive science. Philosophers have
long posed fundamental questions about the nature of mind, the relation-
ship between the mental and physical, and the nature of human agency.
Cognitive science provides a rich and ever expanding body of theory, mod-
els, and findings that are relevant to these timeless philosophical ques-
tions. The Philosophy and Cognition track requires coursework in core
philosophical, formal and cognitive approaches to mind. More in-depth
workcourse allows students to deepen their understanding of the philo-
sophical problems and analytical enigmas raised by language and other
symbolic systems, artificial intelligence, inference and reasoning, and deci-
sion-making.

Prerequisites for the required courses
1. One of PSYCH 111, 112, 114, or 115
2. One introductory course in Philosophy
3. Advisory: One of
   a. PHIL 345: Language and Mind
   b. PHIL 383: Knowledge and Reality

Required Track Courses
1. One of:
   a. PSYCH 240: Introduction to Cognitive Psychology
   b. PSYCH 245: Cognitive Neuroscience
2. One of:
   a. PHIL 340: Minds and Machines
   b. PHIL 482: Philosophy of Mind
3. One of:
   a. PHIL 303: Introduction to Symbolic Logic
   b. PHIL 305: Introduction to Formal Philosophical Methods

Electives. Five courses selected from:
- LING 313: Sound Patterns
- LING 315: Introduction to Syntax
- LING 316: Aspects of Meaning
- LING 342: Perspectives on Bilingualism
- LING 351/PSYCH 344: Second Language Acquisition
- LING 352/PSYCH 352: Development of Language and Thought
- LING 412: Speech Perception
- LING 421: Morphology
- LING 426/PHIL 426: Philosophy & Linguistic Theory
- LING 440: Language Learnability
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- LING 442: Computational Linguistics II
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- LING 447/PSYCH 445: Psychology of Language
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- PHIL 340: Minds and Machines
- PHIL 345: Language and Mind
- PHIL 409: Philosophy of Language
- PHIL 413: Formal Philosophical Methods
- PHIL 426/PSYCH 426: Philosophy & Linguistic Theory
- PHIL 414: Mathematical logic
- PSYCH 344/LING 347: Second Language Acquisition
- PSYCH 352/LING 352: Development of Language and Thought
- PSYCH 445/LING 447: Psychology of Language
- SI 561/EECS 595/LING 541: Natural Language Processing

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There is extensive interaction between contemporary philosophy, espe-
cially philosophy of mind and ethics, and cognitive science. Philosophers have
long posed fundamental questions about the nature of mind, the relation-
ship between the mental and physical, and the nature of human agency.
Cognitive science provides a rich and ever expanding body of theory, mod-
els, and findings that are relevant to these timeless philosophical ques-
tions. The Philosophy and Cognition track requires coursework in core
philosophical, formal and cognitive approaches to mind. More in-depth
workcourse allows students to deepen their understanding of the philo-
sophical problems and analytical enigmas raised by language and other
symbolic systems, artificial intelligence, inference and reasoning, and deci-
sion-making.

Prerequisites for the required courses
1. One of PSYCH 111, 112, 114, or 115
2. One introductory course in Philosophy
3. Advisory: One of
   a. PHIL 345: Language and Mind
   b. PHIL 383: Knowledge and Reality

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1. One of:
   a. PSYCH 240: Introduction to Cognitive Psychology
   b. PSYCH 245: Cognitive Neuroscience
2. One of:
   a. PHIL 340: Minds and Machines
   b. PHIL 482: Philosophy of Mind
3. One of:
   a. PHIL 303: Introduction to Symbolic Logic
   b. PHIL 305: Introduction to Formal Philosophical Methods

Electives. Five courses selected from:
- LING 313: Sound Patterns
- LING 315: Introduction to Syntax
- LING 316: Aspects of Meaning
- LING 342: Perspectives on Bilingualism
- LING 351/PSYCH 344: Second Language Acquisition
- LING 352/PSYCH 352: Development of Language and Thought
- LING 412: Speech Perception
- LING 421: Morphology
- LING 426/PHIL 426: Philosophy & Linguistic Theory
- LING 440: Language Learnability
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- LING 442: Computational Linguistics II
- LING 446: Comparative
- LING 447/PSYCH 445: Psychology of Language
- LING 541/EECS 595/SI 561: Natural Language Processing
- PHIL 340: Minds and Machines
- PHIL 345: Language and Mind
- PHIL 409: Philosophy of Language
- PHIL 413: Formal Philosophical Methods
- PHIL 426/PSYCH 426: Philosophy & Linguistic Theory
- PHIL 414: Mathematical logic
- PSYCH 344/LING 347: Second Language Acquisition
- PSYCH 352/LING 352: Development of Language and Thought
- PSYCH 445/LING 447: Psychology of Language
- SI 561/EECS 595/LING 541: Natural Language Processing
The mission of the Communication Studies major is to study and teach about the mass media and emerging media: their evolution, their effects, and their uses by everyday people, and their regulation and industry practices. Their meanings structure the ways people and societies understand themselves and their world, as well as their politics, social relations, and identities.

**Communication Studies**  
*May be elected as a departmental major*

The mission of the Communication Studies 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 Studies 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
- Combining classroom training with internship opportunities in a variety of media-related fields
- Opportunity to study abroad and to participate in our Honors program
- Opportunity to network with outstanding U-M alumni through our annual Alumni Connection and Entertainment Media Career Forum

**Communication Studies Advising.** Advising appointments are only scheduled online at: [www.lsa.umich.edu/comm/undergraduate](http://www.lsa.umich.edu/comm/undergraduate). Students should schedule an advising appointment on the online appointment system with the undergraduate program coordinator to declare a Communications Studies major, discuss progress in the major, or to complete Major Release Forms. Students seeking approval for domestic transfer credit toward the major can meet with any faculty advisor. Students seeking approval for transfer credit from study abroad must meet with the department faculty foreign credit evaluator. Additionally, the department’s faculty provide regular office hours to discuss current courses or other issues.

Prospective majors can schedule a pre-major appointment with the undergraduate program coordinator anytime, but no later than the second term of the sophomore year. 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.

**Special Departmental Policies.** An "in-person" department advising appointment is required for students to declare a Communication Studies major. Students cannot declare by email, phone, or fax. All prerequisite courses must be completed before the student can declare the major.
Prerequisites to the Major
Four prerequisite courses (COMM 101, 102, 121 and 122) must be completed prior to declaration. COMM 101, 102, 121 and 122 must be completed with a grade of C- or higher in each course AND at least a 2.7 prerequisite grade point average (43.2 honor points). Students must declare no later than second semester junior year. Additional information can be found on the department website at www.lsa.umich.edu/comm/undergraduate.

Requirements for the Major
At least 24 credits in Communication Studies. These must include the following:

1. Core Areas of Communication Study: Two courses, 8 credits, from COMM 251, 261, 271 or 281.
2. Advanced Communication Study: A minimum of 16 credits of COMM courses numbered 300 and above, must include one ULWR course from courses numbered 350-399 (4 credits); one Capstone seminar from courses numbered 450-499 (3 credits); plus 9 additional COMM elective credits at the 300-400 level. Undergraduate Internship (COMM 321) may not be included in this requirement, and no more than three credits of independent reading/research and three credits of Honors seminar courses 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 Studies courses are reserved for declared majors. All spaces in the Capstone seminars are reserved for declared senior Communication Studies students.

Honors Plan. Qualified students are encouraged to undertake an Honors plan. The Honors Program in Communication Studies is available in the senior year to students with a grade point average by their final term of junior year of 3.5 in Communication Studies courses and 3.4 overall. Application and formal admission by the Department are required. Qualified students should contact the Department’s Honors department advisor as early as possible for curricular planning, but applications for Honors plan are generally accepted only after February 1 of the student’s junior year. In addition to satisfying all regular requirements for the major, an Honors plan must also include:

- STATS 250 or equivalent: All Honors majors should have completed, or be taking in their senior year, STATS 250 or an equivalent. All Honors majors are expected to have completed a statistics course before they start the Honors sequence in their senior year. Under certain circumstances, the Honors advisor has the power to waive this requirement in cases that seem appropriate.
- Senior Honors Seminars: COMM 491 and 492, a two-term seminar sequence involving the design and completion of an Honors thesis.

Comparative Literature

Comparative Literature

May be elected as an interdepartmental 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 both the major and faculty advisors. 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.

Prerequisites to the Major. Foreign languages necessary for the study of foreign literature courses at the 300-level.

Requirements for the Major. 33 credits minimum, according to the following plan:

- 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.

Comparative Literature

2015 Tisch Hall
435 South State Street
(734) 763-2351 (phone)
(734) 764-8503 (fax)
www.lsa.umich.edu/complit
e-mail: complit.info@umich.edu

Comparative Literature is a discipline that examines literature across national, historical, and linguistic boundaries. Literary movements, periods, genres, criticism, and theory are studied from an international viewpoint as are the relationships between literature and the other arts (e.g., film, painting, music) and literature and such disciplines as psychology, philosophy, anthropology, history, and women’s studies.

Honors Plan. To be eligible for an Honors plan in Comparative Literature, students should have a cumulative grade point average of at least 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.

Advising. Prospective majors should consult the Comparative Literature department advisor as early as possible about developing a challenging and unified interdepartmental program of study.

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, disciplines, and disciplines. The minor can therefore be integrated into diverse programs of study.

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Comparative Literature

May be elected as an interdepartmental major

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Undergraduate majors will establish individualized programs of study in close consultation with both the major and faculty advisors. 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.

Prerequisites to the Major. Foreign languages necessary for the study of foreign literature courses at the 300-level.

Requirements for the Major. 33 credits minimum, according to the following plan:

- 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 undergraduate 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 undergraduate advisor in Comparative Literature based on a robust theoretical or organizational principle.

Honors Plan. To be eligible for an Honors plan in Comparative Literature, students should have a cumulative grade point average of at least 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.

Advising. Prospective majors should consult the Comparative Literature department advisor as early as possible about developing a challenging and unified interdepartmental program of study.

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, disciplines, 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.

Prerequisites to the Minor: None.

Requirements for the Minor: 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 and 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).

No course will count towards the minor in translation studies unless the student receives a grade of C- or better.

Advising. The Chair of the Department of Comparative Literature will designate a faculty member to serve as Translation Studies Adviser. The role of the Adviser will be:
1. to provide information for students who are interested in applying for the Minor
2. to meet at least once a semester 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.

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**Center for the Study of Complex Systems (CSCS)**

321 West Hall
1085 South University Avenue
(734) 763-3301 (phone)
(734) 763-9267 (fax)
www.lsa.umich.edu/cscs
e-mail: cscs@umich.edu

Not a major

The Center for the Study of Complex Systems (CSCS) is a broadly interdisciplinary graduate certificate program at the University of Michigan designed to encourage and facilitate research and education in the general area of nonlinear, dynamical, and adaptive systems. The Center is based on the recognition that many different kinds of systems which include self-regulation, feedback or adaptation in their dynamics, may have a common underlying structure despite their apparent differences. Moreover, these deep structural similarities can be exploited to transfer methods of analysis and understanding from one field to another. In addition to developing deeper understandings of specific systems, interdisciplinary approaches should help elucidate the general structure and behavior of complex systems, and move us toward a deeper appreciation of the general nature of such systems.

**Minor in Complex Systems**

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 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 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 undergraduates to engage intellectually with students and faculty from a range of fields.

Prerequisites to the Minor: 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 for the Minor: 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 “Computation and Neuroscience”)
- HONORS 493: College Honors Seminar (sections titled “Complexity & Emergence” and “Introduction to Networks”)
- MATH 217: Linear Algebra
- MATH 425 / STATS 425: Introduction to Probability
- MATH 425 / STATS 425: Introduction to Probability
- MATH 462: Mathematical Models
- MATH 522 / 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”)
- 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 463 / MATH 463 / BIOPHYS 463: Mathematical Modeling in Biology
- BIOINF 800: Special Topics (section titled “Computation and Neuroscience”)
- BIOPHYS 463 / MATH 463 / BIOINF 463: Mathematical Modeling in Biology
- 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”)
- 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

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.
The Comprehensive Studies Program (CSP) is an academic unit within the College of Literature, Science, and the Arts that offers a variety of academic support services, including the Summer Bridge Program, academic year course instruction, academic advising and peer advising, tutoring, and freshmen interest groups. CSP works closely with a wide variety of academic departments, offices and programs throughout the university, including offices in the various schools and colleges, the Undergraduate Admissions Office, the Office of Financial Aid, and the Division of Student Affairs.

Admission. CSP’s services are available to all undergraduate students. Some students are pre-selected by the Undergraduate Admissions Office, while other students may choose to affiliate with the program following matriculation. Any University of Michigan student may request to affiliate with CSP by completing an application. Over 2,500 students currently participate in CSP programs and services.

Advising and Personal Counseling. Each CSP student has an assigned academic advisor with whom to meet on a regular basis, starting with Orientation and continuing until the student graduates. Together, student and advisor will explore the student's interests, talents, needs, academic goals, and career objectives. They then develop an individualized program to promote general intellectual growth as well as expertise in a particular field of study. Advisors also provide advice on a wide range of practical and personal matters.

Intensive Course Sections. CSP intensive sections are offered jointly with departments and are regularly available in the Fall and Winter terms for major introductory courses including Biology, Chemistry, Economics, English, Mathematics, Physics, and Spanish. CSP faculty and staff are dedicated to supporting students who have the determination, dedication, and willingness to work hard toward achieving their academic and career goals. The CSP model emphasizes increased contact between students, instructors, and advisors. CSP intensive course sections are small by design, allowing for more one-to-one interaction between student and instructor. Students enrolled in CSP sections can expect not only more contact with the course instructor, but also more learning opportunities through homework, small group learning sessions, instructor office visits, test-taking practice, and consistent performance feedback from the instructor throughout the term. CSP also provides tutoring opportunities in a variety of subjects for those students who need it, but are not enrolled in CSP courses.

Summer Bridge Program. The Summer Bridge Program is designed to facilitate the transition from high school to college. It is also designed to ensure a high level of participation by the students in the academic life of the University. It is offered during the seven-week Summer Half-Term at the University of Michigan. Program participants reside in University Housing, enroll in credit-bearing courses (with all attendant course obligations), and explore student life at the University of Michigan. Participation in Summer Bridge provides excellent preparation for the fall term. It also provides Summer Bridge students with the opportunity to meet fellow students as well as faculty and advisors. Summer Bridge participants enjoy the camaraderie of a cohesive group while they receive highly individualized academic advice, the benefits of small classes, and the personalized attention of faculty and staff.

Other Services. CSP provides a variety of other services designed to assist students in their development and progress. These services typically include tutoring programs, First-year Interest Groups for career exploration, Peer Advising, and Mentoring opportunities.

Computer Science (see Electrical Engineering and Computer Science)

Data Science

Data Science has emerged as a major field of study, one that sits squarely between Computer Science and Statistics. The collection, management, analysis, and interpretation of such data, with complex structures in the form of text, video, streaming data, are leading to exciting new research opportunities.

Huge amounts of data are being collected in all areas under the umbrella of ‘Big Data’, made possible by rapid advances in computing, measurement, data storage, and data transfer technologies over the last few decades. This data tsunami is fundamentally changing the way corporations do business and is also leading to new discoveries in science and engineering. Within business and industry, applications range from transactional data captured by companies, data on the Internet and social media, to sensor data captured by smart phones, automobiles, industrial systems, and environmental networks. As we have seen recently, governments are also using automated algorithms to mine large databases for the purposes of security.

Data Science affects research and applications in many domains, including the biological sciences, medical informatics, health care, social sciences and the humanities. It heavily influences economics, business and finance. From the business perspective, data science is an integral part of competitive intelligence, a newly emerging field that encompasses a number of activities.
While these developments have been happening over the last two decades, what is new is the massive increase in scale in three dimensions:

- Volume of data collected
- Variety and heterogeneity in data types
- Velocity of data (such as streaming data in VOIP, video games and others)

The emergence of Big Data has created many new challenges:

i. warehousing, curating, searching, managing, and retrieving data from heterogeneous data bases;
ii. data provenance, privacy and confidentiality;
iii. capturing relevant information from streaming data such as consumer sentiment, trends (e.g., google trends), and so on;
iv. analysis of complex and heterogeneous data structures such as videos, audio, text, speech, etc.;
v. scalable algorithms and visualization tools for massive data;
vi. extracting interesting patterns and relevant information through data mining, graph mining, etc.

Advising. Faculty advisors are available on both Central and North campuses with a common coordinator across the two programs.

Special Program Policies. Grades of C or better must be achieved in all courses taken to satisfy Data Science requirements.

**Data Science**

*May be elected as an interdepartmental major, administered by the department of Statistics and supervised by Data Science Program Committee.*

Those completing the major in Data Science may not earn a minor in Computer Science or Statistics.

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.

**Minimum Grade Requirement.** 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 to the Major (each with minimum grade of C or higher)**

- **Calculus:** MATH 115, 116, and 215 (each competed with a minimum grade of C or higher)
- **Linear Algebra:** MATH 214 or 217 (competed with a minimum grade of C or higher)
- **Introductory Programming:** One of EECS 183, ENGR 101, or ENGR 151

**Requirements for the Major.** A minimum of 42 credits is required (each with minimum grade of C or higher), distributed as follows.

I. **Core:**

A. *Computing and Discrete Mathematics*

- EECS 203 Discrete Mathematics (preferred)
- MATH 465 Introduction to Combinatorics
- EECS 280 Programming and Elementary Data Structures.

B. *Computing and Statistics*

- EECS 281 Data Structures and Algorithms.
- STATS 412 Introduction to Probability and Statistics.
- STATS 500 Applied Statistics I

C. *Machine learning and data mining* (minimum 4 credits):

- EECS 445 Machine Learning
- or
- STATS 415 Data Mining

D. *Data management and applications* (minimum 4 credits):

- EECS 484 Database Management Systems
- or
- EECS 485 Web Database and Information Systems

E. *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 following list of courses, 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
Earth and Environmental Sciences

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 Earth and Environmental Sciences 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.

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 Earth and Environmental Sciences 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, 120, or 201), or an introductory geosciences course without a laboratory (EARTH 419, 284 or 205+206) combined with a laboratory course (EARTH 118 or 207).

   - Category II: An introductory course in global change, oceanography, or environmental science (EARTH 171, 222&223, 201, 202, 284, or 320).

2. 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,

   - 3. Honors Plan.

   - 3.5 GPA in the major and pre-major courses

   - Complete a research project under the direction of a faculty mentor in Computer Science or Statistics (and an optional co-advisor from any department) by registering for a Capstone Thesis course in Eecs or STATS. (The Capstone Thesis course, if completed successfully, will also count toward the Capstone Experience requirement, irrespective of whether the Honors designation is awarded.)

   - Write an original thesis report on the research project and make a public presentation of the work. Satisfy the advisor and a second reader that the thesis report and the public presentation are worthy of the Honors designation.

   - 3.5 GPA in the major and pre-major courses

   - 3.4 overall U-M GPA (at the time of graduation)

Earth and Environmental Sciences

May be elected as a departmental major

The Earth and Environmental Sciences major trains students to receive a broad foundation in natural and physical sciences related to environmental and Earth sciences. Students are required to learn material from several core areas of the Earth sciences. The program also includes a field requirement that takes students off campus to study and apply their knowledge. 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.

Prerequisites to the Major. 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, 120, or 201), or an introductory geosciences course without a laboratory (EARTH 419, 284 or 205+206) combined with a laboratory course (EARTH 118 or 207).

   - Category II: An introductory course in global change, oceanography, or environmental science (EARTH 171, 222&223, 201, 202, 284, or 320).
2. **MATH 115** (Calculus I)

3. Choose at least 2 out of the following 4 options for chemistry, physics, math, and biology courses:
   - **Option I:** CHEM 130 (General Chemistry) with CHEM 125+126 (lab + discussion) highly recommended
   - **Option II:** PHYSICS 140 and 141 (Physics I and lab)
   - **Option III:** BIOLOGY 162, 171, or 172 (Introductory Cell Biology or Ecology)
   - **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 for the Major.** The requirements for the major are:

1. **Core Courses:** Core courses in the Earth and Environmental Sciences Major are designed to provide students with training in the physical, chemical, and biological processes relevant to the present form, and evolution of the Earth. Students should choose four courses from the following eight Core Course Options:
   - EARTH 305 Earth's Surface and Sediments
   - EARTH 310 Geochemistry of the Solid Earth
   - 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

2. **Field Experience Requirement.** A fundamental aspect of studying the Earth 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 440. Students interested in completing EARTH 440 are strongly recommended to complete EARTH 305, 310, and 351 prior to taking EARTH 440. Students interested in a career in Oceanography may elect to take, with approval from a department advisor, a marine-based field course.

3. **Geoscience 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.

**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 Earth and Environmental Sciences 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 terms 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).
   - EARTH 305, 310, 313, 315, 351, 418, 420, 422, 440
   - Completion of a senior or Honors thesis after at least two terms 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).
   - 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 terms of research with faculty in the department.

**Honors Plan**

The Honors plan consists of a series of special academic opportunities supplementary to the regular Major listed above. The Honors plan is tailored to fit the needs and interests of individual students. EARTH 490 is elected 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, stu-
dents must have at least: (1) a 3.4 grade point average in Earth and Envi-
ronmental Sciences courses elected in the department; and (2) a cumula-
tive 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.

Ideally, the selection of candidates for Honors plan is made at the begin-
ing of the junior year, but qualified students may be admitted to the pro-
gram as late as the end of the junior year. Interested students should con-
tact the departmental office for referral to the Honors advisor, 2534 C.C.
Little Building, (734) 764-1435.

Earth and Environmental Sciences Minors

Students wishing to pursue a minor in the Department of Earth and Envi-
ronmental Sciences must develop a specific plan for its completion in con-
sultation with the department’s designated advisor. Appointments are
scheduled online www.lsa.umich.edu/earth/undergraduate.

Earth Sciences

The Earth Sciences minor is not open to students with any major or any
other minor in the Department of Earth and Environmental Sciences.

Earth Sciences minor is designed to give students a broad introdution to
geology, oceanography and related sciences. It allows a wide selection of
courses to suit both general and specific interests. The Earth Sciences mi-
nor would be particularly suitable for non-science majors, such as pre-law,
business, economics, history, and English.

Prerequisites to the Minor: None.

Requirements for the Minor: At least 15 credits of courses, to be chosen
from the following three categories as stated:

1. One introductory Geology course must be taken from one of the fol-
    lowing two groups:
      Group 1. Courses with laboratory: EARTH 116, 118&119, 120, 201,
              222&223.
      Group 2. Courses without laboratory (EARTH 119, 125, 135, 175,
              205+206, 284).

2. One General Interest course. Up to four additional credits may be
elected from 200-level and up courses in Earth and Environmental Sci-
ences, 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.

Environmental Geology

Not open to students electing the minor in Earth Sciences.

The Environmental Geology minor is designed to give students a broad
introduction to processes shaping the Earth’s surface, its physical and bio-
chemical environment, and potential response to anthropogenic influ-
ences. Because society and the Earth’s surface environment are intimately
linked, students with interests in pre-law or with majors such as business,
economics, history, and English may find the minor in Environmental Ge-
ology an attractive complement to their training. As well, students major-
ing in other areas of the Natural Sciences may find the minor in Environ-
mental Geology a way to diversify their background and apply fundamen-
tal 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.

Prerequisites to the Minor: None.

Requirements for the Minor: At least 15 credits of courses, to be chosen
from the following three categories as stated:

1. One introductory Geology course must be taken from one of the fol-
    lowing two groups:
      Group 2. Courses without laboratory (EARTH 119, 135, 205+206).

2. Core courses: EARTH 284 and 380 are required.

3. Elective courses: EARTH 325, 442, 444, 450, 477, 478, or permission of
   advisor.

Geology

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.

Prerequisites to the Minor: None.

Requirements for the Minor: At least 15 credits of courses, to be chosen
from the following three categories as stated:

1. An introductory geology course: EARTH 116, 119, 120, or 205+206.
   Students who elect EARTH 119, 120, or 205+206 are strongly encour-
   aged 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).

Oceanography

Not open to students electing the minor in Earth Sciences.

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.

Prerequisites to the Minor: None.

Requirements for the Minor: At least 15 credits of courses, to be chosen
from the following three categories as stated:

1. One introductory geoscience course must be taken from one of the fol-
    lowing two groups:
      Group 2. Courses without laboratory (EARTH 119, 205&206, 284).

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, 401 (section titled “Field Methods in Great Lakes Ocean-
     graphy”) – at the U-M Biological Station
   - AOSS 320, 321, 410, 420, 467
   - ENSCEN 420, 455, 467
   - NRE 501 (section titled “Field Methods in Great Lakes Oceanogra-
     phy”) – at the U-M Biological Station
   - NAVARCH 420, 455
   - or permission of advisor

Paleontology

Not open to students electing the minor in Earth Sciences.

The minor in Paleontology is designed for students interested in the histo-
ry of life on Earth. Entry and core courses will provide students with in-
sight into the major features of the fossil record, the methods used in his-
torical sciences, and the theoretical issues dealt with by paleontologists.
The advanced courses are meant to satisfy more specific interests.

Prerequisites to the Minor: None.

Requirements for the Minor: At least 15 credits of courses, to be chosen
from the following three categories as stated:

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, 445, 498 (for 1-3, but no more than 3 credits), 506, 510, 511, 513, 526 (no more than 1 credit)
- ENVIRON 431
- EEB 390, 445
- or permission of advisor

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**Ecology and Evolutionary Biology (EEB)**

2019 E.H. Kraus Natural Science Building
830 North University Avenue
(734) 764-2446 (phone)
(734) 647-0884 (fax)
www.lsa.umich.edu/eeb/

The Department of Ecology and Evolutionary Biology embraces education and research on virtually all aspects of biodiversity, including the origins and history of species ranging from bacteria to humans, the processes by which this diversity has evolved, and the ecological context in which this evolution takes place. These basic sciences underlie some of the most important applied sciences in the world today, such as global climate change, sustainable agriculture, the emergence and spread of infectious diseases, invasive and exotic species, conservation biology, natural resource management, and evolution of pesticide and antibiotic resistance.

Ecologists and evolutionary biologists seek to understand the origin and complex interactions of the earth’s biodiversity and ecosystems. Our collective focus spans numerous levels of biological organization over multiple timescales; including genes, individuals, kin groups, populations, species, communities, and ecosystems. Studies in ecology and evolution strive to synthesize how these levels of organization are related to one another and what processes govern their interactions. Although the methods, background knowledge, and social context for such investigations have changed radically in recent decades, the fundamental questions about life remain, and their relevance to humans has increased. How did we get here? How does nature work? How will our role in nature change in the future?

**Requirements for the Major.** The department administers the major and minor in Ecology and Evolutionary Biology. Students interested in majors in Biology, General Biology, or Plant Biology or a minor in Biology or Plant Biology should refer to information listed under the Program in 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 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/.

**Field of Major GPA Calculation.** For purposes of calculating grade point average, the term “field of the major” means the following:

1. All BIOLOGY, EEB, MCB, and Biological Station courses, including cross-listed ones, at the 200-level and above.
2. All required cognate courses (if any).
3. All mandatory prerequisites.

**Introductory Biology Credit Limitation:** The maximum amount of credit that can be earned in introductory biology courses is 17 credits. Students interested in majoring in Ecology and Evolutionary Biology or Plant Biology must complete BIOLOGY 171, 172/174 and 173, or BIOLOGY 195 and 173, or equivalent.

**Ecology and Evolutionary Biology**

*May be elected as a departmental major*

**Exclusions:** Students who elect a major in Ecology and Evolutionary Biology may not elect the following majors: Biology, 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.

The Ecology and Evolutionary Biology major will train 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 program spans numerous levels of biological organization over multiple timescales, and includes studies of genes and genomes, organ systems, individual organisms, populations, species, communities, and ecosystems. Students learn to synthesize how these levels of organization are related to one another and what processes govern their interactions. The major in EEB will prepare students for a variety of career paths including graduate study in biology, public health and medical, dental, and veterinary health 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. The minor embraces similar principles but to lesser depth for students who wish to supplement a major in another area with additional biological expertise.

**Advising.** To make an appointment, go to the Program in Biology website at www.lsa.umich.edu/biology/.

**Prerequisites to the Major.**

- BIOLOGY 171, 172/174 and 173; or BIOLOGY 195 and 173; or BIOLOGY 162 or 163;
- PHYSICS 125/127 and 126/128; or PHYSICS 135/136 and 235/236; or PHYSICS 140/141 and 240/241.
- CHEM 210/211 and 215/216;
- Quantitative Analysis 1: MATH 115, 120, 156, 175, 185, or 295
- Quantitative Analysis 2: One of
  - MATH 116, 121, 255, 176, 186, or 296
  - MATH 250; 400-level or above
  - BIOPHYS 290 / PHYSICS 290
  - EECS 203 or 280
  - EARTH 468
  - Any other course with a MATH 115 prerequisite chosen in consultation with a major advisor

[Note: any course used to meet this requirement cannot also be used as a major elective, i.e., a course cannot "double count"].

Under exceptional circumstances, students may petition the Associate Chair of Curriculum to substitute other courses in chemistry, physics, mathematics, and statistics for a prerequisite.

**Requirements for the Major.** A minimum of 30 credits, including:

1. Core courses
   a. Ecology: BIOLOGY 281 & EEB 372* (or BIOLOGY 282); or EEB 381*
      (elected at UMBS)
   b. Genetics: BIOLOGY 305
   c. Evolution: EEB 390* or 391
   d. Quantitative Analysis Option or Biochemistry Option (choose one course):
      i. STATS 401, 403, 412, 425;
      EECS 281, 376;
      EEB 408, 430, 490
ii. MCDB 310 or BIOLCHEM 415 or CHEM 351

iii. A second course from the Quantitative Analysis 2 options above [see prereqs]; min of 3 credits, courses cannot be double counted.

e. Capstone Seminar: EEB 410.

* EEB 381 or EEB 390 taken at UMBS satisfies both the residential field course requirement and the individual course requirements.

2. Upper-Level Electives (2 courses, minimum 6 credits):

a. EEB 300-level or above and

b. EEB or MCDB 300-level or above

Exclusions: EEB/MCDB [300, 301, 302, 397, 399, 400, 499, or MCDB 412]

3. EEB Course Areas. Courses used here may overlap with courses in the areas below and elsewhere (i.e., one course may satisfy multiple requirements).

a. Biodiversity: At least one course must have a biodiversity focus.

   • BIOLOGY 207* (4) Introductory Microbiology
   • BIOLOGY 230* (4) Introduction to Plant Biology
   • BIOLOGY 252* (4) Vertebrate Evolution and Diversity
   • BIOLOGY 255* (5) Plant Diversity (Sp)
   • BIOLOGY 256 (4) Animals Functioning in Environments
   • BIOLOGY 288* (4) Animal Diversity
   • EEB 300* (5) Biology of Birds (Su–UMBS)
   • EEB 341* (4) Parasitology
   • EEB 420 (3) Plant Evolution
   • EEB 431* (5) Biology of Animal Parasites (Su–UMBS)
   • EEB 433* (4) Ornithology
   • EEB 436 (4) Woody Plants I: Biology and Identification
   • EEB 440 (3) Biology of Fishes
   • EEB 442* (4-5) Biology of Insects (F–AA / Sp– UMBS)
   • EEB 450* (5) Biology of Amphibians and Reptiles
   • EEB 451* (4) Biology of Mammals
   • EEB 453* (5) Field Mammalogy (Su–UMBS)
   • EEB 457* (5) Algae of Freshwater Ecosystems

   *also satisfies lab req

b. Research* or Residential Field Experience:

   i. EEB 300 (3) or 400 (3), or,
   ii. Any upper division UMBS course or advisor-approved residential field experience

   A maximum of three credits of independent research (EEB / MCDB 300 / 400), taken in one term, may be used to satisfy the Residential Field Course or Independent Research requirement.

   See more information on Program in Biology undergraduate research: www.lsa.umich.edu/biology/studentresearch

4. Additional Courses (Electives and Cognates). Additional courses at the 200-level or above as needed to bring the major total to 30 credits. This may include up to two approved cognate courses (see list below).

Three additional credits of MCDB 300 or EEB 300 or EEB 400 or MCDB 400 (taken in one term), may be applied under Additional Courses for a maximum of six independent research credits.

Excluded:

   • Prerequisites and introductory science courses
   • EEB 301
   • EEB 302
   • MCDB 301
   • MCDB 302
   • MCDB 412

COGNATE OPTIONS:

Anthropology
ANTHRBIO 365 Human Evolution
ANTHRBIO 368 Primate Social Behavior I

Chemistry
Any course number CHEM 230 or above.

Complex Systems
CMPLXSYS 501 Introduction to Complex Systems
CMPLXSYS 530 Computer Modeling of Complex Systems

Earth and Environmental Sciences
EARTH 320 Earth Systems Evolution
EARTH 341 Environmental Science in the Rockies
EARTH 418 Paleontology
EARTH 436 Field Studies in Stratigraphy, Paleontology, and Sedimentology
EARTH 437 Evolution of Vertebrates
EARTH 438 Evolution of the Primates

Environment
ENVIRON 310 Toxicology: The Study of Environmental Chemicals and Disease
ENVIRON 311 Lakes, Rivers and Wetlands (Also taught at UMBS)
ENVIRON 317 Conservation of Biological Diversity
ENVIRON 341 Environmental Science in the Rockies
ENVIRON 353 Tropical Conservation and Resource Management
ENVIRON 411 Fluvial Ecosystems
ENVIRON 416 Field Skills in Wildlife Behavior
ENVIRON 418 Biology and Management of Insects
ENVIRON 419 Agricultural/Forest Pest Management
ENVIRON 441 Remote Sensing of Environment
ENVIRON 457 Plant Physiological Ecology

Mathematics
Courses numbered 200 or above.

Molecular Cell and Developmental Biology
All MCDB courses.

Physics
Courses approved in advance by an advisor

Psychology
PSYCH 338 Primate Social Behavior I
PSYCH 438 Hormones and Behavior
PSYCH 530 Advanced Topics in Evolutionary Comparative Psychology

Statistics
STATS 250 Introduction to Statistics and Data Analysis
STATS 400 Applied Statistical Methods

College of Engineering
A OSS 304 The Atmospheric and Oceanic Environment
A OSS 320 Earth Systems Evolution
BIOMEDE 231 Introduction to Biomechanics
ENSCEN 304 The Atmospheric and Oceanic Environment

Medical School
BIOLCHEM 415
HUMGEN 541 Gene Structure and Regulation

School of Public Health
EPID 543 Virus Diseases
EPID 560 Mechanisms of Bacterial Pathogenesis

Honors Plan
The department conducts an Honors program to train students to conduct independent research in Ecology & Evolutionary Biology. In addition to completing all the requirements for the EEB major, an Honors plan requires a GPA in the major of at least 3.4, and the completion of a significant piece of independent research that is reported in an Honors thesis and presented in a public forum. It is recommended that students discuss Honors with a department advisor early in their undergraduate career, and to meet with a department advisor to declare the Honors plan as soon as possible.

Minor in Ecology and Evolutionary Biology
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.

Exclusions: Students who elect a minor in Ecology and Evolutionary Biology may not elect the following majors: Biology, General Biology, Plant Biology, Ecology and Evolutionary Biology, Microbiology, or Biochemistry. They may also not elect a minor in Biology, Program in the Environment, Plant Biology, or Global Change.

The minor in Ecology and Evolutionary Biology is not recommended for students interested in graduate work in the biological sciences.

Prerequisites to the Minor. BIOLOGY 171, 172/174 and 173; or BIOLOGY 195 and 173; or BIOLOGY 162 or 163.

Minor Program. 15 credits at the 200-level and above (Students who took BIOLOGY 162 or 163, or students with AP credit for BIOLOGY 162 must take 18 credits), distributed as follows:

1. Core courses: Two courses chosen from the following three areas:
   a. Ecology: BIOLOGY 281 or EEB 381 (Biological Station)
   b. Genetics: BIOLOGY 305
   c. Evolution: EEB 390 (on campus or at the Biological Station)

2. Elective courses in EEB to bring minor credits to at least 15 (18 for students who took BIOLOGY 162 or 163, or students with AP credit for BIOLOGY 162).
   • At least one course must have a biodiversity focus (see list of approved courses, above)
   • At least one course must include a lab. EEB 300 or 400, elected for three credits, may be used to satisfy this requirement. A maximum of three credits in undergraduate research credits can be applied to the minor in EEB. Three credits of independent research must be completed in one term to satisfy a laboratory requirement.
   • Attendance at a residential field station is encouraged

Multiple requirements may be satisfied by one course.
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.

Special Departmental Policy: 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.

Economics Undergraduate Office. The undergraduate office is located at 243 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.

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/undergraduatetesting/departmentaladvising

Students are urged to consult with a department advisor each term before selecting courses for the following term.

Economics

May be elected as a departmental major

Prerequisites to the Major

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, 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 for the Major

An Economics major must include a minimum of 29 credits, distributed as follows:

1. Core Economic Theory:
   a. ECON 401, completed with a grade of C– or better.
   b. ECON 402, completed with a grade of C– or better. ECON 401 should be elected before ECON 402.

2. Core Statistics and Econometrics
   a. STATS 250 (Basic), or STATS 426 or ECON 451 (Intermediate), or ECON 453 (Advanced), completed with a grade of C– or better.
   b. ECON 251 (Basic), or ECON 452 (Intermediate), or ECON 454 (Advanced); completed with a grade of C– or better.

Students interested in economic research and/or in applying to doctoral programs in economics or finance are encouraged to elect the advanced sequence, ECON 453 and 454. These courses develop a deep, foundational understanding of the empirical methods used in economic research. This sequence will be especially useful to students intending to apply to doctoral programs in economics or finance.

3. Electives: 15 additional credits in upper-level (300 and 400 level) ECON courses, including at least nine credits in courses with ECON 401 or ECON 402 as a prerequisite.

ECON 401 and 402, and ECON 250, 251, 451, 452, 453, and 454 do not count toward the elective requirement for the major.

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.
**Ann Arbor campus requirement**

Any courses for the major to be taken elsewhere than the Ann Arbor campus of the University should be approved in advance by an economics department advisor.

At least 12 credits in the major, including ECON 401, ECON 402, and at least three of the credits in upper-level economics electives in courses with ECON 401 or ECON 402 as a prerequisite, must be taken at the Ann Arbor campus (excluding STDABRD and transfer courses).

**Honors Plan.** Qualified students are encouraged to consider an Honors plan in Economics. The standards for admission are a cumulative grade point average of at least 3.5 and evidence of outstanding ability in economics. Application is made and admission is granted to the Honors plan during the first term of the junior year.

Honors majors are required to complete the requirements for a regular major in Economics. An Honors plan must include ECON 451 and 452, or ECON 453 and 454. In addition, Honors majors must complete a senior Honors thesis. The senior Honors thesis includes original work 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).

**Minor in Economics**

*A minor in Economics is not open to students with a major in the Department of Economics.*

A minor in economics provides a useful background for students seeking careers in law, business, government, journalism, and teaching. Students majoring 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.

Students wishing to pursue a minor in Economics must develop a specific plan for its completion in consultation with one of the department’s designated advisors.

Schedule an appointment with an economics minor advisor to declare an economics minor. Students must complete the prerequisites to the minor before declaring and must have a GPA of at least 2.0 in the minor.

**Prerequisites to the Minor.** ECON 101 and 102 and MATH 115, each completed with a grade of 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 for the Minor.** 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–.
2. Nine additional credits in upper level (300 and 400 level) ECON courses, including at least three credits in 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.

**Ann Arbor campus requirement:** Any courses to be taken for the minor outside the Ann Arbor campus of the University should be approved in advance by an economics department advisor. At least 11 credits in the minor plan, including ECON 401, ECON 402, and the 3 credits in upper-level economics elective with the ECON 401 or ECON 402 prerequisite, must be taken at the Ann Arbor campus (excluding STDABRD and transfer courses). ECON 401 should be taken before ECON 402.

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**Electrical Engineering and Computer Science**

Computer Science and Engineering Division
2808 Bob and Betty Beyster Building
2260 Hayward
(734) 763-6563 (phone)
(734) 773-1260 (fax)
www.cs.umich.edu
e-mail: cslsaadvisor@umich.edu

Electrical and Computer Engineering Division
3310 EECS Building
1301 Beal Avenue
(734) 763-2390 (phone)
(734) 763-1503 (fax)
www.eecs.umich.edu/eece/
e-mail: ugadmin@eecs.umich.edu

The Department of Electrical Engineering and Computer Science (EECS) offers undergraduate programs for LSA students. LSA students may choose the major in Computer Science, the minor in Computer Science, or the minor in Electrical Engineering. EECS is also a participating unit in the interdisciplinary Informatics major listed in under Informatics.

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**Computer Science & Engineering Division**

Computer science is an integral part of our lives, shaping virtually everything from the objects around us to the ways in which we communicate, travel, work, and play. And the computer revolution has just begun — computer science is now a key enabler for discovery and innovation in most other fields of endeavor, making it an incredibly relevant course of study. The potential for creativity and impact in areas such as medicine, health care, entertainment, the performing arts, education, transportation, security, and the environment is enormous.

The computer science program at Michigan is one of the oldest and most respected. It is also one of the most innovative, with new courses continually under development, many with an interdisciplinary, real-world focus.
Computer Science

May be elected as a departmental 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.

Pre-Major Requirements.

To declare in the LSA Computer Science (CS) major a student must first complete 4 pre-major courses. These are: EECS 203, EECS 280, MATH 115, MATH 116. Performance in these courses 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. Students must achieve a 2.5 GPA over the 4 pre-major courses and have at least a C in each course. 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 pre-major GPA. Only courses with grades of C+ or below can be repeated for this purpose.

Requirements for the Major.

1. Core Courses:
   b. Probability and Statistics: STATS 250 or 412 or 426, or STATS 265/IOE 265.
2. Capstone Course (which may not be counted as CS Upper Level Technical Elective, below): Senior Thesis (EECS 443) or Major Design Experience Course (check with the department for current list of approved MDE courses).
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.
4. At least 27 credits must be upper-level

Comprehensive and up-to-date information about the computer science program can be found on the web at:
www.eecs.umich.edu/eecs/undergraduate/ugcs/computer_science.html

Honors Plan. Students wishing to complete an Honors plan in Computer Science must have earned a 3.2 or higher GPA in the four required pre-major courses (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

A minor in Computer Science is not open to students with a major or minor in the Department of Electrical Engineering and Computer Science.

The minor in Computer Science is intended to provide students with a foundational grounding in the discipline of software construction, along with an in-depth experience in at least one advanced area.

Students wishing to pursue a minor in Computer Science should meet with the program advisor for the LSA Computer Science major. Information about scheduling advising appointments is available from the EECS Undergraduate Advising Office, 2808 Beyster Building.

Prerequisites to the Minor: 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 CS electives.

Requirements for the Minor: 16 credits of courses as follows:

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 482, 483, 484, 487, 490, 492, and 493.

Questions?

Students who have questions about the EE minor, or who would like advice about pursuing the minor, should contact the EECS Undergraduate Advising Office to set up an appointment with an advisor.

Undergraduate Advising Office
EECS Department
3415 EECS Building
University of Michigan
Ann Arbor, MI 48109-2122
Telephone: (734) 763-2305
www.eecs.umich.edu
e-mail: ugadmin@eecs.umich.edu
Electrical Engineering Minor

A minor in Electrical Engineering is not open to Computer Science majors

As the lines between engineering and scientific disciplines become increasingly blurred, many students are forced to make tough decisions about which major to choose. A 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 a 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 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.

Note: Most EECS courses in the Electrical Engineering minor count as non-LSA credits. LSA students may use a maximum of 20 credits of non-LSA course work toward the total 120 credits required for the degree.

Prerequisites to the Minor. ENGR 101; MATH 115, 116, 216, and 216 or equivalent; PHYSICS 140/141 and 240/241 or equivalent (Each course must be completed with a C or better.). LSA students are not required to take CHEM 125, 126, 130, or ENGR 100.

The EE minor is open to all students across campus as long as the eligibility requirements stated below are met:

<table>
<thead>
<tr>
<th>Paths Option</th>
<th>Required Core</th>
<th>Path Preparation Core</th>
<th>Elective (1)</th>
<th>Elective (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Systems</td>
<td>215</td>
<td>216</td>
<td>451, 455, 460</td>
<td>451, 452, 455, 460, 461 (no duplicates)</td>
</tr>
<tr>
<td>2. Electromagnetics &amp; Optics</td>
<td>215</td>
<td>230</td>
<td>330, 334</td>
<td>411, 430, 434, 438, 530</td>
</tr>
</tbody>
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English Language and Literature

3187 Angell Hall
435 South State Street
(734) 764-6330 (phone)
(734) 763-3128 (fax)
www.lsa.umich.edu/english

U-M ENGLISH MISSION STATEMENT

The University of Michigan’s English department is dedicated to four related endeavors: surveying and analyzing the diverse range of texts in the English language; researching and teaching the rich history of that language; fostering exceptional creative as well as critical writing; and studying texts in relation to other cultural phenomena. Our mission as educators is to enable students to become the finest readers and writers of literary texts that they can be. Because those texts in their infinite variety take as their subjects our fellow humans, our histories, and our cultures, we aim in effect to equip our students both to read the world, and write the future, with subtlety, acumen and precision.

The Department of English focuses primary attention on the analysis and enjoyment of works of imaginative literature. Drawing on the rich variety of texts produced over the last millennium and a half in diverse forms of English from every part of the globe, our courses aim at a subtle and flexible understanding of the content of these texts and a sensitive appreciation of their style and form.

The interests the department addresses and the studies it sponsors, however, range far beyond the study of imaginative literature. Its courses offer instruction in writing, including exposition and creative writing, whether prose fiction, poetry, or drama. An increasing number of our courses involve substantial use of computers and extended inquiry into information networks. The English language itself, its history, structure, and diverse traditions of use, is the focus of yet other courses. Still others focus on literary theory, examining strategies of literary interpretation, evaluation, and appreciation and considering the ways in which literary texts relate to other forms of cultural representation.

One special feature of this English Department consists in the number of courses it offers jointly with other programs in the College – Women’s Studies, for example, Afro-American and African Studies, American Culture (Native American Studies, Latina/o Studies, Asian American Studies), Studies in Religion, Comparative Literature, Medieval and Early Modern Studies, and Screen Arts and Cultures. The varieties of materials and the diverse backgrounds and interests of students involved in such courses present extraordinary opportunities for intellectual growth.

The present study of literature has returned with particular force and new perspectives to a very old consideration – that language and literature are necessarily understood as social products and agents, deeply implicated in the processes and questions that interest and, at times, agitate society more generally. These issues as represented in texts – issues of ethics, of
political order, of economic and ethnic difference, of gender, of systems of belief – recur as a regular feature of discussion in many of our courses.

**The English Department Writing Program.** The English Department Writing Program is dedicated to the teaching of writing, particularly at the 100- and 200-level. Our courses aim to prepare all students to write effective analytic arguments that matter to them and to their audience in whatever academic and professional fields they choose to pursue; to read and analyze complex texts critically; and to develop flexible and appropriate strategies for revising academic writing to strengthen the development of ideas and hone the appropriateness of expression. In our creative writing courses, students also have the opportunity to explore the creation of fiction and poetry. Over the course of the academic year, we teach approximately 6700 students from across the university.

The English Department Writing Program administers ENGLISH 124, 125, 223, 225, 229, 302, 325, and 425 and in many cases students fulfill their Upper-Level and First-Year Writing Requirements in our courses.

**New England Literature Program (NELP)**

NELP is a University of Michigan academic program that takes place off campus during the Spring half-term. U-M faculty and other instructors teach the courses, and students earn regular U-M credit.

The program takes place at Camp Wohelo on Sebago Lake in Maine. For six and a half weeks, 40 students and 13 U-M instructors live and work together closely, reading New England authors, writing, and exploring the New England countryside, its people, culture, and history.

**Academic Program.** NELP students earn 8 hours of credit. Although NELP’s academic work is taught as a single integrated academic experience, the credits appear on transcripts as three separate courses:

- ENGLISH 473 Topics in American Literature (3 cr.)
- ENGLISH 317 Literature and Culture (2 cr.)
- ENGLISH 328 Writing and the Environment (3 cr.)

The program emphasizes the writings of Nathaniel Hawthorne, Ralph Waldo Emerson, Henry David Thoreau, Emily Dickinson, Frederick Douglass, Sarah Orne Jewett, Robert Frost, Wallace Stevens, Carolyn Chute, Louise Glück, as well as other 18th- through 20th-century writers of various backgrounds.

NELP offers creative writing workshops, but most writing is done in a journal. Journal writing is required and is central to NELP education. The journals are both personal and academic. Student writing often explores creative expression, the natural world and the New England environment, and the writer’s response to the NELP experience.

NELP courses are graded. The academic program requires completion of a reading list, active work in the journal, and vigorous participation in classes and in the journal group.

**Who Can Apply?** All University of Michigan students are eligible to apply for NELP, as are special students, international students, and students from other colleges. Some seniors participate in NELP after they graduate from U-M. You need not be an English major to apply.

**Application.** Applications for NELP are due to the English Department in early January, usually during the first week of Winter Term, along with a $35 non-refundable application fee. At that time, all applicants sign up for a 20-minute interview with two NELP staff members, to be held later in the month. Applicants who will not be on-campus in January can arrange for a phone interview and to submit their applications electronically.

**Cost.** Exact costs and detailed financial aid information will be provided in acceptance letters. There are two costs for attending NELP:

1. The NELP program fee, which covers transportation, textbooks, food and lodging for the duration of the program, will most likely be $2200.
2. Spring half-term U-M tuition rates are set by the University. Out-of-state students should note the reduction in the cost of out-of-state tuition for students at NELP (made possible by a special arrangement with the College).

For further information and to download the brochure and application, visit the program website: www.lsa.umich.edu/english/nelp

**English**

*May be elected as a departmental 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.

**Prerequisites to the Major.** Students who wish to concentrate in English must take as prerequisite ENGLISH 298 (Introduction to Literary Studies).

**Degree Program Options.** The Department of English Language and Literature offers three main routes toward the major: (1) the General Program; (2) the Honors Program; and (3) the Creative Writing Program. The department also offers a minor in creative writing for non-majors. Students electing any of these may work simultaneously toward a secondary school teaching certificate. Students within the General Program are strongly encouraged to select three upper-division courses within one of the optional areas of specialization below (or one designed by a student and an advisor). Possible areas of specialization are:

- Medieval Literature in English (Pre-1600),
- Early Modern (c.1500-1700),
- The Long Eighteenth Century (late 17th c. through early 19th c.),
- Nineteenth Century (through Modernism),
- Twentieth and Twenty-First Century (Modernism through Contemporary),
- Literatures of the Americas,
- World Literatures in English,
- Literary Criticism and Theory,
- Genre Studies,
- Studies in Race & Ethnicity,
- Sexuality/Gender Studies,
- Drama and Performance Studies,
- Language, Writing, and Rhetoric.

Students must complete a course with a grade of C– or better to have it count toward the Requirements for the Major.

**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.

**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 WRITING 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, 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

**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.

The General Program

Students in the General Program must successfully complete 30 credits in ENGLISH courses numbered 300 or above. [Students must complete a course with a grade of C– or better to have it count toward the requirements for the major.]

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 1800
- one course on literature written 1830-1900
- one course in American literature
- a 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/english/undergraduate/courses/ or from an English department advisor.

Majors should note that no more than one course 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. Also, no more than six upper-level credits of Independent Study may count toward 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 major. Independent study projects cannot be used to meet department program requirements.

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. Students are strongly encouraged to choose an optional area of specialization and to take three upper-level courses within the submajor. A full list of areas of specialization is available in the English Undergraduate office, online, or from a department advisor. Please refer to the Handbook for English Concentrators for more information on how to design specific paths of study. All ENGLISH courses applied to the major must meet a minimum grade requirement of C–.

The Honors 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 prerequisite 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, students 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 in the winter term of junior year. The completion of this 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.

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).

Students must complete a course with a grade of C– or better to have it count toward the requirements for the major.

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. 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.

Creative Writing Minor

Not open to students with a major in English, or Creative Writing in the Residential College, nor to those electing a minor in Writing through the Sweetland Center for Writing

Students wishing to pursue a minor in Creative Writing must develop a specific plan for its completion in consultation with an English Department undergraduate department 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. A 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.

Prerequisites to the Minor: ENGLISH 223. Students must submit a portfolio of writing after completion of ENGLISH 223 for admittance into the minor. Once accepted into the minor, students will pursue either a poetry or prose fiction track at the 300- and 400-levels.

Applications for admission into the Creative Writing Minor are due on April 1 (Fall Term) and December 1 (Winter Term). Please fill out the application and attach a representative sample of your writing and submit to the Undergraduate Studies Office in 3187 Angell Hall.
Requirements for the Minor: 15 credits of additional courses, to be chosen from the following categories, as described below.

a. One course in Creative Writing in poetry or prose fiction at the intermediate level (ENGLISH 324, poetry or ENGLISH 323, prose fiction).
b. One course in Creative Writing in poetry or prose fiction at the advanced level (ENGLISH 424, advanced poetry, or ENGLISH 423, advanced fiction). Either ENGLISH 423 or 424 would satisfy the minor’s Upper-Level Writing Requirement.
c. Nine other credits in either craft or literary history courses at the 300- or 400-level. Upon consultation with an advisor, a student, if interested in writing both poetry and prose, may fulfill three of these credits in a 300-level Creative Writing course in the genre other than the one s/he is majoring in.

English Language Institute (ELI)

555 South Forest Avenue
(734) 764-2413 (phone)
(734) 763-3876 (fax)
www.lsa.umich.edu/eli
e-mail: eli-information@umich.edu

Not a major

The English Language Institute offers instruction in academic English to international students enrolled in the University. The main purpose of this instruction is to help non-native speakers to become effective and fully participating members of the academic community. For this reason, the majority of the ELI courses are primarily concerned with English for Academic Purposes. Most of these courses address specific areas such as pronunciation, lecture comprehension, or academic grammar and usually involve no more than 20 contact hours per term. In major areas such as speaking and writing, a sequence of courses of increasing difficulty and specialization is available.

The ELI offers courses in Winter and Summer Terms for international graduate student instructors in conjunction with the Center for Research on Learning and Teaching (CRLT) and offers language courses throughout the academic year for non-native speaking GSIs that address the communicative language needs of classroom, lab, and office hours.

The ELI provides a Writing Clinic and a Speaking Clinic as one-on-one facilities for those who have taken or are taking ELI courses in the relevant areas or are deemed not to need regular classroom instruction.

In addition, the ELI offers courses for students interested in the instructional aspects of language learning and teaching.

Summer English Language Program

The ELI offers a fee-based Summer English Language Program which is non-credit bearing. It is comprised of three separate programs: English for Academic Purposes, English for Business Studies, and English for Legal Studies.

English for Academic Purposes is designed for students who have been accepted to an English speaking university and wish to improve their language and study skills before beginning their academic program.

English for Business Studies focuses on the special nature of business communications and the language ability needed for exchange between people from different business cultures in both academic and non-academic settings. This course is designed for foreign business majors and international managers who wish to improve communication skills.

English for Legal Studies is designed for students who have been accepted into a U.S. law school. The focus is on the language, cultural, and academic skills needed to succeed in a rigorous law school program.

For further information, call (734) 764-2413.

Program in the Environment (PitE)

1120 Undergraduate Science Building
204 Washtenaw Avenue
(734) 763-5065 (phone)
(734) 647-7892 (fax)
www.lsa.umich.edu/pite
e-mail: Environment.Program@umich.edu

The Program in the Environment is an undergraduate degree program offered by the College of Literature, Science, and the Arts (LSA) and the School of Natural Resources and Environment (SNRE). This collaborative venture includes courses taught by faculty in SNRE as well as courses taught by faculty in various departments of LSA and in other schools and colleges. The resulting curriculum presents an expanded range of opportunities for students interested in environmental careers. It draws upon SNRE’s history as a leader in environmental and natural resource education and LSA’s strength in the liberal arts. The program is housed in the Undergraduate Science Building (USB) and many of its classes and activities are held in the Dana Building, the home of SNRE.

The Program in the Environment attempts 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 emphasizes the natural sciences and social sciences but requires one course in the humanities, broadly construed, in recognition of the importance of humanistic and cultural perspectives in environmental education. 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.

Natural and Earth Systems Science courses for the major and Natural Science Courses for the minor: Choose any natural science course at the 200-level or above in consultation with the department advisor.

Breadth Social Studies Courses for the major and Environmental Social Science Courses for the minor.

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<tr>
<th>Course Code</th>
<th>Course Name</th>
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<tr>
<td>AAS</td>
<td>322, 332, 396, 477</td>
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<td>ARCH</td>
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<td>EDCURINS</td>
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<td>NRE</td>
<td>336, 475, 477, 495, 571, 583</td>
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<tr>
<td>POLSCI</td>
<td>380</td>
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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 online at:

http://www.lsa.umich.edu/pite/academics/advising

Students can either pursue a minor in the Environment or the Minor in Sustainability, but not both.
• ENVIRON 111 / SOC 111 / GEOG 111 / AOS 172 / ENSCEN 172. Introduction to Global Change II: Human Impacts
• ENVIRON 201. Ecological Issues
• ENVIRON 270. Our Common Future
• CEE 260. Environmental Principles

B. Environmental Natural Science. One course chosen in consultation with the department advisor.

C. Environmental Social Science. One course chosen in consultation with the department advisor.

D. Culture and Environment. One course chosen in consultation with the department advisor.

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 U-M 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 350) or equivalent (STATS 265, 400, 405, or 412; ECON 404 or 405; or IOE 285).

Sustainability

A minor in Sustainability is not open to students majoring in the Environment, 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.

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 wellbeing? 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.

Prerequisites to the Minor: None for the minor per se, although individual courses elected to meet the requirements of the minor may have course prerequisites.

Requirements for the Minor: At least 18 credits of courses, to be elected from the following categories as stated:

1. Introductory course:
   ENVIRON 207: Sustainability and Society.

2. Practical/Field Experience Course: Students pursuing the 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 be 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 344/EARTH 344: Sustainable and Fossil Energy: Options and Consequences
• ENVIRON 398: Environment Internship Program
• 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. Courses with emphasis on basic aspects of environmental social and natural sciences and humanities are not acceptable to meet these requirements.

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 ENVRON 377: Literature and the Environment
• ENVRON 211: Social Sciences and Environmental Problems
• ENVRON 222: Introduction to Environmental Justice
• ENVRON 256/ANTHRCUL 256: Culture, Adaptation and Environment
• ENVRON 304: Topics in Culture and Environment
• ENVRON 320: Environmental Journalism: Reporting about Science, Policy and Public Health
• ENVRON 360/PSYCH 384: Behavior and Environment
• ENVRON 361/PSYCH 385: The Psychology of Environmental Stewardship, or NRE 561: The Psychology of Environmental Stewardship
• ENVRON 376: Environmental Ethics
• ENVRON 377: Literature and the Environment, or ENGLISH 320: Literature and the Environment
• ENVRON 382/EDUCURINS 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 ENVRON 361/PSYCH 385: The Psychology of Environmental Stewardship
• PHIL 240: Environmental Ethics
• PHIL 355: Contemporary Moral Problems
• PSYCH 384/ENVRON 360: Behavior and Environment
• PSYCH 385/ENVRON 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/ENVRON 380: Mineral Resources, Economics, and the Environment
• ENGR 390: Special Topics (section titled “Social Entrepreneurship”)
• ENGR 521: Clean Tech Entrepreneurship
• ENVRON 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/ENVRON 370/UP 423: Introduction to Urban and Environmental Planning
• CMPLXSYS 391/POLSCI 391: Applied Complex Systems: Emergent Challenges
• EEB 318/ENVRON 318/RCIDIV 318: Food, Land and Society
• EHS 588/ENVRON 475/NRE 475: Environmental Law
• ENVRON 270: Our Common Future – The Ecology, Economics and Ethics of Sustainable Development
• ENVRON 306: Global Water
• ENVRON 312/POLSCI 380: Environmental Politics and Policy
• ENVRON 318/EEB 318/RCIDIV 318: Food, Land and Society
• ENVRON 350: The Built Environment: Introduction to Landscape Change
• ENVRON 360: International Environmental Policy
• ENVRON 370/ARCH 423/UP 423: Introduction to Urban and Environmental Planning
• ENVRON 405: Urban Sprawl: Policy and Politics
• ENVRON 412: Environmental Values in Public Policy
• ENVRON 449/NRE 449: Organizational Theory and Change
• ENVRON 475/EHS 588/NRE 475: Environmental Law
• NRE 449/ENVRON 449: Organizational Theory and Change
• NRE 475/ENVRON 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/ENVRON 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/ENVRON 318/ESE 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
• EHS 500: Principles of Environmental Health Science
• EARTH 380/ENVRON 380: Mineral Resources, Economics, and the Environment
• ENVRON 310: Toxicology: The Study of Environmental Chemicals and Disease
• ENVRON 317: Conservation of Biological Diversity
• ENVRON 380/EARTH 380: Mineral Resources, Economics, and the Environment
• HMP 200/PUBLTH 200/PUBPOL 210: Health and Society: Introduction to Public Health
• PUBLTH 200/HMP 200/PUBPOL 210: Health and Society: Introduction to Public Health
• PUBPOL 210/PUBLTH 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/ESE 567: Energy Infrastructure Systems
• CMPLXSYS 250/PUBPOL 250: Social Systems, Energy, and Public Policy
• ESE 567/CIE 567: Energy Infrastructure Systems
• ENVRON 309: GIS Explorations of the Past, Present, and Future
• ENVRON 367: Global Enterprise and Sustainable Development
• MECHENG 433/AUTO 533: Advanced Energy Solutions
• NRE 574/PUBPOL 519/RCCNSCI 419: Sustainable Energy Systems
• PUBPOL 250/CMPLXSYS 250: Social Systems, Energy, and Public Policy
• PUBPOL 519/NRE 574/RCCNSCI 419: Sustainable Energy Systems
• RCCNSCI 419/NRE 574/PUBPOL 519: Sustainable Energy Systems
• UP 357/ARCH 357: Architecture, Sustainability and the City: Ideas, Forces, and People

Advising: The staff of the Program in the Environment will be responsible for advising students in planning and completing this minor.

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 bil-
lion 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.

Prerequisites to the Minor: None

Requirements for the Minor: The Food Systems Minor consists of no less than 5 courses for a total of at least 15 credits, at least two of which must be at the 300-level or above, from the following categories as stated:

A. Introductory Courses. Select at least one of the following as an orientation to the minor:
- UC 254, “Sophomore Interdisciplinary Seminar” (section titled ‘Much Depends on Dinner’)  

B. 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” AND  
- RCIDIV 318 / EEB 318 / ENVIRON 318, “Food, Land, and Society”

C. 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 / UP 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’)  
- RCIDIV 390 / ENVIRON 390, “Environmental Activism: Citizenship in a Republic”
- UC 370, “UC Special Topics” (section titled ‘The Measure of Our Meals’)  
- UP 357 / ARCH 357, “Architecture, Sustainability and the City: Ideas, Forces and People Shaping the Built Environment”

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.

Advising. PitE staff and faculty advisors working in tandem with faculty advisors in other units will help students navigate the Food Systems Minor.

Center for European Studies (CES)

1080 South University Avenue, Suite 3668  
(734) 764-0351 (phone)  
(734) 763-4765 (fax)  
www.it.umich.edu/ces  
e-mail: ces.advising@umich.edu  

Not a major
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 borders, 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.

Advising: Advising appointments can be scheduled online at www.ii.umich.edu/ces-euc/academics/europeanstudiesminor.

Constraints: Students may not use more than one course to meet the requirements of both a major and a minor. No course may be used to satisfy the requirements of more than one minor.

Prerequisites to the Minor: Fourth-term proficiency in a language of the European Union (other than English) or other European language by permission of the advisor.

Minor Program. At least 15 credits of courses from the following categories:

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.

At least two courses must be upper-level (300 or above). 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.

Germanic Languages and Literatures

3110 Modern Languages Building
812 East Washington Street
(734) 764-8018 (phone)
(734) 763-6557 (fax)
www.lsa.umich.edu/german
e-mail: german.dept@umich.edu

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 focus systematically on the development of all four basic language skills and intellectual curiosity of our students. Our language 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.

At least two courses must be upper-level (300 or above). 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.

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.

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. 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-M is GERMAN 232 are normally eligible for four additional retroactive credits if they complete the course with a grade of "B" or better. LSA 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 the LSA website.

Questions regarding placement and the placement test should be directed to Hartmut Rastalsky.

The Max Kade German Residence Program
(734) 764-8018 (phone)
e-mail: maxkade@umich.edu
www.lsa.umich.edu/german/german/kade

The Max Kade Residence is located in North Quad. Residents of the Kade Program have the opportunity to learn and practice German in an informal setting: students at all levels are welcome. They are also able to participate in the many activities in the residence, such as film series, Kaffeesstunden, and a mini-course featuring guest lectures by faculty. The Program also...
organizes and subsidizes trips to local cultural events, and to Berlin, Vienna, Munich, Cologne, or Hamburg over Spring Break.

The George Valenta Scholarship is available each year for an upperclass major living in the Max Kade Residence.

German

May be elected as a departmental major

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.

Majoring 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.

Information about graduate opportunities and careers specifically available to students majoring in German may be obtained from the department office.

Advising. A major in German is developed in consultation with and must be approved by Karl-Georg Federhofer (kallimz@umich.edu) or Andrew Mills (ajmills@umich.edu), the department advisors.

Appointments are scheduled online at wwwlsa.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.

Prerequisites to the Major. GERMAN 232, or the equivalent.

Prerequisites to Declaration. Students can declare a major at any stage during their undergraduate years.

Requirements for the Major. 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.

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.

For further information, contact Karl-Georg Federhofer (kallimz@umich.edu) or Andrew Mills (ajmills@umich.edu).

Honors Plan. In meeting the requirements stated above, students admitted to the Honors plan must include GERMAN 491 and 492 (Honors pro-seminar and thesis). Completion of preliminary work is a prerequisite to acceptance in the Honors plan 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) or Andrew Mills (ajmills@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.soelinguistics.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).

Dutch and Flemish Studies

Not a major

Dutch Studies has been an integral part of the Department of Germanic Languages and Literatures since the early 1970s. The program offers both language and literature courses. The first- and second-year courses satisfy the language requirement. Upper-level courses have ranged from the most modern literature to medieval genres, the literature of Rembrandt’s time, and Vincent van Gogh’s letters or Dutch colonial literature from The East Indies. Independent studies in combination with for instance European or World History, Anthropology, South African, or Indonesian Studies are encouraged. Hovering between English and German, Dutch is easy to learn for English speakers. Tutorials in the closely-related South African language Afrikaans are available on request.

A special course is offered: “Anne Frank in Past and Present” (DUTCH 492), in which the famous diary and its impact are studied and compared to other Holocaust writings. The first-year seminar entitled “Colonialism and its Aftermath” (DUTCH 160) enhances and emphasizes the wide scope of Dutch and Flemish Studies, as the history of the low countries is examined in contacts with new worlds in East and West.

Each year in May, students of Dutch have the opportunity to acquire the internationally recognized certificate of proficiency in Dutch, on four levels.

Scandinavian Studies

Not a major

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 invest 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 Swedish 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.

Turkish-German Studies

Not a major

Turkish-German Studies is a new field in the humanities and social sciences that researches and analyzes issues related to Turkish-German relations in both their historic and present forms. The interdisciplinary field investigates the impact of Turkish migrants on the German cultural landscape. Rather than indicating a hybrid culture caught in between two nations, the hyphen in ‘Turkish-German’ serves as a point of departure for an investigation into the history of relations between Turkey and Germany (and, by extension, the East and West).
Germanic Languages and Literatures Minors

Students wishing to pursue a minor in German Studies must develop a specific plan for its completion in consultation with Karl-Georg Federhofer or Andrew Mills, the department advisors. Appointments are scheduled online at:
www.lsa.umich.edu/german/undergrad/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

German Studies

Not open to student electing a major in German

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.

Information about graduate opportunities and careers specifically available to students minoring in German Studies may be obtained from the department office.

Prerequisites to the Minor: GERMAN 231 or equivalent, as determined by the departmental placement examination.

Requirements for the Minor: 18 credits of courses at the level of GERMAN 232 or higher are required. The 18 credits must include either GERMAN 325 or 326, and at least four courses within the 18 credits must be taught in German. At least one of the courses must be numbered 400 or above.

Scandinavian Studies

Prerequisites to the Minor: SCAND 234 or equivalent, as determined by the departmental placement examination.

Requirements for the Minor: At least 15 credits and five courses, to be chosen from the following categories as stated below.

1. Required Scandinavian courses: SCAND 331, 325, and 375.
2. Electives: Two courses chosen from among:
   - SCAND 351, 421, 430, 442, 460, 480;
   - PHIL 371;
   - Appropriate (Scandinavian topic) sections of: ENGLISH 407, SAC 330, and SAC 441.

German Studies

Not open to student electing a major in German

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.

Information about graduate opportunities and careers specifically available to students minoring in German Studies may be obtained from the department office.

Prerequisites to the Minor: GERMAN 231 or equivalent, as determined by the departmental placement examination.

Requirements for the Minor: 18 credits of courses at the level of GERMAN 232 or higher are required. The 18 credits must include either GERMAN 325 or 326, and at least four courses within the 18 credits must be taught in German. At least one of the courses must be numbered 400 or above.

Scandinavian Studies

Prerequisites to the Minor: SCAND 234 or equivalent, as determined by the departmental placement examination.

Requirements for the Minor: At least 15 credits and five courses, to be chosen from the following categories as stated below.

1. Required Scandinavian courses: SCAND 331, 325, and 375.
2. Electives: Two courses chosen from among:
   - SCAND 351, 421, 430, 442, 460, 480;
   - PHIL 371;
   - Appropriate (Scandinavian topic) sections of: ENGLISH 407, SAC 330, and SAC 441.

Center for Global and Intercultural Study (CGIS)

Established in July 2009, the Center for Global and Intercultural Study (CGIS) was created to provide a wide variety of global engagement and learning opportunities to the University of Michigan community. CGIS programming serves students with diverse academic interests at sites in all regions of the world, international and domestic.

CGIS also offers administrative and academic support to departments and units across campus hoping to launch their own individualized programs.

Advising. Every day of the academic term, CGIS conducts peer-facilitated sessions, called Ready, Set...Go Global, which identify global opportunities available to all U-M students. CGIS program advisors also assist students in determining the opportunity most consistent with their academic and professional goals as well as their personal interests. Students should attend a Ready, Set...Go Global session and meet with a CGIS program advisor to better understand the different advantages of various types of CGIS-supported programming.

Financial Aid + Scholarships. Students may apply Michigan awarded financial aid to some CGIS program costs. Please contact the Office of Financial Aid for details. CGIS also offers some scholarships to student participating on CGIS programs. Consult the CGIS website for scholarship application, information, and deadlines.

Programs. CGIS staff support student participation in four different program areas.
- Global Course Connections
- Spring/Summer Language Study
- Global Intercultural Experience for Undergraduates
- Michigan Global Academic Programs

Global Course Connections

These short-term programs offer an excellent and affordable opportunity for students interested in field-based extensions to on-campus courses.

Spring/Summer Language Study

These spring or summer term programs allow students to complete their third and fourth term language requirement in one intensive half term in the field. Students deepen their comfort and fluency in a non-English language through direct immersion as they live with host families and/or participate in internship/volunteer placements. These special language programs are offered during the spring/summer terms enabling students to complete their language requirement during their first year, if desired. Students register for these courses through the departments offering the language. Consult the CGIS website for course details.

Global Intercultural Experience for Undergraduates

GIEU expands learning beyond traditional classroom boundaries through intercultural, short-term (3 or 4 week summer) service projects. Small groups of diverse students called GIEU Student Scholars are mentored by U-M faculty members and travel to culturally-rich locations in the U.S. and around the world. Projects benefit local communities and give students the opportunity to work closely with local community members. GIEU emphasizes gaining intercultural skills, and as such, students are matched with field sites after being admitted to the program. Participation involves a year-long commitment, and students receive a paid internship and academic credit. Students apply to the program in early November and are registered for UC 275 or UC 276 (in winter and fall terms) by the instructor following acceptance.

Michigan Global Academic Programs

These programs offer global opportunities for students to study off campus during the entire academic year, spring, summer, fall or winter terms. Educational opportunities are categorized into many different types of programs, to meet a variety of student needs.
For courses not taught in English, these extended, in-depth opportunities allow students to achieve a higher degree of fluency. Please note that it is often possible to take courses in English even in non-English speaking countries. Many of the programs also have academic themes best explored on site.

**History**

*Updated 9/29/2014 for Fall 2014*

**May be elected as a departmental 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.

**Prerequisites to the Major.** None.

**Requirements for the Major.** 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. Two mini-courses can be combined in order to equal one course.

History majors with an average of 3.5 or better in their history courses are encouraged to join the National History Honor Society, Phi Alpha Theta.

For more information, go to phialphatheta.org.

**Requirements for the Major**

1. **Required course.** Every history major 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.

For the purposes of history major credit, no more than eight credits may be elected from HISTORY 395 (Independent Study).

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 departmental advisor to discuss the program requirements, but upon declaring, each student selects a faculty mentor who will serve as his or her personal advisor. Departmental advisors will help students select a mentor based upon 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 courses.

**The Honors Program**

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

For more information, go to phialphatheta.org.
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.

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 way to learn the basic analytical skills historians depend on and employers value. These skills include learning to become a consciously critical read, a concise and compelling writer, and a person who not only ‘knows stuff’ but who can tell other what the ‘stuff’ means and why it matters.

**Prerequisites to the Minor:** None.

**Requirements for the Minor:**

- Five courses (at least 15 credits), including two from a designated cluster, to be chosen in consultation with a faculty advisor. At least two of these count for cluster purposes:
  - Global Power and Social Justice
  - Cultural Connections

  Students may take all three and count one under “additional courses.”

  **Additional Courses.** Four additional courses (a minimum of 3 credits each for at least 12 credits), including two from a designated cluster, to be chosen in consultation with a faculty advisor. At least two of the three additional courses must be at the 300-level or higher. A maximum of one can be at the 100-level.

  All courses must be from the approved list of classes that count for the Global History Minor. The designated clusters are:

  - Global Power and Social Justice
  - Science, Technology, Medicine, Environment
  - Cultural Connections

  With approval from a faculty advisor, students may create an alternative cluster.

  **Cluster #1: Global Power and Social Justice**

  Courses in this cluster address projections of power, inequality, and dependency over long distances, from the premodern era through the cold war and post-9/11 worlds. Key themes involve the develop-
ment of political systems, such as empires and colonies; military interventions, in many types of wars and conflicts; economic exchanges, including trade networks and commodity systems; and international legal history, including treaties and the development of human rights law.

This cluster is particularly relevant for students majoring in fields such as International Studies, Political Science, and Economics.

- HISTORY 227: The Rise and Fall of the British Empire
- HISTORY 230: Humanities Topics in History, sections titled “Tracking Human Rights” and “Global Cold War”
- HISTORY 241: America and Middle Eastern Wars
- HISTORY 257 / JUDAIC 257: Law in the Pre-Modern World
- HISTORY 303: Topics in History, section titled “Atlantic Slave Trade: Histories and Legacies”
- 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 328: Humanities Topics in History, section titled “The Great War and the Twentieth Century”
- HISTORY 363: The U.S. and the World Since 1945: Politics, Culture, and War in the American Century
- HISTORY 407: Advanced Study in Comparative and Transnational History, section titled “Gender, Sexuality, and International Human Rights Law”
- HISTORY 445: Topics in History, section titled “Debating Capitalism” or “Why the West Rules(d) the World”

Cluster #2: Science, Technology, Medicine, Environment

Courses in this cluster provide global and comparative perspectives on the ways in which scientific knowledge, technological and medical developments, and environmental transformations have shaped societies, reflected political power, and produced inequalities.

This cluster is particularly useful for minors whose program is supplementing a major in fields such as the biological sciences, engineering, environmental studies, and the social sciences, and for undergraduates on the pre-med and pre-public health tracks.

- HISTORY 222 / ENVIRON 221: Global Environmental History
- HISTORY 224 / PUBPOL 224: Global Nuclear Proliferation
- 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 285 / RCSSCI 275: Science, Technology, Medicine and Society
- HISTORY 300 / ASTRO 300: The Beginning and the End: A History of Cosmology
- HISTORY 301 / ASTRO 301: Discovery of the Universe
- HISTORY 339 / ASIAN 365 / CLCIV 339: Doctors in the Ancient World: China, Greece, and Rome
- 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

Cluster #3: Cultural Connections

Ideas, languages, books, religions—all move widely across space and change as they circulate. Cultural transformations and interactions along frontiers and borderlands, in port cities, and through movement across regions and continents are at the center of global and world history. The Cultural Connections cluster draws on the History Department’s extensive curricular offerings in the study of world religions along with global and transregional perspectives on the history of sexuality, the family, popular culture, and everyday life, among other themes.

This cluster is particularly well suited for humanistically inclined students interested in society and culture through comparative and interactive perspectives.

- HISTORY 105: Introduction to Religion
- HISTORY 229 / ANTHRCUL 226: Introduction to Historical Anthropology
- HISTORY 243 / MENAS 243: Islamic World 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 290 / JUDAIC 290 / AAPTIS 287: Jews and Muslims
- HISTORY 309: After Alexander: The Hellenistic Age in the Mediterranean and the Near East
- HISTORY 327 / WOMENSTD 327: History of Sexuality
- HISTORY 375 / WOMENSTD 375: A History of Witchcraft: The 1692 Salem Trials in Historical and Cross-Cultural Perspective
- HISTORY 421 / AAS 421 / LACS 421 / RELIGION 421: Religions of the African Diaspora
- HISTORY 469: Preccolonial Southeast Asia
- HISTORY 489: The History of the Roman Catholic Church, 1775-2005
- HISTORY 495: The World the Mongols Made

100-Level Courses (not in any cluster; maximum of one of these may be counted toward the minor)

- HISTORY 101 / INTLSTD 205: What Is History?
- HISTORY 102: A History of the Present

AP credit: AP credits may not be used to satisfy requirements of the minor.

Conditions: Five of the six 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 Law and Policy Minor

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.

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 to embed 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.

Prerequisites to the Minor: None.

Requirements for the Minor. 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 235. Law and Social Justice
Electives. A minimum of four courses and 12 credits selected in consultation with a history faculty advisor, selected from the list below.

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.

Recommended capstone seminar:
- HISTORY 477. Law, History, and the Dynamics of Social Change (highly recommended but not required)

Other HISTORY Courses in History of Law and Policy:
- HISTORY 222 / ENVIRON 221. Global Environmental History
- 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 256 / JUDAIC 265. Introduction to Jewish Law. Sources, Legal History and Legal Theory
- HISTORY 257 / JUDAIC 257. Ancient Law
- HISTORY 269 / JUDAIC 260 / RELIGION 260. Introduction to the Talmud and the Rabbits
- HISTORY 272 / AAS 262. The Modern Civil Rights Movement
- HISTORY 3XX. Crime, Punishment, and the Politics of Prayer
- HISTORY 312 / POLSCI 362. History of European Integration
- HISTORY 322 / GERMAN 322. The Origins of Nazism
- HISTORY 324. Muslims in Contemporary Europe
- HISTORY 345 / RCSSCI 357. History and Theory of Punishment
- HISTORY 346 / AMCULT 348. History of American Capitalism
- HISTORY 349 / LACS 349. Revolutionary Movements in Modern Latin America
- HISTORY 356 / AMCULT 331 / WOMENSTD 356. Health in America. Patterns, Experiences, and Inequalities
- HISTORY 360. September 11
- HISTORY 364. History of American Suburbia
- HISTORY 368 / AMCULT 342 / WOMENSTD 360. History of the Family in the U. S.
- HISTORY 374 / AMCULT 374. The Politics and Culture of the “Sixties”
- HISTORY 375 / WOMENSTD 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 407. Advanced Study in Comparative and Transnational History, section titled “Gender, Sexuality, and International Human Rights Law”
- HISTORY 415 / ASIAN 415. Chinese Legal History. Law and Society in Late Imperial and Modern China
- HISTORY 443 / AAPTIS 487. Modern Middle East History
- HISTORY 466. Building American Empire: War, Politics, and Social Reform in the United States, 1901-1950
- HISTORY 497. History Colloquium, section titled “K-12 Education History and Policymaking”

Electives Cross-listed with HISTORY
- AAPTIS 487 / HISTORY 443. Modern Middle East History
- AAS 262 / HISTORY 272. The Modern Civil Rights Movement
- AMCULT 331 / HISTORY 356 / WOMENSTD 356. Health in America. Patterns, Experiences, and Inequalities
- AMCULT 342 / HISTORY 368 / WOMENSTD 360. History of the Family in the U. S.
- AMCULT 348 / HISTORY 346. History of American Capitalism
- AMCULT 374 / HISTORY 374. The Politics and Culture of the “Sixties”
- ASIAN 415 / HISTORY 415. Chinese Legal History. Law and Society in Late Imperial and Modern China
- ENVIRON 221 / HISTORY 222. Global Environmental History
- ENVIRON 224 / HISTORY 224 / PUBPOL 224. Global Nuclear Proliferation
- GERMAN 322 / HISTORY 322. The Origins of Nazism
- JUDAIC 257 / HISTORY 257. Ancient Law
- JUDAIC 260 / HISTORY 269 / RELIGION 260. Introduction to the Talmud and the Rabbits
- JUDAIC 265 / HISTORY 256. Introduction to Jewish Law. Sources, Legal History and Legal Theory
- LACS 349 / HISTORY 349. Revolutionary Movements in Modern Latin America
- 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 Rabbits
- WOMENSTD 356 / HISTORY 356 / AMCULT 331. Health in America. Patterns, Experiences, and Inequalities
- WOMENSTD 360 / HISTORY 368 / AMCULT 342. History of the Family in the U. S.
- WOMENSTD 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)

AP credit: AP credits may not be used to satisfy requirements of the minor.

Conditions: 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
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.

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.

Prerequisites to the Minor: None
Requirements for the Minor: A minimum of 6 courses and 18 credits, distributed as follows

A. 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.

B. Five additional courses (at least 15 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 List

HISTORY 230: Humanities Topics in History, section titled “History of Psychology”
HISTORY 232: Interdisciplinary Topics in History, section titled “Mental Health in Global History”
HISTORY 285 / RCSSCI 275: Science, Technology, Medicine and Society
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): History of Sexually Transmitted Diseases from Syphilis to AIDS
HISTORY 355 / AAS 355 / ANTHRCUL 355: Health and Illness in African Worlds
HISTORY 356 / AMCULT 331: Health in America: Patterns, Experiences, and Inequalities
HISTORY 376: Epidemics: Plagues and Cultures from the Black Death to the Present
HISTORY 391: Topics in European History, section titled “Medieval Catastrophes”
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 355 / HISTORY 355 / ANTHRCUL 355: Health and Illness in African Worlds
ANTHRCUL 355 / HISTORY 355 / AAS 355: Health and Illness in African Worlds
ASIAN 365 / HISTORY 339 / CLCIV 339: Doctors in the Ancient World
CLCIV 339 / HISTORY 339 / ASIAN 365: Doctors in the Ancient World
RCSSCI 275 / HISTORY 285: Science, Technology, Medicine and Society

AP credit: AP credits may not be used to satisfy requirements of the minor.

Conditions: Four of the six 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).

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.

Prerequisites to the Minor: None

Corequisites to the Minor: HISTORY 105 (Introduction to Religion).

Requirements for the Minor: Five additional courses (at least 15 credits), to be chosen in consultation with a faculty advisor, covering at least two of the following religious traditions – Christianity, Judaism, Islam, Buddhism, Hinduism – or another religious tradition approved by a faculty advisor. At least two of these five courses must be at the 300-level or higher.

History Department Courses in Religion

200-level

HISTORY 213 / MEMS 213: The Reformation
HISTORY 230: Humanities Topics in History, section titled “Angels and Demons in Early Christianity”
HISTORY 244 / AAPTIS 244 / HICS 244 / JUDAIC 244 / MENAS 244. The History of the Arab-Israeli Conflict.
HISTORY 248 / ASIAN 248 / RELIGION 248: Jesus Comes to Asia
HISTORY 256 / JUDAIC 265: Intro to Jewish Law
HISTORY 269 / JUDAIC 260 / RELIGION 260: Introduction to the Talmud and the Rabbis
HISTORY 270 / AMCULT 270: Religion in America
HISTORY 271 / RELIGION 271 / ANTHRCUL 221: Religions of Latin America
HISTORY 286 / RELIGION 286: A History of Eastern Christianity from the 4th to the 18th Century
HISTORY 290 / JUDAIC 290: Jews and Muslims

300-level and above

HISTORY 308 / ASIAN 307: Eat, Pray, Love: Devotional Traditions in South Asia
HISTORY 324: Muslims in Contemporary Europe
HISTORY 325 / RELIGION 325 / AAPTIS 325 / ASIAN 324: The History of Islam in South Asia
HISTORY 328: Humanities Topics in History, section titled “The Bible in the 19th Century” or “Ancient Judaism: Law, Religion, History”
HISTORY 357: Topics in African History, section titled “Islam in Africa”
HISTORY 381 / CLCIV 380 / JUDAIC 380 / RELIGION 382: Ancient Jewish History to 638 CE: From Israelite Origins to Islamic Conquest
HISTORY 387 / JUDAIC 387 / AMCULT 387: History of American Jews
HISTORY 421 / AAS 421 / LACS 421 / RELIGION 421: Religions of the African Diaspora
HISTORY 442 / AAPTIS 461: The First Millennium of the Islamic Near East
HISTORY 445: Topics in History, section titled “American Jews & Social Justice in the U.S.”
HISTORY 481: Topics in European History, section titled “Spirituality & Madness: Religious Women”
HISTORY 489: The History of the Roman Catholic Church 1775-2005
HISTORY 497: History Colloquium, section titled “Crusade and Jihad”

Non-History Department Courses Approved for the Religion Minor

African and African American Studies
AAS 358: Topics in Black World Studies, section titled “Urban Religion in the African Diaspora”

Anthropology
ANTHRCUL 246 / RELIGION 246: Anthropology of Religion
Asian Languages and Cultures

ASIAN 220 / RELIGION 202: Introduction to the Study of Asian Religions
ASIAN 223 / RELIGION 223: Krishna Speaks: Bhagavad-Gita
ASIAN 225 / RELIGION 225: Introduction to Hinduism
ASIAN 230 / PHIL 230 / RELIGION 230: Introduction to Buddhism
ASIAN 231 / RELIGION 231: Introduction to Tibetan Buddhism
ASIAN 234 / RELIGION 234: Buddhism and Death
ASIAN 272 / RELIGION 272: Introduction to the Study of Korean Religions
ASIAN 303 / RELIGION 303: Religious Military Orders of the World
ASIAN 304 / HISTART 304: The Art of Yoga
ASIAN 305 / RELIGION 305: Religion and Violence in the Secular World
ASIAN 306 / RELIGION 306: What is Religion?
ASIAN 325 / RELIGION 323: Zen: History, Culture, and Critique
ASIAN 326: Introduction to Japanese Buddhism
ASIAN 329: Violence and Nonviolence in the Buddhist Traditions of Asia
ASIAN 331 / PHIL 331 / RELIGION 331: Introduction to Indian Philosophy
ASIAN 333: Sacred Collectives: Nation and Religion in South Asia
ASIAN 439 / HISTART 492: Himalayas: An Aesthetic Experience
ASIAN 464 / RELIGION 464: From Mystic Saints to Holy Warriors: Islam in Southeast Asia

Classical Studies

CLCIV 347 / RELIGION 347: Roman Religion from the Archaic Period to Late Antiquity

English

ENGLISH 258 / RELIGION 258: The Bible as Literature
ENGLISH 349 / THTREMUS 323: American Theatre and Drama, section titled “Sex and Religion in Early English Drama”
ENGLISH 398: Junior Seminar in English Studies, section titled “New English Literature in the Age of Chaucer”
ENGLISH 415 / WOMENSTD 414: Studies in Women and Literature: Early Women Writers
ENGLISH 469: Milton

Germanic Languages and Literatures

GERMAN 460: Europe’s Islam: From Dante to Rushdie

History of Art

HISTART 285 / AAPTIS 285: Visual Culture Islam
HISTART 304 / ASIAN 304: The Art of Yoga
HISTART 351: The Art and Poetry of Michelangelo
HISTART 355 / MEMS 355: The Miraculous and the Diabolical in Late Medieval and Early Modern European Visual Culture
HISTART 492 / ASIAN 439: Himalayas: An Aesthetic Experience

History

MEMS 355 / HISTART 355: The Miraculous and the Diabolical in Late Medieval and Early Modern European Visual Culture

Judaic Studies

JUDAIC 205 / HJCS 276: Intro to Jewish Civilizations and Culture
JUDAIC 270 / HJCS 270 / ACABS 270 / RELIGION 270: Introduction to Rabbinic Literature
JUDAIC 360: A Global History of the Jews of Spain
JUDAIC 376 / WOMENSTD 376: Women and the Bible
JUDAIC 410 / SOC 410: Sociology of the American Jewish Community
JUDAIC 451 / POLSCI 350: The Politics and Culture of Modern East European Jewry
JUDAIC 468 / HJCS 478 / RELIGION 469: Jewish Mysticism

Near Eastern Studies

AAPTIS 200 / ACABS 200 / HJCS 200 / RELIGION 201: Introduction to World Religions: Near Eastern
AAPTIS 262 / RELIGION 204: Introduction to Islam
AAPTIS 285 / HISTART 285: Visual Culture Islam
AAPTIS 361: Jihad in History
AAPTIS 363 / RELIGION 363: The Qur’an and its Interpretations
AAPTIS 365: The Prophet Muhammad in Islam
AAPTIS 465 / RELIGION 465: Islamic Mysticism
AAPTIS 567: Readings in Classical Islamic Texts (requires 6th-term proficiency in Arabic)

ACABS 122 / RELIGION 122: Introduction to the New Testament
ACABS 221 / RELIGION 280: Jesus and the Gospels
ACABS 261: Ancient Egypt: Religion and Culture
ACABS 270 / JUDAIC 270 / HJCS 270 / RELIGION 270: Introduction to Rabbinic Literature
ACABS 323 / RELIGION 350: Christianity after the New Testament: The First Six Centuries
ACABS 592: Seminar in Ancient Civilizations and Biblical Studies
HJCS 270 / ACABS 270 / JUDAIC 270 / RELIGION 270: Introduction to Rabbinic Literature
HJCS 276 / JUDAIC 205: Intro to Jewish Civilizations and Culture
HJCS 478 / JUDAIC 468 / RELIGION 469: Jewish Mysticism

Philosophy

PHIL 230 / ASIAN 230 / RELIGION 230: Introduction to Buddhism
PHIL 262 / RELIGION 262: Intro to the Philosophy of Religion
PHIL 331 / ASIAN 331 / RELIGION 331: Introduction to Indian Philosophy
PHIL 480: Philosophy of Religion

Political Science

POLSCI 350 / JUDAIC 451: The Politics and Culture of Modern East European Jewry

Religion

RELIGION 122 / ACABS 122: Introduction to the New Testament
RELIGION 201 / ACABS 200 / AAPTIS 200 / HJCS 200: Introduction to World Religions: Near Eastern
RELIGION 204 / AAPTIS 262: Introduction to Islam
RELIGION 220 / ASIAN 220: Introduction to the Study of Asian Religions
RELIGION 223 / ASIAN 223: Krishna Speaks: Bhagavad-Gita
RELIGION 225 / ASIAN 225: Introduction to Hinduism
RELIGION 230 / PHIL 230 / ASIAN 230: Introduction to Buddhism
RELIGION 231 / ASIAN 231: Introduction to Tibetan Buddhism
RELIGION 234 / ASIAN 234: Buddhism and Death
RELIGION 246 / ANTHRCUL 246: Anthropology of Religion
RELIGION 258 / ENGLISH 258: The Bible as Literature
RELIGION 262 / PHIL 262: Intro to the Philosophy of Religion
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RELIGION 306 / ASIAN 306: What is Religion?
RELIGION 323 / ASIAN 325: Zen: History, Culture, and Critique
RELIGION 331 / ASIAN 331 / PHIL 331: Introduction to Indian Philosophy
RELIGION 347 / CLCIV 347: Roman Religion from the Archaic Period to Late Antiquity
RELIGION 350 / ACABS 323: Christianity after the New Testament: The First Six Centuries
RELIGION 360 / RCHUMS 365: Experiences of Atheism: A History of Skepticism and Unbelief from the Greco-Roman to the Modern Period
RELIGION 363 / AAPTIS 363: The Qur’an and its Interpretations
RELIGION 455 / SOC 455: Religion and Society
RELIGION 464 / ASIAN 464: From Mystic Saints to Holy Warriors: Islam in Southeast Asia
RELIGION 465 / AAPTIS 465: Islamic Mysticism
RELIGION 469 / HJCS 478 / JUDAIC 468: Jewish Mysticism

Residential College

RCHUMS 365 / RELIGION 360: Experiences of Atheism: A History of Skepticism and Unbelief from the Greco-Roman to the Modern Period

Sociology

SOC 410 / JUDAIC 410: Sociology of the American Jewish Community
History of Art

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.

Organized visits to museums in Cleveland, Detroit, Toledo, and other nearby collections are an integral part of the department’s academic program.

Prerequisite to the Major: none

Requirements for the Major: 24 credits (and five courses), including at least two upper-division courses, in the medieval and early modern periods, chosen in consultation with the MEMS minor 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 minor 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.

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.

History of Art

May be elected as a departmental major

A major in the History of Art is developed in consultation with a History of Art advisor. Appointments are scheduled through the departmental website: www.lsa.umich.edu/histart/undergraduate/academicadvising.

Majors must consult with an advisor at least once a year.

Prerequisite to the Major. Any course below the 300 level, except for HISTART 194 and 299. Students are encouraged—but not required—to choose from among HISTART 100, 101, 102, or 103. The prerequisite requirement can also be met through the Advanced Placement Examination (AP) in Art History with the approval of a History of Art advisor.

Requirements for the Major. At least 24 credits in History of Art and 6 cognate credits.

The 24 credits in History of Art must include:
- a 3-credit seminar at the 300 level or higher.
- a total of 12 credits (including the seminar) at the 300 level or higher.
- 12 additional credits at the 200 level or higher.
- completion of the History of Art Distribution Requirements.

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.

**Honors Plan.** 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**
A minor in History of Art is not open to students with a major in History of Art.

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.

A minor in the History of Art is developed in consultation with a History of Art advisor. Appointments are scheduled through the departmental website: [www.lsa.umich.edu/histart/undergraduate/academicadvising](http://www.lsa.umich.edu/histart/undergraduate/academicadvising)

Minors must consult with an advisor at least once a year.

**Prerequisites to the Minor. None**

**Requirements for the Minor.** At least 15 credits (or five courses) in the History of Art. The selected courses must satisfy the following requirements:

1. **100-level Survey Course:** A student must complete a 100-level survey course (HISTART 100, 101, 102, or 103). This requirement may be satisfied through the Advanced Placement Examination (AP) in Art History with the approval of a History of Art advisor.
2. **Electives:** A minimum of 2 History of Art courses (6 credits) at the 300 level or higher, one of which must be a seminar. The remaining credits required to complete the minor must be at the 200 level or higher.

**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 100-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**
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

Graduate-level courses are also available. Two courses (minimum 6 credits) in the discipline must be at the 400 level or higher, one of which must be a seminar. The remaining credits required to complete the minor must be at the 300 level or higher.

**Honors Program**

1330 Mason Hall
419 South State Street
(734) 764-6274 (phone)
(734) 763-6553 (fax)
[www.lsa.umich.edu/honors](http://www.lsa.umich.edu/honors)
e-mail: ask.honors@umich.edu

The College, recognizing its special responsibility to students with superior ability, has established a four-year program to provide opportunities for greater depth of study throughout the undergraduate years. Michigan Honors is a four year program. In each term of the first and second years, students elect two Honors courses among the total of four courses normally comprising their schedules. In the junior year students are admitted to an Honors plan (“major”) from among approximately forty departments and programs in the College. Students may also choose to pursue Honors in the Liberal Arts.

Among the features of the Honors Program are special Honors courses and Honors sections in regular courses, opportunities to participate in the research projects of faculty members, or in individual research, faculty-student seminars, and special academic advising.

**Honors Admission**

Students are admitted to the Honors Program by invitation of the Director, though inquiries are welcomed from any highly motivated student. Approximately 10% of incoming first-year students are invited into the program, but continuance is based on academic accomplishment. Students may jointly enroll in Honors and other LSA programs, such as the Residential College, the Comprehensive Studies Program, or other MLCs, or in LSA/Honors and another school, such as Music or Engineering.

Honors Admissions considers a number of factors when reviewing students: the high school GPA; the difficulty of the curriculum; teacher and counselor recommendations; the student’s intellectual interests, enthusiasms, and goals; achievement test scores, SAT and ACT scores, and the student’s essay. The Honors student body is diverse, with a range of backgrounds, scores, and grades. Above all, we look for evidence of exceptional intellectual engagement and energy.

Students who are not invited to participate in the fall of their first year may request admission through the Honors Program. Though inquiries are welcomed from any highly motivated student, approximately 10% of incoming first-year students are invited into the program, and continuance is based on academic accomplishment. Students may jointly enroll in Honors and other LSA programs, such as the Residential College, the Comprehensive Studies Program, or other MLCs, or in LSA/Honors and another school, such as Music or Engineering.

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students with distinguished academic performance in a full set of challenging classes are admitted at the second-year level.

Honors Housing

Honors Housing is open to all students who are admitted to the Honors Program, but no student is required to live there. Honors Housing allows students to live near others who are taking some of the same classes, and promotes intellectual interchange and a feeling of community. At the same time, students have access to all of the facilities in the residence hall and can participate in its many programs and activities. Honors RAs run a number of programs throughout the year to promote community. Information about Honors Housing is sent to all admitted students.

Honors Advising

Perhaps the most valuable aspect of the Honors Program that students consistently mention is the high quality of academic advising they receive from the directors, the entire Honors staff, faculty, and peer advisors. Advising helps students make informed decisions. These decisions range from election of courses to choosing a major, from setting up an independent study to choosing a graduate or professional school, from going abroad to focusing on potential careers. This kind of ongoing dialogue assures that the individual student comes first. Students also profit from discussions with Honors department advisors.

Honors Courses

The Honors Program believes that challenging work, including research opportunities, should be available to superior students from the onset of their college education. Several types of Honors courses are offered for first and second year students:

- courses offered by various departments intended only for Honors students
- sections of regular courses for Honors students
- courses sponsored by the Honors Program.

The Honors Core forms the foundation for an Honors education at U-M. Designed specifically for Honors students by innovative faculty the Honors Core Curriculum provides rigorous, wide-reaching introductory courses across the three academic divisions in LSA: the Natural Sciences (NS), the Social Sciences (SS), and the Humanities (HU). The Honors Core builds on the fine tradition of our historic Great Books course, which remains a Core Humanities course. The Core extends to other areas the many strengths of Great Books: foundational content, critical analysis, excellent instruction in writing, and social bonding. The Core is also integrative by providing opportunities for interaction between students and faculty in its various courses through electronic media, virtual meetings, and occasional symposia. Because Honors students take Core courses in both first and second years, they have added opportunities to form study groups and friendships more broadly across the Program. Honors students are required to elect three Core courses in their first two years, one Core course in each LSA division. Core courses that are available in any given semester are listed in the Course Guide.

Small seminars (HONORS 250, 251, and 252) enable students to discuss matters of intellectual substance with a senior faculty member on a variety of topics. These seminars enroll a maximum of 15 students.

Some upper level courses also count as Honors courses for first and second year students and many courses may be converted to Honors courses with the agreement of the professor and the Honors Program.

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.

Independent Study and Research

Underlying all the coursework in Honors is the firm belief that students should take learning outside the classroom and engage in an independent study research project (for credit) under the direction of a faculty member. The Honors Program strongly encourages qualified and able students to do independent study or research. These options allow students to concentrate a considerable amount of time and effort in an area of particular interest, to develop intellectual relationships with members of the faculty and research staff, and to make more informed decisions about the Honors thesis and perhaps even long-range goals. Students are encouraged to look for a research placement when they have had adequate preparation to make their participation useful to the project and interesting for them. Honors academic advisors will be happy to talk with students about strategies for finding a project and a mentor.

Honors research tutorials are available in any term by permission of the Honors Office. First-year students and sophomores elect HONORS 291 and 292 and may serve as research assistants for faculty researchers, receive instruction in research methods, or participate in some phase of University or individual research. Comparable courses are available for juniors (HONORS 390) and seniors (HONORS 490).

The Undergraduate Research Opportunity Program (UROP) is another avenue through which to find a research placement. Some departments (for example, chemistry and psychology) maintain lists of available research projects. Many of our students find research work by directly contacting faculty whose areas of specialization interest them.

First and Second Year (Underclass) Honors

General guidelines for underclass Honors students, if they are to remain in good standing in the Honors Program, are based on standards developed during the Program’s history. They are designed to provide a sound base for the undergraduate experience and to allow students to acquire knowledge, develop analytic skills, exercise creative abilities and critical faculties of mind.

The basic four requirements for an underclass Honors student are:

- an average of two Honors courses per term for the four full terms of underclass Honors
- a course load of 14-18 credit hours
- an overall grade point average (GPA) of 3.4 or better
- the Texts and Ideas requirement.

Junior/Senior (Upperclass) Honors

Almost all departments and interdisciplinary programs offer Honors majors. At the beginning of the third year, students may apply to a departmental Honors Plan. 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 who are accepted into an Honors major program 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.

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 & Minors.

Students may also petition the Honors Program for approval of an Honors Individual Major Program (HIMP). Information about the Honors Individual Major Program is available in 3330 Mason Hall.
Senior Thesis

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.

Thesis Grants. All seniors are eligible to apply for senior thesis and travel grants.

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 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.

Honors in the Liberal Arts

Honors in the Liberal Arts (HLA) provides an alternative to the traditional Honors plan as a means to earn an Honors degree. The degree is intended for Honors students who have been academically successful during the first and sophomore years and who wish to explore and develop deep interests across major boundaries through especially advanced work primarily outside the major. This work may be elected either in addition to an Honors plan or to supplement a non-Honors plan. The courses proposed for the HLA must represent areas or aspects of a central theme which span the curricula of several departments or programs. Only one HLA course may come from any of the student’s major(s) or minor(s). HLA proposals will reflect the unique academic interests of each individual student. Students who make this choice will graduate with Honors in the Liberal Arts. It is possible for students to complete both Honors in the Liberal Arts and Honors plan degrees if they complete a sufficiently rich and challenging curriculum outside the area of major in the third and fourth years.

Requirements for Honors in the Liberal Arts

1. Completion of the Honors Program requirements in the first two years: eight (8) Honors courses, including two (2) “Literature and Texts” courses.
2. Submission of a proposal and list of potential courses to the Honors Academic Board before the end of the junior year. Students should consult with an advisor while preparing their proposal.
3. Five (5) HLA courses, each carrying departmental graduate credits (a minimum of 15 credits), to be selected in consultation with an Honors advisor. Four (4) must come from outside the student’s major and minor.
4. Students will submit a portfolio of work completed in their HLA courses to the Honors Program in the term they plan to graduate. This work will be evaluated by a committee, which will include faculty, to ensure that the academic program is sufficiently rigorous and includes written expression of a caliber that will warrant awarding the HLA.
5. An overall GPA of 3.5.

Individual Major Program (IMP)

1255 Angell Hall
435 South State Street
(734) 764-0332 (phone)
(734) 764-2772 (fax)
www.lsa.umich.edu/IMP
e-mail: individual-major.program@umich.edu

Tyrose Stewart, Ph.D.
IMP Advisor

May be approved as a special major

The Individual Major (IMP) is an option for innovative and thoughtful students who wish to undertake a rigorous program of study within the College of LSA that is not available either in an existing departmental major or interdepartmental program. IMPs are interdisciplinary and reflect the liberal arts perspective of LSA. The IMP encourages diversity and flexibility, but all IMPs must have an identifiable academic focus and unifying theme. As with other majors, IMPs must stress development of skills to think critically, to understand and evaluate knowledge, and to develop ideas.

Students are encouraged to apply for an IMP during their sophomore year. No more than half the proposed courses for the major can be completed and/or currently elected at the time the IMP application is submitted. Applications from students in their senior year will not be accepted.


Since an IMP leads to an A.B. or B.S. degree, students must meet A.B./B.S. requirements (first-year writing, second language, race and ethnicity, and quantitative reasoning requirements, and an area distribution plan). Students may complete the upper-level writing requirement by electing any course approved for that purpose but are urged to seek courses relevant to their major.

Students with an IMP may elect a Double Major provided the IMP courses are not used as part of the second major or for area distribution. Only one course from an IMP may be used toward completing the requirements of a minor. A maximum of six non-LSA credits may be included in an IMP. Courses in departments from which students have 12 or more major credits may not be used to meet the distribution requirement.
Students interested in developing an IMP must meet with the IMP advisor to discuss goals, academic options, and procedures. After this initial discussion, a formal application may be submitted. This application must include:

1. an intellectual statement containing a coherent rationale for the proposed program;
2. a comprehensive curriculum of at least 34 upper-level credits;
3. an unofficial transcript; and
4. a letter of recommendation from two faculty members from two LSA departments offering courses in the student’s defined major. These faculty should have discussed the proposed program with the student and support the proposal.

The completed application is reviewed by the Committee on Interdisciplinary Studies, a committee composed of LSA faculty members and a representative of the Newnan Academic Advising Center. The committee bases its decision on whether the proposed program ensures a coherent course of study comparable to that in other College majors.

When an IMP has been approved, the student may proceed with the program. If it becomes necessary or desirable to modify an IMP, the student must consult the IMP advisor.

Honors Individual Major Program (HIMP). 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 unify 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 schedule an appointment with Dr. D.L. Wessel Walker, 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.

Residential College Individual Major Program (RCIMP). The Residential College offers the opportunity to formulate an individualized major to RC students unable to find an existing degree program within the Residential College, or in the College of Literature, Science and the Arts, which meets their specific academic needs and interests. Students wishing to pursue this option must have a good idea of what they want to achieve, consult with RC faculty and (where appropriate) other U-M faculty, and develop a carefully thought out academic plan of study.

Note: Students who wish to declare an individualized major are strongly advised to do so before the end of their sophomore year. Under exceptional circumstances an individualized major may be approved as late as during the junior year, but in no cases during the senior year.

RC Advising. Students interested in this option should start by discussing the matter with the head of the RC Individual Major Program (IMP), whose name may be obtained at the RC Academic Services Office in 134 Tyler, East Quad. With the assistance of the IMP coordinator, the student will need to identify one or two faculty members – at least one of whom is on the RC faculty – willing to serve as her/his department advisor(s). The department advisor(s) will help the student formulate an appropriate academic plan of study, and that plan must be approved by the advisor(s) and by the IMP coordinator before the student can formally declare the individualized major. After the major is declared, the student must continue to consult with her/his advisor(s) at least once a term before registering for courses in the following term; and completion of the major must be certified by an advisor who is a member of the RC faculty.

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 biologi-
cal, 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 (Data Mining & Information Analysis Track), or to apply information technology to large-scale, cutting-edge problems in the life sciences (Life Science Informatics Track).

Students majoring 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 developers working with large software development teams. Recruiters visiting the university frequently are seeking students with the ideas 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 44 credit hours for completion, including core courses, track requirements for the major, and electives. The major consists of four core courses, 3-4 courses in one of the flexible program tracks, plus electives selected from a list of recommended courses.

Four prerequisite courses serve as an introduction to some of the core academic aspects of the curriculum and are required for all majors. 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: Data Mining & Information Analysis or Life Science Informatics. Each of the three 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.

A. Data Mining & Information Analysis Track
The collection, analysis, and visualization of complex data play critical roles in research, business, and government. Powerful tools from applied statistics, mathematics, and computational science can be used to uncover the meaning behind complex data sets. The Data Mining and Information Analysis track integrates these disciplines to provide students with practical skills and a theoretical basis for approaching challenging data analysis problems. Students in this track learn how to develop and test models for making predictions, to search through large collections of data for rare and unexpected patterns, and to characterize the degree of certainty associated with discoveries made in the course of data analysis. Skills and knowledge acquired in this track are increasingly important in the job market and are highly relevant for a number of graduate school programs.

B. 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.

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 prerequisites for the major.
Informatics majors may not use any STATS courses toward the Area Distribution requirement.

Advising. The academic program coordinator 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 Newman 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.

Note. It is not necessary to complete all prerequisite courses prior to declaring an Informatics major. Minimum grade for all prerequisite courses is a C or better.

Prerequisites to Core Courses:
1. SI 110 / UC 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 with a C or better.

Prerequisite to Declaration. MATH 115, STATS 250, and EECS 182 or 183. Major. A minimum of 12 courses and a minimum of 40 credits.

1. Core: EECS 203, EECS 282 or 280*, STATS 403
If a student takes both EECS 282 and 280, EECS 280 will be treated as an elective.

2. Subplans: Completion of one of the following tracks:
   a. Data Mining & Information Analysis track
      i. MATH 217
      ii. STATS 406
      iii. STATS 415
   b. Life Science Informatics track
      i. BIOLINF 527
      ii. One of the following Life Sciences courses:
         1. BIOLOGY 305
         2. MCDB 310
      iii. Two of the following Quantitative/Computational courses:
         1. EECS 376, 382, 485
         2. STATS 401, 449, 470
         3. BIOSTAT 449
   iv. Electives*: 8 credits must be elected at the 300-level or higher.
level or higher.

3. Electives: Additional Informatics electives to bring total credits for the major 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 are 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 choose 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.

Data Mining & Information Analysis

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
BIOINF 551*/BIOMED 551*/CHEM 551*/BIOMEDE 551*/PATH 551* Proteome Informatics
BIOINF 551*/BIOLCHEM 551*/BIOSTAT 646*/CHEM 551*/BIOMEDE 551*/PATH 551* Proteome Informatics
BIOINF 643/MATH 643/BIOINF 643 Math Modeling in Biology
BIOINF 749/STATS 749 Topics in Biostatistics
BIOINF 545*/STATS 545* Molecular Genetic and Epigenetic Data
CHEM 551*/BIOLCHEM 551*/BIOINF 551*/BIOSTAT 646*/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 510*/OMS 510* Linear Programming I
IOE 511*/MATH 512* Continuous Optimization Methods
IOE 512* Dynamic Programming
MATH 416 Theory of 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/STATS 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 510* Linear Programming I
MATH 562*/IOE 511* Continuous Optimization Methods
MATH 571 Numerical Methods for Scientific Computing I
MCD 408 Genomic Biology
OMS 518*/IOE 510*/MATH 561* Linear Programming I
PATH 551*/BIOLCHEM 551*/BIOINF 551*/CHEM 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/BIOINF 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 525*/MATH 525 Discrete State Stochastic Processes
STATS 545*/BIOLCHEM 545*/BIOMEDE 545* 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

Life Science Informatics

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
BIOINF 551*/CHEM 551*/BIOSTAT 646*/PATH 551* Proteome Informatics
BIOINF 551*/BIOSTAT 646*/CHEM 551*/BIOINF 551*/BIOMEDE 551*/PATH 551* Proteome Informatics
BIOINF 643/MATH 643/BIOINF 643 Math Modeling in Biology
BIOINF 649/STATS 649 Topics in Biostatistics
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ECS 281 Data Structures and Algorithms
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MATH 548/STATS 548 Computations in Probabilistic Modeling in Bioinformatics

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neurial innovation.

university units, and student-led organizations that enables Wolverines to
neurship ecosystem, a web of experience-based curricula, mentorship,
Innovate Blue unifies the University of Michigan innovation and entrepr e-
experiential space that promotes safe risk-taking and advances entrepr e-
challenges and opportunities, taking full advantage of an academic and
creativity and multidisciplinary teams in tackling the world's most pressing

turn their dreams into action. At Innovate Blue we support both individual

web: innovateblue.umich.edu
e-mail: innovateblue@umich.edu

The School of Information will launch a Bachelor of Science in Informa tion
Not a major

program in Fall 2014 (students will apply starting Fall 2013). Students apply
to the program during their sophomore year and are admitted to the
program during their junior year. The A.B./B.S. degree is normally awarded
at the end of the senior year (the first year of study in the School of Info r-

information about course offerings and degree requirements

The School of Information offers an accelerated program for exceptional
undergraduates at the University of Michigan. The program enables stu-
ents in the Department of Linguistics to complete both a bachelor's de-
and the two-year Master of Science in Information (MSI) degree in
five years of study. The School of Information will select candidates for this
program during their junior year. The A.B./B.S. degree is normally awarded
at the end of the senior year (the first year of study in the School of Informa tion) and the MSI degree after completion of its requirements (normally after a second year of graduate study).

The program is described in on the LSA website. Undergraduates wishing
further information about course offerings and degree requirements
should contact the School of Information.

The School of Information is also a participating unit in the interdepart-
mental Informatics major listed under "Informatics."


107A, 1st floor, Shapiro Library
919 South University Ave
(734) 763-8617 (phone)
e-mail: innovateblue@umich.edu
web: innovateblue.umich.edu

Entrepreneurial education is focused on equipping students to "Be the
Difference" – to innovate and develop ideas and to put these ideas into
action, typically as part of a team effort. It is therefore a truly multidiscipli-
ary activity that includes teachings from a variety of disciplines, such as
anthropology, business, engineering and psychology, and focuses at its
core on an approach that values immersive experiences.

Advising. All students wishing to declare either PIE or the Minor should
contact innovateblue@umich.edu to schedule an appointment with an
advisor.

Minor in Entrepreneurship

A minor in Entrepreneurship in not open to those electing the Program in
Entrepreneurship supplemental studies

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 550/CMPLXSYS 510 Introduction to Adaptive Systems
MCDB 408 Genomic Biology
MCDB 411 Protein Structure and Function
PATH 551/BIO/LCHEM 551/CHM 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 631* Practical I Engagement Workshop: Content Management Systems
SI 689* Computer-Supported Cooperative Work
STATS 401 Applied Statistical Methods II
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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

Honors Plan. Students interested in doing original research in informatics are encouraged to consider the Informatics Honors Plan. The Honors plan is open to all Informatics majors who have achieved both a GPA in the ma-
and an overall GPA of 3.4 or better. At least one year prior to gradu-
ation, 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 Applica-
tion 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 be-
fore 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 independ-
ent reader, and the student presents the work in a public forum.

School of Information

School of Information
3360 North Quad
105 South State Street
(734) 763-2285 (phone)
(734) 615-3587 (fax)
www.sii.umich.edu
e-mail: umsi.admissions@umich.edu
Professor Jeff MacKie-Mason, Dean

Not a major

The School of Information will launch a Bachelor of Science in Information
program in Fall 2014 (students will apply starting Fall 2013). Students apply
to the program during their sophomore year and are admitted to the
School of Information for their final two years. Undergraduates wishing
further information about course offerings and degree requirements
should contact the School of Information.

Innovate Blue

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Innovate Blue unifies the University of Michigan innovation and entrepre-
neurship ecosystem, a web of experience-based curricula, mentorship,
university units, and student-led organizations that enables Wolverines to
turn their dreams into action. At Innovate Blue we support both individual
creativity and multidisciplinary teams in tackling the world’s most pressing
challenges and opportunities, taking full advantage of an academic and
experimental space that promotes safe risk-taking and advances entrepre-
neurial innovation.

Entrepreneurial education is focused on equipping students to “Be the
Difference” – to innovate and develop ideas and to put these ideas into
action, typically as part of a team effort. It is therefore a truly multidiscipli-
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anthropology, business, engineering and psychology, and focuses at its
core on an approach that values immersive experiences.

Advising. All students wishing to declare either PIE or the Minor should
contact innovateblue@umich.edu to schedule an appointment with an
advisor.

Minor in Entrepreneurship

A minor in Entrepreneurship in not open to those electing the Program in
Entrepreneurship supplemental studies
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

Prerequisite to the Minor. None

Prerequisite to Declaration: Sophomore standing or above

Requirements for the Minor. A minimum of 15 credits of courses

1. Core:
   A. ES 212. Entrepreneurial Business Basics
   or
   UC 270. University Courses Special Topics, section titled “Entrepreneurial Business Basics”
   B. UC 270. University Courses Special Topics, section titled “Entrepreneurial Creativity”

2. Electives: minimum 3 credits selected from an approved list.
   Electives present students with an opportunity to explore disciplinary areas in more academic depth related to their entrepreneurial interest.
   *Students are encouraged to petition for approval of classes not yet identified that offer an opportunity to pair their entrepreneurial mindset with a level of specialization.

3. Practicum Experience. The third and final part of the requirement for a Minor in Entrepreneurship is a minimum of 6 credits of an immersive, experiential learning opportunity. Key to this practical experience is a strong focus on:
   a. the identification and opportunity recognition and also
   b. implementation and execution of the idea for a relatively large external audience.

   Students must receive credit for both

   • ENTR 411: Entrepreneurship Practicum, and
   • ENTR 490: Advanced Entrepreneurship Practicum

Program in Entrepreneurship (PIE) Supplemental Studies

The supplemental studies in Program in Entrepreneurship in not open to those electing the Entrepreneurship minor

The primary purpose of the Program in Entrepreneurship (PIE) is to give students who are not able to commit to the full Minor in Entrepreneurship a formal academic program structure through which they can acquire fundamental entrepreneurial knowledge. The new Program in Entrepreneurship will focus on social sciences, specifically entrepreneurial creativity, and include a wide breadth of electives reflecting the breadth of entrepreneurial interests for our students focused on a wide range of entrepreneurial activities from social entrepreneurship, technology startups to design and arts-focused entrepreneurial activities.

Prerequisite to the Supplemental Studies. None

Prerequisite to Declaration: sophomore standing or above

Requirements for the Supplemental Studies. A minimum of 9 credits of courses

1. Core:
   A. ES 212. Entrepreneurial Business Basics
   or
   UC 270. University Courses Special Topics, section titled “Entrepreneurial Business Basics”
   B. UC 270. University Courses Special Topics, section titled “Entrepreneurial Creativity”

2. Electives: minimum 3 credits selected from an approved list. This presents students with an opportunity to explore disciplinary areas in more academic depth related to their entrepreneurial interest. Students are encouraged to petition for approval of classes not yet identified that offer an opportunity to pair their entrepreneurial mindset with a level of specialization.

Electives

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Minor</th>
<th>Supplemental Studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAS 330 / RCSSCI 330</td>
<td>Urban and Community Studies I</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>AAS 443 / WOMENSTD 443</td>
<td>Pedagogy of Empowerment: Activism in Race, Gender, and Health</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>ARCH 506</td>
<td>Special Topics in Design Fundamentals, section titled “Launching Design Practices”</td>
<td>yes</td>
<td>yes</td>
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<tr>
<td>ARTDES 314</td>
<td>Change by Design</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BA 201</td>
<td>Business Thought and Action, section titled “Business Entrepreneurship in Thought and Action”</td>
<td>Yes</td>
<td>yes</td>
</tr>
<tr>
<td>CHE 405 / ENGR 405</td>
<td>Problem Solving and Troubleshooting in the Workplace, section titled “Entrepreneurship, Intrapreneurship &amp; Transition”</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>DESCI 501</td>
<td>Analytical Product Design</td>
<td>yes</td>
<td></td>
</tr>
<tr>
<td>ECON 490</td>
<td>Topics in Microeconomics, section titled “Economics of Entrepreneurship”</td>
<td>no</td>
<td>yes</td>
</tr>
<tr>
<td>EECS 406 / ENGR 406</td>
<td>High Tech Entrepreneurship</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>EECS 410 / ENGR 410</td>
<td>Patent Fundamentals for Engineers</td>
<td>no</td>
<td>yes</td>
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<tr>
<td>EECS 441</td>
<td>Mobile App Development for Entrepreneurs</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Sections</td>
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<tr>
<td>ENGLISH 407</td>
<td>Topics in English Language and Literature, section titled “Ambiguity”</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>ENGR 345</td>
<td>Introduction to Design Processes</td>
<td>no</td>
<td>yes</td>
</tr>
<tr>
<td>ENGR 390</td>
<td>Special Topics in Engineering, sections titled “Imagine Innovate Act”, “Introduction to Design Process”</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>ENGR 405 / CHE 405</td>
<td>Problem Solving and Troubleshooting in the Workplace, section titled “Entrepreneurship, Intrapreneurship &amp; Transition”</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>ENGR 406 / EECS 406</td>
<td>High Tech Entrepreneurship</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>ENGR 410 / EECS 410</td>
<td>Patent Fundamentals for Engineers</td>
<td>no</td>
<td>yes</td>
</tr>
<tr>
<td>ENGR 520</td>
<td>Entrepreneurial Business Fundamentals for Engineers and Scientists</td>
<td>no</td>
<td>yes</td>
</tr>
<tr>
<td>ENGR 521</td>
<td>Clean Tech Entrepreneurship</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>ENTR 390</td>
<td>Special Topics in Entrepreneurship, sections titled “Innovation Thru Social Entrepreneurship” or “Business Entrepreneurship in Thought and Action”</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>ENTR 390</td>
<td>Special Topics in Entrepreneurship, sections titled “Imagine Innovate Act”, “Introduction to Design Process”</td>
<td>yes</td>
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<td>ENTR 407</td>
<td>Entrepreneurship Hour</td>
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<td>ENTR 408</td>
<td>Patent Law</td>
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<td>ENTR 409</td>
<td>Venture Business Development</td>
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<td>ENTR 417</td>
<td>Entrepreneurship Hour Discussion Session</td>
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<td>ENTR 599</td>
<td>Special Topics in Entrepreneurship, sections titled “Entrepreneurial Market Strategy”, “Education Entrepreneurship Practicum”</td>
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<td>ENTR 599</td>
<td>Special Topics in Entrepreneurship, section titled “Creativity, Innovation, and Design”, “Entrepreneurial Ethics”</td>
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<td>ENVIRON 412 / PUBPOL 412</td>
<td>Environmental Values in Public Policy</td>
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<td>ES 329 / FIN 329</td>
<td>Financing Research Commercialization</td>
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<tr>
<td>ES 395</td>
<td>Entrepreneurial Management</td>
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<td>ES 425 / MKT 425</td>
<td>New Product and Innovation Management</td>
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<td>ES 520</td>
<td>CleanTech Venture Opportunities</td>
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<td>ES 569</td>
<td>Managing the Growth of New Ventures</td>
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<td>Financing Research Commercialization</td>
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<td>FIN 425</td>
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<td>Entrepreneurship</td>
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<td>ORGSTUDY 201</td>
<td>Leadership and Collaboration</td>
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<td>ORGSTUDY 202</td>
<td>Practicum in Leadership and Collaboration</td>
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<td>PSYCH 443</td>
<td>Creativity</td>
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<td>PSYCH 487</td>
<td>Current Topics in Social Psychology, sections titled “Psychology of Entrepreneurship and Intrapreneurship” or “Startups and Upstarts: Psychology of Entrepreneurship and Intrapreneurship” or “Negotiations”</td>
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<td>RCSSCI 330 / AAS 330</td>
<td>Urban and Community Studies I</td>
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<td>RCSSCI 461</td>
<td>Senior Seminar, section titled “Organizing People, Power, and Social Change”</td>
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<td>SI 422</td>
<td>Needs Assessment &amp; Usability Evaluation</td>
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<td>SI 622</td>
<td>Needs Assessment &amp; Usability Evaluation</td>
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<td>Entrepreneurship in the Information Industry</td>
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<td>Organizing: People, Power, and Change</td>
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<td>SW 305</td>
<td>Theories and Practice for Community Action and Social Change</td>
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<td>STRATEGY 492</td>
<td>Dynamic Capabilities Through Corporate Development</td>
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<td>THTREMUS 245</td>
<td>Introduction to Stage Management</td>
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<td>Global Community Practicum</td>
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<td>THTREMUS 385</td>
<td>Performing Arts Management</td>
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<td>UARTS 250</td>
<td>Creative Process</td>
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<td>WOMENSTD 350</td>
<td>Nonprofit Management, Community Engagement and Feminist Practice</td>
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<td>WOMENSTD 443 / AAS 443</td>
<td>Pedagogy of Empowerment: Activism in Race, Gender, and Health</td>
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**Institute for the Humanities**

1111 Thayer Academic Building
202 South Thayer Street
(734) 936-3518 (phone)
(734) 763-5507 (fax)
[www.lsa.umich.edu/humanities](http://www.lsa.umich.edu/humanities)
e-mail: humin@umich.edu

**The Program on Intergroup Relations (IGR)**

1214 South University Avenue, 2nd Floor, Suite B
(734) 936-1875 (phone)
(734) 647-4133 (fax)
[www.igr.umich.edu](http://www.igr.umich.edu)

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. On this site you will find information on academic and co-curricular initiatives, program history and philosophy, and resources related to social justice education.

The Mark Chesler Library Collection on Intergroup Relations is home to over 1200 books, videos, journals, and other materials covering a wide range of subjects related to social diversity and social justice. These materials are useful for conducting independent research, designing dialogue activities, enhancing curricular content or simply broadening horizons in many areas of interest. Topics found within the resource center include intercultural communication, social identity, multicultural education, facilitation techniques, social justice issues, intergroup relations, and many more. All students, faculty, and staff on campus are invited to use these resources, located in the IGR office, 1214 South University, 2nd Floor.

The Library of The Program on Intergroup Relations is named in honor of Mark Chesler, Professor of Sociology Emeritus, who helped create IGR and whose professional and personal life exemplifies its mission “to pursue social justice through education”.

**The Intergroup Relations Course Sequence:**

The course sequence in Intergroup Relations is designed for students with special interests in social diversity and social justice. Intergroup Relations courses offer experience in both analyzing and understanding issues of diversity and justice, and building practical skills to deal with these issues in the "real world."

Students may find this sequence useful in preparing for careers in social work, law, medicine, clinical psychology, education, business, and other diverse workplaces. Students may also use this sequence to enter graduate
programs in social justice, become community organizers, or engage in other professions directly relevant to social action. Additionally, students study this sequence not merely for professional reasons, but also to refine and actualize their own values as individuals and community members.

For more information on the IGR Course Sequence, please contact The Program on Intergroup Relations. The following courses listed in the sequence below are examples of applicable Intergroup Relations courses and are recommended, but not required.

**Intergroup Dialogues (3 credits)**

UC 122/PSYCH 122/SOC 122.

If possible, PSYCH 122/SOC 122/UC 122 should be completed by the first semester of the sophomore year. A second dialogue, on a different topic, may be taken for two additional credits.

Examples of topics offered in recent semesters include: Race & Ethnicity; Gender; Sexual Orientation; Religion; Socio-Economic Class and International Students/U.S. Students.

**Foundations of Intergroup Relations (3 credits)**

UC 218/SOC 218 or PSYCH 218 (section titled "Foundations of Intergroup Relations")

This introductory course will examine identity development, intergroup and intercultural relations from a social justice framework, and challenge us to think critically and creatively about social justice and worldviews. This course will also examine the history of various social identity groups and the theory behind how social identity groups form, intergroup conflict and coalition building. We will also explore how people develop an understanding of their own social identity group membership, how bias develops (prejudice, stereotyping, discrimination, and oppression), how groups are impacted by privilege and power dynamics, and how to develop advocacy for groups to which one does not belong.

**Training and Practicum in Intergroup Dialogue Facilitation (7 credits)**

UC 320/PSYCH 310/SOC 320: Training Processes for Intergroup Dialogue Facilitation. (This course should be completed by the end of the junior year, and must be completed by the first semester of the senior year.) (3 credits)

Designed to provide the foundational skills and knowledge necessary to facilitate multicultural group interactions, the Program on Intergroup Relations’ facilitator training course develops basic group facilitation skills through theoretical and experiential learning on topics such as group dynamics, conflict intervention, intergroup communication, and community building. Students will engage in discussions, activities, and readings focused on prejudice, stereotyping, privilege, oppression, social identity, group development.

UC 321/PSYCH 311/SOC 321: Practicum in Intergroup Dialogue Facilitation. (This course is usually taken the academic term after PSYCH 310/SOC 320/UC 320 is completed.) (4 credits)

Intergroup dialogue facilitators are trained undergraduate students who lead a group of peers through a semester of intergroup dialogue. Facilitators are trained in dialogic communication, group building, conflict surfacing and de-escalation, and social justice education. They work in pairs to facilitate dialogue, not simply as teachers, but also as learners with dialogue participants. Recent trainees have facilitated intergroup dialogues with topics such as Race and Ethnicity, Gender, Socio-economic Class, International and U.S., Religion, Sexual Orientation, Arab/Jewish, Ableism, and White Racial Identity.

**Conflict and Coexistence**

UC 375/SOC 375/PSYCH 312. Intergroup Conflict and Coexistence: Religion, Ethnicity, and Culture (3 credits)

Conflict is an inherent part of human nature, individual relationships and thus society. There are, however, important, successful and often underreported examples of coexistence between groups that historically have been in conflict. This course will examine examples of social conflict based on religion, ethnicity and culture, and examine interdisciplinary theories that help to understand the nature of such conflict (i.e., social identity, limited resources, psychological, neurological, communication, anthropology). We will review current coalition building, and coexistence work among various religious, ethnic and cultural groups, as well as in higher education, community programs and NGOs (i.e., Oasis of Peace, Slifka Program, UN Difficult Dialogues, Peace Studies Program, etc.). Conflict as a constructive tools for social change will be examined, with an eye toward increasing capacity for coexistence.

**Capstone Course: Advanced Intergroup Relations (3 credits)**

UC 470

This course, offered periodically, will focus on social justice and social change in the United States and on individual participants’ own values, skills and future plans. By their senior year, many UM students committed to social change have managed to find places where they can learn about such work or even engage in it with allies on campus or the local community. But what about after graduation? This course seeks to address this question and consider social change and social justice in the real world.

The course will explore alternative meanings of social justice, theories and strategies of social change, roles of change agents in traditional career environs, the costs and benefits of careers of social activism, including opportunities for career choices in these arenas and the assessment of personal skills and resources, discussions with local social justice advocates and organizational representatives, and practice in multicultural teamwork and coalition building.

**Minor in Intergroup Relations Education**

Intergroup education is a growing area of study focused on intergroup contact across social identities, the examination of inequality and conflict, and how groups build coalitions in the face of power inequities. More than ever, it is crucial for students to become competent national and global citizens, prepared to understand this nation’s history and to work across social divisions and conflict toward a more just and peaceful world. This minor intends to build on over 60 years of intergroup relations theory and research, through the use of engaged and interactive pedagogies to help students gain academic knowledge and apply this knowledge to the promotion of positive intergroup relations and civic leadership. Students will learn about theory, research and praxis by gaining knowledge and skills, and by linking concepts to skills. More specifically, the minor focuses on multiple issues in intergroup relations, such as social identity, prejudice and discrimination, inequalities of opportunity and power, and leadership in social justice-oriented change. Additionally, there is an emphasis on engaged pedagogy and utilizing process to complement the intergroup content.

The IGR education minor emphasizes building skills that can translate across many disciplines or work-life foci. The IGR education minor develops skills for understanding social inequality within societal systems and for working alongside community members to address social inequality wherever our students work or live and

**Goals of the Minor**

- Develop an increased awareness of oneself as an individual and as a member of a social identity group.
  - b. Locate oneself in systems of historic and contemporary advantage and disadvantage.
  - c. Understand basic intergroup concepts (e.g., social inequality and sociopolitical justice, prejudice and discrimination, privilege and oppression) and use them to discuss and analyze complex issues addressed throughout the minor.
  - d. Examine the impact of social identity group membership in a variety of settings.
  - e. Explore racial, class and gender groups’ histories and their commonalities and differences.
  - f. Understand the complexities of intersectionality as a meta-theory and a source of multiple identities.

**Courses:**

UC 122 / SOC 122/ PSYCH 122; UC 218/ SOC 218/ PSYCH 218; UC 320 / SOC 320 / PSYCH 310; UC 421

**Research Practicums:** UC 325, PSYCH 326, or SOC 394
• Identify the role that culture and societal institutions play in patterns of disadvantage/oppression and advantage/entitlement that occur on the basis of race, ethnicity, gender, and other social identities.
  a. Examine how societal norms shape our worldviews and how we understand and communicate with those around us.
  b. Understand how social systems (e.g., colleges, corporations, non-profit organizations, communities) reflect broader historic and contemporary patterns of advantage/disadvantage.
  c. Explore how theories of social and human capital explain patterns of inequality.
  d. Understand the ways in which social groups’ histories are reflected in students’ personal narratives of their social identity group memberships.

Courses: UC 218 / SOC 218 or PSYCH 218; UC 320 / SOC 320 / PSYCH 310; UC 321 / SOC 321 / PSYCH 311; UC 421

• Develop effective skills in inquiry, communication, conflict exploration, small group dynamics and leadership.
  a. Prepare students in the skills required for democratic leadership in communities and a multicultural society/ global world.
  b. Prepare students to apply their knowledge of intergroup education in a variety of settings: dialogue facilitation, community outreach, research laboratories, and workplace situations.
  c. Understand theories and research about small group dynamics and develop skills in working with issues of difference and inequality in such settings.
  d. Translate educational research into pedagogical practice and self and other inquiry/learning designs.
  e. Understand and practice how to deal with interpersonal and intergroup conflict in productive and peaceful ways.

Courses: UC 122 / SOC 122 / PSYCH 122; UC 320 / SOC 320 / PSYCH 310; UC 321 / SOC 321 / PSYCH 311; UC 421
Research Practicum: UC 325, PSYCH 326, or SOC 394; UC 471 / SOC 471 / PSYCH 411

• Explore theories and historic examples of social change
  a. Increase understanding of the ways in which people and groups have organized and acted in pursuit of social equality and justice and the ways in which counter-efforts have reacted and proceeded.
  b. Explore the role of social justice-oriented advocacy and coalition building in both one’s daily life and career goals.
  c. Analyze historic efforts at intergroup relationship-building and boundary-crossing and their meaning for one’s personal individual behaviors.
  d. Identify social movements and personal actions that contribute to the creation of socially just communities.

Courses: UC 122 / SOC 122 / PSYCH 122; UC 321 / SOC 321 / PSYCH 311; UC 421; UC 471 / SOC 471 / PSYCH 411

This minor offers students opportunities to explore social identities in the context of understanding social inequality and to become critical thinkers and creative and adaptive problem-solvers. The minor is primarily for students in the social sciences and humanities who want to integrate engaged learning pedagogy with an applied emphasis into their major coursework areas such as sociology, psychology, political science, languages, international studies, history, and organizational studies. The minor will be attractive to students who are considering graduate education in professional schools, for example, public health, education, law, public policy, social work, and who would like to build capacity for understanding inequality and working across difference. Michigan students will be more prepared for professional practice by incorporating intergroup education that complements their liberal arts education. Finally, while the minor is primarily for these specific groups of majors, we believe all students will benefit from the courses in the proposed minor.

The minor is intentionally progressive, and builds on the foundational knowledge of intergroup relations, social identity development, and inequality/justice to an increasingly complex understanding and ability to analyze and act in ways that further positive intellectual, intergroup and civic leadership. Students who are interested in developing facilitative leadership skills, with an emphasis on understanding group dynamics, intercultural communication, social identity awareness and leading groups will be particularly interested in the Facilitative Leadership track. This is primarily a course-based training ground. Students who are interested in deepening their analytical skills through the research process or by studying intergroup issues in campus communities will be most interested in the Campus Communities and Research track. This is the examination of intergroup issues in out-of-class and applied research settings.

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 to the Minor: None

Requirements for the Minor. A minimum of 15 credits, from the following categories as stated:

I. Foundation Core Courses. Elect both:
  A. UC 122 / PSYCH 122 / SOC 122: Intergroup Dialogues
  B. UC 218 / SOC 218: 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.

1. UC 320 / SOC 320 / PSYCH 310: Processes of Intergroup Dialogues Facilitation


B. The Campus Communities and Research Track (9 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.


Students may request to substitute another research methods class other than STATS 250 or SOC 210.

2. Social Psychology in Community Settings (UC 421) 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.

3. IGR Research Practicum (UC 325, PSYCH 326, or SOC 394) 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.
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.

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/academics/advising

Program in International and Comparative Studies (PICS)
together to address global problems. The major is rigorous and offers a balanced approach between disciplinary depth and cross-disciplinary breadth.

It provides an opportunity for students to create a curriculum that combines exposure to disciplinary depth and integrative coursework emphasizing successful interdisciplinary research. Students learn how to move among different units of analysis and disciplinary approaches in order to understand, analyze, and ultimately help solve contemporary problems. International Studies students will be exposed to a rigorous curriculum to address global problems. The major is rigorous and offers a breadth.

Prerequisites to the Major. INTLSTD 101; Courses used in the major may have additional prerequisites.

Students electing the Political Economy & Development subplan must elect ECON 101 as a prerequisite to major.

Prerequisite to Declaration of the Major. Students must have started or completed 4th-term language proficiency before declaring the major.

Requirements for the Major. A minimum of 33 credits.

Students must earn C- or better in all required PICS courses. The language requirement courses are not included in the GPA in the major.

PICS Language Requirement for the Major. Sixth-term proficiency in a language other than English must be satisfied through study of a language, though language courses do not count as credits toward the major. Students should begin the language sequence early, and should have started or completed the fourth term proficiency or equivalent before they declare the major.

We believe that language study is a vital part of any liberal arts education, and that students who concentrate 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 graduation admissions committees about how our students are well-rounded and focused on the world and not just the United States.

Course Requirements.
1. Core Courses. INTLSTD 301 and 401, each completed with a C- or better
2. Research Methods Course. One quantitative research methods course (minimum of 3 credits) chosen from the following list:
   • ECON 401: Intermediate Microeconomic Theory
   • ECON 451: Intermediate Introduction to Statistics and Economics
   • POLSCI 391: Introduction to Modeling Political Processes
   • POLSCI 490: Game Theory & Formal Models
   • POLSCI 499: Quantitative Methods of Political Analysis
   • SOC 210: Elementary Statistics
   • SOC 310: Introduction to Research Methods
   • STATS 250: Introduction to Statistics & Data Analysis

This requirement must be completed before electing INTLSTD 301.

3. One Regional Course (minimum 3 credits): Geographic emphasis composed of one course devoted to a single world region or country that is related to foreign language of study. This course cannot be double counted with a subplan course.

4. Subplans: The four subplans represent four different themes or areas of interest. Students must choose one subplan and take at least four courses (minimum 12 credits) from that subplan to gain knowledge in one area. One of the courses must be at the 400 level. The four courses must be taken in two or more academic subjects.

Students electing the Political Economy & Development subplan must elect ECON 101 as a prerequisite and at least one other ECON course from the approved PED subplan list.

Students electing the Comparative Culture & Identity subplan must elect INTLSTD 205 and include at least one course chosen from COMPLIT 222, 240, or 322. [If INTLSTD 205 is elected as HISTORY 101, the credits will not count toward the minimum 33 required for the major].

5. Three electives (minimum of 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.

List of Approved Courses by Subplan
International Security, Norms & Cooperation

• AAPTIS 244 / HJCS 244 / JUDAIC 244 / MENAS 244: The Arab-Israeli Conflict in the Middle East, c. 1880 to the Present
• AAPTIS 368 / AMCULT 368 / ARABAM 363 / WOMENSTD 368: Women and War in the Middle East
• AAS 359 / POLSCI 359: African Politics
• AAS 432: Violent Environments: Oil, Development and the Discourse of Power
• AMCULT 206: Themes in American Culture, section titled “Gender Violence in a Global Context”
• AMCULT 368 / ARABAM 363 / AAPTIS 368 / WOMENSTD 368: Women and War in the Middle East
• ARABAM 363 / AMCULT 368 / AAPTIS 368 / WOMENSTD 368: Women and War in the Middle East
• AMCULT 498: Humanities Approaches to American Culture, section titled “Why Do They Hate Us: Perspectives on 9/11”
• ANTHRCUL 333: Non-Western Legal Systems I
• ANTHRCUL 447: Culture, Racism and Human Nature
• ANTHRCUL 458: Topics in Sociocultural and Linguistic Anthropology, section titled “Anthropology of Undocumented Migration”
• COMM 439: Seminar in Journalistic Performance, section titled “War, Revolution and the New Media”
• COMPLIT 490: Comparative Cultural Studies, section titled “Translating Human Rights”
• ENGLISH 407: Topics in English Language and Literature, section titled “Literature and Human Rights”
• ENVIRON 490 / HISTORY 440: War and the Environment: A Lethal Reciprocity
• HISTORY 224: The Arab-Israeli Conflict in the Middle East
• HISTORY 230: Humanities Topics in History, section titled “Tracking Human Rights”
• HISTORY 239: The World Before 1492
• HISTORY 240: The World Since 1492
• HISTORY 244 / AAPTIS 244 / HJCS 244 / JUDAIC 244 / MENAS 244: The Arab-Israeli Conflict in the Middle East, c. 1880 to the Present
• HISTORY 257 / JUDAIC 257: Law in the Pre-Modern World
• HISTORY 310 / RSCS 310: Globalization in History: The Making of the Modern World
• HISTORY 318: Europe in the Era of Total War, 1870-1945
• HISTORY 328: Humanities Topics in History, section titled “Imperialism, Violence and Human Rights”
• HISTORY 360: September 11
• HISTORY 360: September 11
• HISTORY 363: U.S. Foreign Policy and International Politics Since World War II
• HISTORY 440/ENVIRON 490: War and the Environment: A Lethal Reciprocity
• HISTORY 443 / NEAREAST 487: Modern Middle East History
• HISTORY 449: Topics in Middle Eastern History, section titled “The Caucasus Between Empires: Origins of Modern Conflict”
• HISTORY 477: Law, History, and the Dynamics of Social Change, section titled “Gender, Sexuality, and International Human Rights Law”
• HISTORY 480: Conflict and Diplomacy in the Caucasus
• HISTORY 496: History Colloquium, section titled “Immigrants, Exiles and Emigrations”
• HUCS 244 / HISTORY 244 / AAPTIS 244 / JUDAIC 244 / MENAS 244: The Arab-Jewish Conflict in the Middle East, c. 1880 to the Present
• JUDAIC 244 / HISTORY 244 / AAPTIS 244 / HUCS 244 / MENAS 244: The Arab-Jewish Conflict in the Middle East, c. 1880 to the Present
• JUDAIC 257 / HISTORY 257: Law in the Pre-Modern World
• MENAS 244 / HISTORY 244 / AAPTIS 244 / HUCS 244 / JUDAIC 244: The Arab-Jewish Conflict in the Middle East, c. 1880 to the Present
• NEAREAST 487 / HISTORY 443: Modern Middle East History
• POLSCI 341: Comparative Politics of Developed Democracies
• POLSCI 342: Eastern Europe: Revolution, Reaction, and Reform
• POLSCI 342: Eastern Europe: Revolution, Reaction, Reform
• POLSCI 353: The Arab-Israeli Conflict
• POLSCI 359 / AAS 359: African Politics
• POLSCI 369: Politics of International Economic Relations
• POLSCI 372: Comparative Foreign Policy
• POLSCI 462: Strategic Interaction in World Politics
• POLSCI 489: Advanced Topics in Contemporary Political Science, section titled “The International Law & Politics of Human Rights”
• POLSCI 498: Undergraduate Seminar in International Politics, sections titled “War in World Politics” and “The International Law & Politics of Human Rights”
• PSYCH 312 / UC 375 / SOC 375: Intergroup Conflict & Coexistence: Religion, Ethnicity and Culture
• PSYCH 393: Political Psychology
• PSYCH 401: Special Problems in Psychology as Social Science, section titled “Psychological Aspects of War and Peace”
• RCSSCI 310 / HISTORY 310: Globalization in History: The Making of the Modern World
• RCSSCI 360: Social Science Junior Seminar, section titled “Global Justice: Social Theory and Practice”
• RELIGION 305 / ASIAN 305: Religion and Violence in the Secular World
• SOC 350: Human Rights in the United Nations
• SOC 375 / UC 375 / PSYCH 312: Intergroup Conflict & Coexistence: Religion, Ethnicity and Culture
• SOC 450: Political Sociology
• SOC 495: Topics in Sociology, sections titled “Citizenship and Human Rights” or “Human Rights and Socioeconomic Citizenship”
• UC 254: Sophomore Interdisciplinary Seminar, sections titled “When Legal Norms Collide” and “The History of Human Rights in Latin America”
• UC 375 / SOC 375 / PSYCH 312: Intergroup Conflict & Coexistence: Religion, Ethnicity and Culture
• WOMENSTD 368 / AMCULT 368 / ARABAM 363 / AAPTIS 368: Women and War in the Middle East

Political Economy & Development (at least one course must be ECON)

• The others selected from:
  o AAS 247/HISTORY 247: Modern Africa
  o AAS 322 / ENVIRON 335: Introduction to Environment Politics: Race, Class, and Gender
  o AAS 432: Violent Environments: Oil, Development and the Discourse of Power
  o AAS 458: Issues in Black World Studies, sections titled “Health and African Development” and “Business & Politics in Developing Countries”
  o AAS 497 / POLSCI 458: Party Politics and Democracy in Sub-Saharan Africa
  o ANTHRUC 328: Globalizing Consumer Cultures
  o ANTHRUC 439: Economic Anthropology & Development
  o ENVIRON 270: Our Common Future: Ecology, Economics & Ethics of Sustainable Development
  o ENVIRON 313 / POLSCI 394: Environment and Development: Dilemmas of Power and Place in a Global World
  o ENVIRON 335 / AAS 322: Introduction to Environment Politics: Race, Class, and Gender
  o ENVIRON 367: Global Enterprise & Sustainable Development
  o HISTORY 239: The World Before 1492
  o HISTORY 240: The World Since 1492
  o HISTORY 247 / AAS 247: Modern Africa
  o POLSCI 337: Comparative Constitutional Design
  o POLSCI 343: Political Economy of Developed Democracies
  o POLSCI 348: Political Economy of Development
  o POLSCI 354 / SEAS 354: Governments and Politics of Southeast Asia
  o POLSCI 369: Politics of International Economic Relations
  o POLSCI 389: Topics in Contemporary Political Science, section titled “State and Market of Contemporary China”
  o POLSCI 394 / ENVIRON 313: Environment and Development: Dilemmas of Power and Place in a Global World
  o POLSCI 458 / AAS 497: Party Politics and Democracy in Sub-Saharan Africa
  o POLSCI 497 Undergraduate Seminar in Comparative and Foreign Government, section titled “Politics of Energy in the Developing World”
  o POLSCI 498: Undergraduate Seminar in International Politics, section titled Globalization & Politics International Finance
  o RCSSCI 315: International Grassroots Development
  o SEAS 354 / POLSCI 354: Governments and Politics of Southeast Asia
  o SOC 430: World Population Dynamics
  o STRATEGY 310: The World Economy
  o STRATEGY 361: International Management
  o STRATEGY 411: The Corporation in Society
  o STRATEGY 445: Base of the Pyramid: Business Innovation for Solving Society’s Problems
  o UC 254.004: Sophomore Interdisciplinary Seminar, sections titled “Cities in the Global South” and “Global Health Equity for the 21st Century”

Comparative Culture & Identity

A. INTLSTD 205 [If elected as HISTORY 101, the credits will not count toward the minimum 33 required for the major].

B. at least one course chosen from:

• COMPUT 222/ GTBOOKS 212: Great Books in World Literatures
• COMPUT 240: Introduction to Comparative Literature
• COMPUT 322: Translating World Literatures

C. The others selected from:

• AAPTIS 495 / HISTORY 429 / RELIGION 496 / WOMENSTD 471: Gender and Sexuality in Pre-Modern Islam
• AAS 409 / ANTHRUC 408: Maternal / Child Health & Environmental Pollution in Africa
• AAS 420 / ANTHRUC 347: Race and Ethnicity
• AAS 422 / ANTHRUC 411: African Culture
• ANTHRUC 222: Comparative Study of Cultures
The minor in International Studies offers students an opportunity to add to their disciplinary major a program of study that includes the following:

- An interdisciplinary International Studies Advanced Topics Seminar will be offered for students in the minor. This course cannot be taken prior to the second term of the junior year. Students enrolled in the minor may take the course more than once, but it can only be counted once toward the 18 credits required for the minor.

- 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.

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. At least 10 credits toward the minor must be taken in residence (which can include courses in U-M study abroad programs).

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 minor since some students may be

### Honors Plan
Students interested in an Honors plan elect the Honors section of INTLSTD 101, 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, and must complete all International Studies requirements for the major, and complete a senior Honors thesis. Students must earn C- or better in all required PICS courses.

Students writing a thesis will enroll in INTLSTD 499 twice their senior year, for three credits each term. The thesis will have a minimum length of 50 pages. Students are responsible for locating their own thesis advisor. Advisor and topic must be approved by PICS director.

An instructor will oversee the Honors plan. 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 advisor and the PICS instructor, plus one outside reader from the faculty.

Student grades on the thesis will be determined by the PICS instructor in consultation with the thesis advisor.

### Minor in International Studies

*Not open to students electing the International Studies major*

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.

**Prerequisites to the Minor**: Sixth-term proficiency in a language other than English must be satisfied through the study of a language used in the country or world area that is the focus of geographic coursework. The Director of the Program in International and Comparative Studies (PICS) will consider requests involving a different language, but it is expected that students will in all cases complete at least one year of coursework in a language used in the region of geographic emphasis. Any exceptions to the PICS language requirement must be approved by written consent of the PICS Director.

**Requirements for the Minor**: 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. At least two of the three thematic courses must give primary attention to countries or world regions beyond the United States. A third course devoted to the same theme can give significant attention to the United States if there is a clear intellectual reason for doing so.

**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.

One course can be “double-couuted” and thus count for both the geographic and the thematic requirement for the major. 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 may be offered by the department of the student’s disciplinary major. If the courses are taught by faculty members in a single department (e.g., Women’s Studies, Germanic Languages and Literatures, Asian Languages and Cultures, Near Eastern Studies), the faculty members must be from at least two different disciplines.

### Geographic Emphasis Courses

- **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.**

### Thematic Emphasis Courses

- **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. At least two of the three thematic courses must give primary attention to countries or world regions beyond the United States. A third course devoted to the same theme can give significant attention to the United States if there is a clear intellectual reason for doing so.**

**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.

One course can be “double-counted” and thus count for both the geographic and the thematic requirement for the major. 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 may be offered by the department of the student’s disciplinary major. If the courses are taught by faculty members in a single department (e.g., Women’s Studies, Germanic Languages and Literatures, Asian Languages and Cultures, Near Eastern Studies), the faculty members must be from at least two different disciplines.

### An interdisciplinary International Studies Advanced Topics Seminar will be offered for students in the minor. This course cannot be taken prior to the second term of the junior year. Students enrolled in the minor may take the course more than once, but it can only be counted once toward the 18 credits required for the minor.

*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.*

### 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. At least 10 credits toward the minor must be taken in residence (which can include courses in U-M study abroad programs).

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.
unable to meet this requirement because of financial, family, or other considerations.

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**International Institute (II)**

1080 South University Avenue, Suite 2660  
(734) 763-9200 (phone)  
(734) 763-9154 (fax)  
www.ii.umich.edu  
e-mail: iimichigan@umich.edu

Not a major  
The University of Michigan International Institute (II) advances the exchange of knowledge, ideas, and resources across U-M’s campus and with partnering institutions worldwide. Working actively with its centers and other academic units, the institute expands and enriches instructional programs, advances language study, and provides funding to students and faculty for research and study overseas. The II also brings leading scholars together to address national and international problems and collaborates with other academic units to recruit faculty members with international expertise.

**Centers and Programs.** The International Institute is home to centers and programs which support faculty and students interested in area and thematic studies. These include:

- African Studies Center*  
- Armenian Studies Program*  
- China Data Center  
- Center for Chinese Studies*  
- Center for European Studies*  
- Center for International and Comparative Studies*  
- Center for International Business Education and Research  
- Islamic Studies Program*  
- Center for Japanese Studies*  
- Center for Latin American and Caribbean Studies*  
- Center for Middle Eastern and North African Studies*  
- Nam Center for Korean Studies*  
- Center for Russian, East European, and Eurasian Studies*  
- Center for South Asian Studies*  
- Center for Southeast Asian Studies*  
- Weiser Center for Emerging Democracies  
- Weiser Center for Europe and Eurasia  
- Center for World Performance Studies

(*described elsewhere on the Academics and Requirements website.)

**Fellowships and Grants.** The International Institute and its centers distribute more than $4 million each year to support international research and study. This funding includes fellowships and grants for faculty and student research abroad, international internships, and the study of less commonly taught languages. A number of prestigious and competitive national fellowships, such as the Fulbright and Luce awards, are administered by the II.

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**Center for Japanese Studies (CJS)**

1080 South University Avenue, Suite 4640  
(734) 764-6307 (phone)  
(734) 763-9154 (fax)  
www.ii.umich.edu/cjs  
e-mail: umcjs@umich.edu

Not a major  
Undergraduates may pursue Japanese Studies through the Asian Studies major or minor of the Department of Asian Languages and Cultures.

The Center for Japanese Studies (CJS) promotes and disseminates research on Japan, fosters communication among diverse disciplines, and encourages new approaches in the understanding of Japan and its place in the world. Founded in 1947, CJS is the oldest interdisciplinary center in the United States devoted exclusively to Japanese Studies. CJS is also part of the University of Michigan’s U.S. Department of Education Title VI East Asia National Resource Center, along with the Center for Chinese Studies and the Nam Center for Korean Studies. The Center supports a community of over forty Japan area specialists who teach and pursue research in the University’s various departments and professional schools.

The Center for Japanese Studies (CJS) offers a broad, interdisciplinary approach to the study of Japan at the Master’s level. Undergraduates may pursue Japanese Studies through the Asian Studies major or minor of the Department of Asian Languages and Cultures.

**Overseas Study**

The Kyoto Consortium for Japanese Studies (KCJS) is an undergraduate academic year program in Kyoto co-sponsored by fourteen universities in the United States, including the University of Michigan. This Center, developed in cooperation with Kyoto University, opened in September of 1989. The program provides a select group of undergraduates and graduate students with an academically challenging course of study in Japanese language and culture. **Prerequisites:** at least two years of prior enrollment in Japanese language courses at the college level (five hours per week minimum). A limited number of students may be admitted for single semester study in the fall or spring. Applications are available from the Center for Global and Intercultural Study (CGIS). KCJS also offers a six-week intensive summer program in advanced and classical Japanese for highly motivated undergraduate and graduate students who have completed three years of Japanese or equivalent. **Application deadline:** March 1. For more information and application, see kcjssummer.columbia.edu.

The Japan Center for Michigan Universities (JCMU) is an opportunity for undergraduates currently enrolled at the University of Michigan to study Japanese language, society, and culture in Japan. Located in Shiga Prefecture, on Lake Biwa (near Kyoto and Osaka), the JCMU offers academic courses and programs for university credit. The program is open to undergraduates from any of the fifteen state-supported universities in Michigan, as well as students from Shiga Prefecture. **Prerequisites:** applicants must have been enrolled full-time for at least one year at one of the state-supported universities in Michigan. Applicants must apply through their home institution. Applications are available from the Center for Global and Intercultural Study (CGIS).

The Inter-University Center for Japanese Language Studies (IUC) in Yokohama, Japan offers advanced intensive Japanese language training in a 10-month academic year program and a six-week summer program for select undergraduate and graduate students. The Center’s program is intended for students who are embarking on careers in Japanese studies or a profession in which fluent Japanese is necessary. The program is designed to bring each student to a level of proficiency sufficient for academic or professional use. Applicants to the 10-month program must be currently enrolled in a graduate degree program or graduating seniors who plan to enroll in a graduate program upon completion. They should have completed at least two years of college-level Japanese prior to application, and must pass a proficiency test. Applicants to the summer program must
demonstrate a clear intent to pursue a professional or academic career requiring the use of Japanese, and have successfully completed two to three years of college-level Japanese. Application deadline: January 13 (10-month); March 15 (summer). For more information and application, see www.stanford.edu/dept/IUC/.

Undergraduate Support
Summer Foreign Language and Area Studies (FLAS) Fellowship
East Asia National Resource Center (EANRC), jointly administered by the Center for Chinese Studies, the Center for Japanese Studies and the Nam Center for Korean Studies, offers the Summer Foreign Language and Area Studies (FLAS) Fellowships for undergraduate students who are US citizens or permanent residents. Funded by a grant from the US Department of Education and supplemental funding the three constituent area studies centers of EANRC, these fellowships provide full tuition, mandatory fees and stipend for fellows to enroll in an approved summer intensive language program that teaches the equivalent of one academic year of an East Asian language as taught at the University of Michigan. Programs must be at least six weeks in length and have minimum classroom instruction time of 140 hours for intermediate language level and 120 hours for advanced level. Fellows must be at the intermediate (2nd year) or advanced (3rd year or above) language level, and students at the advanced level are given preference. Fellows who receive funding to enroll in intermediate level must complete both terms of third year language in the academic year immediately following the summer program. Chinese, Japanese, Korean and Tibetan are pre-approved languages; additional less commonly taught languages spoken in East Asia may be approved by petition. Fellows are selected on the basis of academic merit in an annual competition. For more information and application, please go to the FLAS website at www.ii.umich.edu/flas/. Application deadline: February 1.

CIS Undergraduate Study Abroad Scholarship
Center for Japanese Studies offers a limited number of scholarships for undergraduates who participate in a study abroad program to Japan. Applicants must be currently enrolled undergraduate students in any school or college, and must participate in a study abroad academic program that is sponsored by CGIS or another school or college of the University of Michigan and that results in academic credit. Independent research, internships, and volunteer activities are not eligible. Scholarships of up to $1,500 each are awarded in an annual competition on the basis of academic merit. For more information and application, please see the CIS website under Academics, Student Funding, UG Study Abroad Scholarship. Application deadline: March 15 for travel to Japan between May 1 and April 30.

Ito Foundation Scholarship
Center for Japanese Studies nominates University of Michigan students for scholarships awarded by the Ito Foundation for International Education Exchange, based in Tokyo, Japan. The Ito Foundation Scholarship provides tuition, stipend, and round-trip travel to Japan for up to two years of enrollment in a graduate degree program at a Japanese university or a program of independent research affiliated with a Japanese university or university research consortium. Scholarship recipients must be U.S. citizens or permanent residents. Currently enrolled graduate students, graduating seniors and UM alumni who received their bachelor’s degree within the last twelve months are eligible to apply. Students are nominated to the Ito Foundation by the Center for Japanese Studies; the foundation’s Board of Directors selects the scholarship recipient. Application deadline: November 15.

Jean & Samuel Frankel Center for Judaic Studies
An undergraduate major in Judaic Studies offers students the opportunity to broaden their knowledge of international affairs, historical change and religious phenomena. The major introduces students to the history and cultures of the Jewish people, and explores the world from distinctive Jewish perspectives.

Prerequisites to the Major
JUDAIC 205 and second-term proficiency in modern Hebrew (HICS 102) or Yiddish (JUDAIC 102).

Requirements for the Major
Students are required to complete at least 24 credits of work in approved courses, exclusive of the above language requirement and JUDAIC 205. Fifteen of the 24 credits must be elected in residence unless special permission is given by the department advisor.

The 24 credits must include two courses in each of the following three categories:
A. Classical and Modern Judaism
B. Jewish Literature and Culture
C. Jewish History and Social Science

In addition, two of the courses (not including JUDAIC 205) must cover or include material from pre-modern periods (before ca. 1750).

Classical and Modern Judaism: Law and Religion
- Judaic Studies: JUDAIC 260, 265, 270, 277, 281, 376, 379, 467, 468, 470, 478, 481
- Law: 642, 867
- Near Eastern Studies

Ancient Civilizations and Biblical Studies: ACABS 270, 321, 322, 470, 542, 543, 723, and appropriate sections of 591 and 592
- Near East Studies: NEAREAST 200, 207, 238
- Religion: 201, 260, 270, 277, 359, 469, 471 and 478
- Slavic Languages and Literatures: SLAVIC 281, 481

Undergraduate Study
Both a Bachelor of Arts and minor in Judaic Studies are offered by the Frankel Center, where undergraduate students receive a well-balanced understanding of Jewish Literature and Culture, Jewish History and Social Science, and Classical and Modern Judaism in Law and Religion, along with a strong knowledge of Yiddish or Hebrew. The undergraduate curriculum aims to situate Jewish Studies within a broad-based liberal arts education and provides a framework for developing critical thinking and informed engagement.

Judaic Studies
May be elected as an interdepartmental major
Not open to those who elect a Hebrew Studies submajor in Near Eastern Studies
Women’s Studies: WOMENSTD 376

Jewish Literature and Culture
- American Culture: AMCULT 387
- Anthropology: ANTHRCUL 335
- English Language and Literature: 383, and appropriate sections of ENGLISH 313, 317, 318, 417 and 430.
- History: 350, 387, 435
- History of Art: HISTART 323
- Judaic Studies: 250, 271, 281, 296, 343, 344, 373, 381, 401, 451, 467, 480, 591, and 592
- Near Eastern Studies
  - Ancient Civilizations and Biblical Studies: ACABS 544
  - Hebrew & Jewish Cultural Studies: HICS 296, 305, 323, 335, 373, 381, 401, 402, 471, 472, 544, 545, 571, 572, 577, 592
- Near East Studies: NEAREAST 281, 326, 490, 590
- Political Science: 350 and 451
- Religion: 296, 324, 361, 444, and 471
- Slavic Languages and Literatures:
  - RUSSIAN 435
  - SLAVIC 270, 281, 481
- Women’s Studies: WOMENSTD 376

Jewish History and Social Science
- American Culture: AMCULT 343, 387
- Germanic Languages and Literatures: GERMAN 322
- History: HISTORY 244, 256, 269, 322, 368, 381, 382, 383, 384, 385, 386, 387, 406, 435, 628, and appropriate sections of HISTORY 396, 397, 590, 591; and MEMS 381 and 382
- Middle Eastern and North African Studies: MENAS 244

Near Eastern Studies
- Arabic, Armenian Turkish & Islamic Studies: AAPTIS 244
- Hebrew & Jewish Cultural Studies: HICS 244, 296
- Near East Studies: NEAREAST 207
- Political Science: 350, 351, 353, 451, 652
- Religion: 260, 277, 296, 358
- Slavic Languages and Literatures:
  - Slavic Surveys: SLAVIC 270
  - Social Work: 645
  - Sociology: 410

Languages
- Judaic Studies: 201, 202, 301, 302, 333 and 401
- Near Eastern Studies
  - Ancient Civilizations and Biblical Studies: ACABS 202, 483, 484, 581, 582
  - Hebrew: HEBREW 301
  - Hebrew & Jewish Cultural Studies: HICS 201, 202, and 302
- Near Eastern Studies Language: NESLANG 201
- Yiddish: 201, 202, 301, and 302

Independent Studies
- Judaic Studies: 495, 496, 497, 498, and 500.

Other courses, at the 200-level and above, may be approved by the department advisor. 100-level courses may not be included in a major.

Students may include intermediate Hebrew or Yiddish courses in a major if they use the other language as a prerequisite.

Honors Plan. 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. The name, phone number, and office hours of the Honors department advisor are available in the Honors Office, 1330 Mason Hall, or in the Center for Judaic Studies, 2111 Thayer Academic Building.

Concurrent Undergraduate / Graduate Studies (CUGS) Program. Majors who are advanced in their studies and have exhausted the undergraduate resources in Judaic Studies are encouraged to speak with the Judaic Studies Student/Fellow Coordinator about the Concurrent Undergraduate-Graduate Studies (CUGS) Program in LSA.

Advising. Prospective majors should consult the department advisor. Normally, a major should reflect the multi-disciplinary nature of the program and the themes that a student wishes to develop. Appointments are scheduled via our Student / Fellow Coordinator by calling (734) 615-6097.

Minors in Judaic Studies

Judaic Studies Minor

A minor in Judaic Studies is not open to students with a major in Judaic Studies.

The minor in Judaic Studies introduces students to Jewish civilization through thematic and textual approaches. Broadly, topic areas include Jewish religious practices, language cultures, especially Hebrew and Yiddish, and the socio-political realities associated with living among non-Jews as a minority both dispersed and concentrated. 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.

Students wishing to pursue a minor in Judaic Studies must develop a specific plan for its completion in consultation with the academic advisor. Appointments are scheduled via our Student / Fellow Coordinator by calling (734) 615-6097.

Prerequisites to the Minor: None

Requirements for the Minor: At least 15 credits of courses, including
1. JUDAIC 205 (Introduction to Jewish Civilizations and Cultures)
2. two courses from the following three categories (see department for list of specific courses)
   - Jewish Literature and Culture
   - Jewish History and Social Science
   - Law and Religion in Classical and Modern Judaism
3. two course electives (which can include Hebrew or Yiddish language at the 200-level).

Constraints: At least three of the courses counting toward the minor must be taken at the UM–Ann Arbor campus.

Yiddish Studies Minor

A minor in Yiddish Studies is not open to students with a major in Judaic Studies.

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.

Prerequisites to the Minor: 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 YIDDISH 101-102 at U-M or take an intensive summer course elsewhere). 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.

Requirements for the Minor: 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 301 / JUDAIC 301: Advanced Yiddish I
      - YIDDISH 302 / JUDAIC 302: Advanced Yiddish II
      - JUDAIC 401: Readings in Yiddish Texts: (section titled “Yiddish Culture Between Tradition and Modernity”)

   B. **Literature**
      - YIDDISH 332 / JUDAIC 332: Yiddish Classics and Modernity
      - YIDDISH 433 / JUDAIC 433: Yiddish Classics and Modernity
      - JUDAIC 205 / HICS 276: What is Judaism?
      - JUDAIC 218: Humanities Topics in Judaism (sections titled "Jewish American Short Stories", "Urban Cafes and Modern Jewish Culture")
      - JUDAIC 271 / SLAVIC 270: Contact and Conflict: Jewish Experience in Eastern Europe through Art, Film & Literature
      - 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", "Yiddish Classics and Modernity")
      - JUDAIC 318: Humanities Topics in Judaism: (section titled "Jewish Literature", "Literature of the Holocaust")

   - JUDAIC 332 / YIDDISH 332: Yiddish Classics and Modernity
   - JUDAIC 384 / HISTORY 384: Modern Jewish History 1880-1948
   - JUDAIC 386 / HISTORY 386 / GERMAN 391: The Holocaust
   - JUDAIC 387 / HISTORY 387 / AMCULT 387: History of American Jews
   - JUDAIC 433 / YIDDISH 433: Yiddish Classics and Modernity
   - JUDAIC 481 / SLAVIC 481: Desire, Destiny, & Death: Jews and Modernism in Eastern / Central Europe
   - AMCULT 387 / HISTORY 387 / 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 384 / JUDAIC 384: Modern Jewish History 1880-1948
   - HISTORY 386 / JUDAIC 386 / GERMAN 391: The Holocaust
   - HISTORY 387 / JUDAIC 387 / AMCULT 387: History of American Jews
   - HICS 276 / JUDAIC 205: What is Judaism?
   - HICS 472: Introduction to Modern Hebrew Literature II (section titled “Ethnicity in Israel Literature and Culture”)
   - SLAVIC 270 / JUDAIC 271: Contact and Conflict: Jewish Experience in Eastern Europe through Art, Film & Literature
   - SLAVIC 481 / JUDAIC 481: Desire, Destiny, & Death: Jews and Modernism in Eastern / Central Europe

### Advising
Judaic Studies undergraduate faculty advisor will meet by appointment only. Students may also meet with the Judaic Studies student services coordinator.
Nam Center for Korean Studies

1080 South University Avenue, Suite 2620
(734) 763-0553 (phone)
(734) 615-8880 (fax)
www.ii.umich.edu/ncks
e-mail: ncks.info@umich.edu

Not a major. Undergraduates may pursue Korean Studies through the Asian Studies major or minor of the Department of Asian Languages and Cultures.

The Nam Center for Korean Studies (NCKS) is a unit of the International Institute within the University of Michigan. The program’s goal is to foster teaching and research across disciplines and to use the academic resources of the university to promote an economic, political, and cultural understanding of Korea.

The Nam Center provides funding for public programs (art exhibitions, film festivals, lectures, and conferences), individual faculty research, undergraduate and graduate scholarships, development of new courses, and the expansion of the Asia Library’s Korea collection. It maintains an active colloquium series, bringing eminent Korean Studies scholars from around the world to lecture on a diverse set of issues. The program also sponsors Korean events on campus including undergraduate and graduate initiatives and cultural activities. Major financial support from the Korea Foundation helped establish a senior professorship in Korean Studies. These activities and programs have raised awareness and appreciation of Korean culture across U-M and in the surrounding community. As the center expands, the depth and diversity of the curriculum in Korean area studies continues to grow, with a variety of courses in a number of disciplines offered each year.

The center currently offers Korea Foundation Graduate Fellowships, SeAH Haiam Arts and Sciences Scholarships, Research Fellowships, Conference Travel Support, Faculty Funding, and Asia Library Travel Grants. Foreign Language and Area Studies Fellowships (FLAS) are also available for both undergraduate and graduate students; Academic Year Graduate FLAS Fellowships are awarded to graduate and professional school students at the master’s and doctoral level to study modern foreign languages and related area and/or international studies; Summer FLAS Fellowships are for undergraduate, graduate and professional school students to support summer modern language study. These awards are given only for intensive language classes that teach the equivalent of a University of Michigan academic year language class.

Center for Latin American and Caribbean Studies (LACS)

1080 South University Avenue, Suite 4661
(734) 764-2252 (fax)
www.ii.umich.edu/lacs
e-mail: lacs.office@umich.edu

The Latin American and Caribbean Studies Program (LACS) was founded at the University of Michigan as an undergraduate major in 1984. Over the years LACS has grown into a major interdisciplinary program, linking many faculty members from more than a dozen departments, and professionals with research interests in Latin America. LACS has achieved national recognition for its growth as an academic program and a center of excellence in area research. In 2006, LACS became one of twenty-four U.S. Department of Education-supported National Resource Centers for Latin American and Caribbean Studies.

LACS maintains strong ties with several other research and teaching programs on campus, including:

- the Department of Afroamerican and African Studies (AAS),
- the Program in American Culture, and
- Latino/Latina Studies.

Several of the LACS program faculty are affiliated with these units and we frequently co-sponsor activities. Overlapping all four groups are research clusters of faculty and graduate students interested in such areas as:

- Latino/a history, “minority” identity, and the experience of migration
- The African Diaspora in the Americas
- Indigenous America
- Questions of colonialism and post-coloniality

LACS organizes and co-sponsors over 50 public lectures, workshops, and conferences each year, and has become a midwestern and Michigan resource for scholars and the public at large. LACS actively sponsors and co-sponsors events involving visiting scholars and speakers, and conferences and workshops in which participants from Latin America interact with University faculty, students, and members of the community.

The major goals of the Center are:

- To promote and support initial field research of graduate students specializing in Latin American studies, with the help of resources such as Foreign Language and Area Studies awards.
- To promote interchange among faculty and graduate students through field research, special courses, events, and conferences.
- To maintain our active partnerships with scholars from Latin America.
- To develop collaborative relationships and closer links between the disciplinary departments of the College of Literature, Science and Arts and the professional schools of the University of Michigan by supporting promising students with research interests in Latin America.
- To serve as a resource on Latin America for area educators and the wider community.

Quechua Language Study at Michigan. Quechua, the language of the Inkas, is spoken today by millions of people in Bolivia, Peru, Ecuador, and Colombia. It has a written literature that goes back to the sixteenth century.

Quechua is offered as a regular course during the academic year at the University of Michigan in Ann Arbor, and as an intensive summer course in Cusco, Peru.

Three levels are taught in year-long courses:

- Beginning Quechua (LACS 471/472)
- Intermediate Quechua (LACS 473/474*)
- Advanced Quechua (LACS 475/476).

*LACS 474 meets the language requirement.

Summer Quechua Language Study in Cusco. The program is open to all college and university undergraduate and graduate students who wish to learn Southern Quechua. This unique program offers high quality intensive language instruction through the experienced faculty Centro Tinku and the unusual experience of living and learning in the ancient Inka capital of Cuzco. Classes will meet intensively for seven weeks. A series of lectures on Quechua culture and history and an extensive program of excursions and cultural events will supplement the courses. The Quechua courses are taught using the immersion method, so previous knowledge of Spanish is not required (though of course some familiarity with Spanish is useful for getting around Peru). Consult the center’s website for further information: www.ii.umich.edu/lacs/academics/quechualanguageprogram
Latin American and Caribbean Studies

May be elected as an interdepartmental major

The Interdepartmental 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.

Prerequisites to the Major. None.

Requirements for the Major. 30 credits above the 200-level, beyond the language requirement, are required to complete the major. Among the 30 credits, students must choose at least one course from each of the disciplines of Anthropology, History, Literature, and Political Science.

LACS Language Requirement for the Major. Competency in Spanish or Portuguese [equivalent to SPANISH 277 (or 275) or the intensive Spanish program at the Residential College, or PORTUG 232] 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.

Required Courses. In choosing the 30 credits of upper-level courses, students must include at least one course from each of the following areas:

- Anthropology: ANTHRCUL 319 (Introduction to Latin American Society and Culture), 414 (Introduction to Caribbean Societies and Cultures), or another upper-level Anthropology course on Latin America.
- History: HISTORY 347 (Latin America: The Colonial Period), or 348 (Latin America: The National Period), or another upper-level HISTORY course on Latin America.
- Literature: SPANISH 381, 382 (Introduction to Latin American Literature, I and II), or another upper-level course in Latin American literature.
- Political Science: POLSCI 347 (Government and Politics of Latin America), or another upper-level course in Latin American politics.

Elective Courses. The remainder of the 30 credits may be drawn from upper-level courses, from any department, that deal with Latin America and the Caribbean. These change from year to year. The Center will normally make available during pre-registration a list of courses relating to Latin America and the Caribbean offered the following term. Accredited courses taken during Study Abroad programs in Latin America [administered by the Center for Global and Intercultural Study (CGIS), 764-4311] can in many cases count toward the major. Students should consult with their individual faculty advisor and with the Undergraduate Advisor for advice on selecting appropriate courses and developing an intellectually coherent and comprehensive program of study.

Advising. Prospective majors should consult the undergraduate advisor for guidance on courses. Appointments are scheduled in the LACS office, (734) 763-0553 or lacs.office@umich.edu.

Normally, a major should reflect the multidisciplinary nature of the program and the themes that a student wishes to develop. Students should file a tentative plan for the major with the Center in their junior year, and update it prior to graduation.

Honors Plan. LACS offers an Honors plan to qualified LACS 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 LACS graduation requirements, maintain a 3.5 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 plan is not limited to students who have been in the College Honors Program in the first and second years. More details about the Senior Thesis and about applying for LACS Honors may be obtained from the undergraduate advisor.

Latin American and Caribbean Studies Minor

A minor in Latin American and Caribbean Studies is not open to students with a major in Latin American and Caribbean Studies.

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. Students wishing to pursue a minor in Latin American and Caribbean Studies must develop a specific plan for its completion in consultation with the LACS student advisor.

Appointments are scheduled in the LACS office [(734) 763-0553 or lacs.office@umich.edu].

Prerequisites to the Minor: SPANISH 232 or PORTUG 232.

Requirements for the Minor: At least 15 credits in courses at the 300-level and above on Latin America and the Caribbean, to be chosen from among courses listed in the Latin American and Caribbean Studies major.

Constraints: Courses must be drawn from at least three different departments, with not more than six credits in any one department.

Latina/o Studies (see American Culture)

Linguistics

440 Lorch Hall, 1220
611 Tappan Street
(734) 764.0353 (phone)
(734) 936.3406 (fax)
www.lsa.umich.edu/linguistics
e-mail: linguistics@umich.edu

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 major 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 prehistoric 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-major courses in Linguistics.** The Department of Linguistics offers a series of pre-major 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.

**Linguistics Major and Minor Advising.** Advising appointments can be made at https://webapps.lsa.umich.edu/Advispts/AA_StuSel5vc1.aspx?tctxg=LING or by contacting linguistics@umich.edu.

**Linguistics**

*May be elected as an interdepartmental major*

**Prerequisites to the Major.** None, but LING 209 or 210 or 212 are recommended.

**Requirements for the Major.** The linguistics major requires a total of 30 credits at the 300 level or higher; at least 18 of these credits must be in regular classroom offered by the Department of Linguistics. Specifically, these 18 credits may not include experiential practice, independent study, study abroad courses, transfer credits, or courses offered by other departments. (Note that courses cross-listed with LING are treated as Linguistics courses.) In addition, at most 6 credits of independent study and at most 6 credits of experiential practice may be counted toward the major.

Students should consult with their advisor to ensure that their major consists of a coherent set of courses. The interdisciplinary nature of the field of linguistics — and hence the interdisciplinary nature of the major — makes it particularly important that students are aware of the options available to them.

**A. Required Courses.** All majors are required to take the following four courses. The coursework in LING 313, 315, and 316 should be completed as soon as possible, as it is intended to ensure that all students gain a solid understanding of the nature of language and the methods currently employed in the study of language.

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 aspects of semantic and pragmatic systems in natural language, including logic and formal systems, reference/co-reference, and text analysis.
4. **LING 497 – Capstone Seminar.** This seminar is designed to provide students with a unified experience that brings previous course-work, particularly the other required courses, to bear on a specific topic that may vary by term.

In extraordinary circumstances, with permission of the undergraduate chair, an advanced course in the area of phonetics/phonology, semantics, or syntax could satisfy the LING 313, 315, or 316 requirement, respectively.

**B. Additional Courses.** Beyond the three basic courses, majors are encouraged to fill out their program, in consultation with a linguistics department advisor, with courses that satisfy their own particular interests and goals. These courses may be offered by the Department of Linguistics or another program or department. Each term, the Linguistics Undergraduate Program distributes a list of courses offered by other units that are approved for credit in the major in Linguistics. Majors may request that courses not on this list also count towards the required credits; these requests must be approved by the Undergraduate Program chair. See under “Major Profiles” for three organized sub-plans that are available to majors whose interests fall into one of those areas.

**Double Major.** Because the study of language is inherently interdisciplinary, a major in Linguistics can be designed to integrate very well with other academic fields. A large proportion of current linguistics majors (more than half) complete Double Majors.

An LSA Double Major requires satisfying all of the requirements for the major of both programs. However, since LSA places no limit on the number of credits that may be offered jointly for both majors, this allows students to double-concentrate with substantially fewer than 60 total credits for the major.

Students considering a Double Major in Linguistics and another field in LSA should consult department advisors in both fields.

**Honors Plan**

The Honors plan 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).

**Major Profiles**

The Department of Linguistics offers three sub-plans within the major. These are optional: no major is required to follow any sub-plan. They are offered for the benefit of those students who wish to have more structure in their major than is provided by the default option, which comprises the four core courses plus seven electives.

**Applied Linguistics and Second Language Learning and Teaching**

The study of second/foreign language acquisition is a major focus of applied linguistics. Coursework in this area addresses both practical and theoretical issues. Although much of the emphasis in these courses is on teaching English as a Second Language (ESL), the principles and practices studied apply to instruction in any non-native language. A sequence of coursework in this area is especially useful for students interested in teaching ESL, particularly in international settings.

Students will have opportunities to meet faculty members and observe language courses in the language departments and at the English Language Institute, a principal center of second language instructional research and curriculum development.

Students following this major profile who seek a certificate* (issued upon graduation) stating that the student has completed a sequence of courses in this major area are required to take LING 350 and three approved courses (in addition to the four core courses required of all majors).

*Note that this certificate is not legal certification in ESL for the public schools.

**Language and Mind**

The language and mind profile introduces students to the multidisciplinary investigation of human language and the mind/brain. Research within this enterprise attempts to characterize the acquisition/development, origin,
representation and processing of linguistic knowledge through both theoretical and empirical/experimental investigation. Specific topics include, but are not limited to, linguistic theory, psycholinguistics, cognition, perception, reasoning, and formal and computational models of linguistic knowledge and processes. The sub-plan focuses on the investigation both of universal aspects of human linguistic knowledge and of cognitive mechanisms that determine the observed diversity of human language.

This profile is also relevant for students who wish, in the junior and senior years of study, to combine courses in linguistics, philosophy, and computer science, including courses that focus on learning the languages (generally 100- and 200-level) with courses that focus on the languages of natural language processing by computers, human computer interaction, teaching and learning languages, literacy, and the diagnosis and treatment of language disorders.

To follow this profile, students are advised to take 12 credits, chosen from an approved list of courses (see the Department’s website for the list). It is recommended that students interested in this track take LING 209, Language and Human Mind, as one of their first courses.

**Linguistics for a Multicultural World**

Courses in this profile focus on issues related to historical, sociocultural, and typological aspects of linguistics, particularly as these are relevant to multilingualism and multiculturalism. The sub-plan is designed to teach students to use the tools of linguistic inquiry to address questions of relationships among languages, cultures, and societies. Special attention is devoted to the emergence of global languages, particularly (nowadays) English. The courses in this track approach the study of language from a variety of perspectives and seek to equip students to become productive and informed citizens in an increasingly multicultural world.

Students who follow this profile are advised to take 12 credits, chosen from an approved list of courses (see the Department’s website for the list); we strongly recommend that LING 340, Introduction to Sociolinguistics, be one of these courses.

**Other Areas**

Students interested in combining linguistics with work in a particular language should take courses dealing with the history and structure of that language. Such a major assumes the ability to use the spoken and written language; courses that focus on learning the languages (generally 100- and 200-level) will not count as part of the requirements for the major in linguistics.

Students interested in learning about issues in natural language and computation may combine courses in linguistics, philosophy, and computer science. These students may also choose to pursue a Double Major in Linguistics and either of these two fields.

Students interested in applying the methods of linguistic analysis to spoken English discourse and to written English texts can combine the study of linguistics with courses in formulation (and the MSI degree after completion of its requirements (normally a second year of graduate study). Students in the accelerated joint program must satisfy the normal requirements for both the Bachelors and the MSI programs; but any course they take that satisfies a requirement for the Bachelors degree and also satisfies a requirement for the MSI can be used to satisfy both requirements simultaneously. By taking 24 credits of courses that are “double-counted” in this fashion, it is possible to eliminate a year from the normal course of study. In particular, several designated courses taught in the School of Information and the Department of Linguistics satisfy requirements for both degrees. See the official list of courses for details.

To qualify for admission to the School of Information under the Accelerated Joint Program, students need to show that, given the double counting provision, they will be able to complete the LSA and Linguistics requirements for the Bachelors degree by the end of the fourth year, while also completing the usual first-year coursework for the MSI.

In addition, applicants for the accelerated joint program must show an academic record that is consistent with the demands of completing six years of course work in five years. This means that program applicants must be at or above the norm for the regular entering class at the School of Information, in terms of fit to the School, maturity, GPA, and GRE scores.

Further information can be found by visiting the School of Information, 300 West Hall, or SI’s website [www.si.umich.edu]. Declared Linguistics majors who are interested in this program should consult with their Linguistics advisor as early as possible. An application to the School of Information is made in the fall academic term of the junior year and is reviewed as part of the regular admission process by the School of Information. Applicants will be notified of the School of Information’s decision before the registration deadline in the winter academic term.

**Minor in Linguistics**

A minor in Linguistics is not open to students with a major in the Department of Linguistics.

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 major in Linguistics. The 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 tool for majors in other cognate disciplines.

Students wishing to pursue a 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.

**Prerequisites to the Minor.** LING 209/PSYCH 242 or LING 210 or LING 212 or is a prerequisite for a linguistics minor, but does not count toward the minor.

**Minor Program.** 15 credits in Linguistics or in courses cross-listed with Linguistics, distributed as follows:

1. **Linguistics core:** Two courses chosen from LING 313, 315, and 316.
2. **Linguistics electives:** Nine credits in Linguistics, at the 300-level or above, chosen in consultation with, and approved by, the minor advisor.
Lloyd Hall Scholars Program (LHSP)

Alice Crocker Lloyd Residence Hall
100 South Observatory
(734) 764-7521 (phone)
(734) 764-5312 (fax)
www.lsa.umich.edu/lhsp
e-mail: lhsp@umich.edu

Not a major

The Lloyd Hall Scholars Program (LHSP) is a first- and second-year living-learning community focused on writing and the arts. Students from all academic disciplines are encouraged to participate in LHSP, take writing and studio arts classes, and engage in clubs, events, and publications related to writing and the creative arts.

Macromolecular Science and Engineering

3062C H.H. Dow Building
2300 Hayward Avenue
(734) 763-2316 (phone)
(734) 763-4788 (fax)
macromolecular.umich.edu

e-mail: macromolecular@umich.edu

Not a major

Macromolecular Science and Engineering is an interdisciplinary graduate program that provides the academic and research basis for studies in the science and technology of synthetic and natural macromolecules. Such large molecules exhibit unusual and specific properties as compared to small molecules and a large field has developed in unraveling the scientific foundations of this behavior, both in the synthetic and the biological areas.

The Program at U-M is one of the very few where students can achieve competence in both the traditional discipline of their choice and the interdisciplinary field of Macromolecular Science and Engineering. The faculty members are drawn from various departments, thus making the Program a truly cooperative and interdisciplinary endeavor.

Mathematics

2074 East Hall
530 Church Street
(734) 764-0335 (phone)
(734) 763-0937 (fax)
www.math.lsa.umich.edu
e-mail: math-undergrad-office@umich.edu

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.

Special Departmental 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.

Mathematics

May be elected as a departmental major

For detailed requirements on the Mathematics Major consult the brochure Undergraduate Programs & Courses-Department of Mathematics available from the Undergraduate Program Office, 2084 East Hall, (734) 763-4223, or the department’s website [www.math.lsa.umich.edu/undergrad/].

Prerequisites to the Major. Most programs require completion of one of the sequences ending with MATH 215&217, 256&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.)

Majors. 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 end 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 major must be designed with and approved by a department advisor.

Field of major and 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 and Financial Math only).

Advising. Students are strongly urged to consult with a department advisor each term before selecting courses for the following term. Appointments may be scheduled on-line at: www.math.lsa.umich.edu/undergrad/

Pure Mathematics
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.

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.

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 256, 286, or 316
   - Analysis: MATH 351 or 451
   - Geometry/Topology: MATH 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.

Mathematical Sciences Program
Prerequisites to submajor. Completion of one of the following sequences ending with MATH 215&217, 256&217, 285&217, or 295&296. Students who have completed one of the sequences 255&256 or 285&286 may substitute MATH 513 for MATH 217. 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; and the Introductory Biology sequence (BIOLOGY 171-172). 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.

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. Each student must select one of the eight Program Options as a special area.

a. Four basic courses (one course from each of the following four groups), completed with a grade of at least C–:
   - Differential Equations: MATH 256, 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. 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: www.math.lsa.umich.edu/undergrad):
   - Discrete and Algorithmic Methods
   - Numerical and Applied Analysis
   - Operations Research and Modeling
   - Probabilistic Methods
   - Mathematical Economics
   - Control Systems
   - Mathematical Physics
   - Mathematical Biology
c. Two additional advanced mathematics (or related) courses, approved by a department advisor.
d. At least two of the courses in b and c must be MATH courses.

Honors Mathematics
Outstanding students may elect an Honors plan 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, ...).

Students intending an Honors plan are strongly advised to take one of the Honors introductory sequences MATH 156-256, 175-286, 185-286, or 295-396, or some combination of these four. The sequence MATH 295-396 is very theoretical. Eight credits of PHYSICS and familiarity with a high-level computer language are strongly recommended.

The Honors plan 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 or 513
   2. Analysis: MATH 451
   3. Modern Algebra: MATH 493
   4. Geometry/Topology: MATH 433, 490, or 590
   5. Probability: MATH 525
   6. Differential Equations: MATH 404, 454, 556, 557, or 558

Students who complete MATH 295&296, with a grade of at least a C– are exempt from MATH 451. Students who complete MATH 295&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 one-credit course and can be used to satisfy the elective requirement only if taken for a total of three 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 to 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 plan 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: www.math.lsa.umich.edu/undergrad/) no later than the second term of their sophomore year.

Actuarial Mathematics
The Actuarial Mathematics Program is designed to provide broad training in the basic mathematics underlying the operations of private and social insurance and employee benefit plans. The courses are organized to assist the student to prepare for several of the examinations of the Casualty Actuarial Society and the Society of Actuaries. Non-credit review classes for some of the professional actuarial examinations are organized each term; ask your actuarial advisor about the time and place of these classes. It is strongly recommended that some of these exams be passed before graduation. Summer internships are an important component of the educational program and students are strongly encouraged to seek an internship no later than the conclusion of their junior year. Students are encouraged to
take either MATH 422 or 427 to satisfy their upper-level writing requirement.

**Prerequisites to the subMajor**: MATH 215&217, MATH 255&217, MATH 285&217 or MATH 295&296. Each student must also complete: ECON 101 and 102 and ECECS 183 all elected on a graded basis. The grade for ECON 101, ECON 102 and ECECS 183 will be included in the GPA in the major.

**Requirements for the subMajor**. 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 216, 256, 286, or 316
   - Probability: MATH 425
   - Statistics: STATS 426
   - Finance: MATH 423

B. Five special courses for Actuarial Mathematics: MATH 424, MATH 520 and 521 (or 522), MATH 523 and 524.

C. Two additional courses in areas relating to Actuarial approved by an advisor.

**Mathematics of Finance and Risk Management (Financial Mathematics)**

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.

**Prerequisites to the submajor**: MATH 215&217, MATH 255&217, MATH 285&217 or MATH 295&296. Each student must also complete: ECON 101 and 102 and ECECS 183 all elected on a graded basis. The grade for ECON 101, ECON 102 and ECECS 183 will be included in the GPA in the major.

**Requirements for the subMajor**

A. Four basic courses (one from each of the following four groups), completed with a grade of at least C–:
   1. Differential Equations: MATH 216, 256, 286, or 316
   2. Probability: MATH 425
   3. Statistics: STATS 426
   4. Finance: MATH 423

B. Four special courses for Financial Mathematics: MATH 451, MATH 472 (or 471), MATH 525, MATH 526.

C. Two additional courses in areas relating to Financial Mathematics approved by an advisor.

**Secondary Mathematics Teaching Certificate**

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: www.math.lsa.umich.edu/undergrad

For information specific to the School of Education, students should contact:

- The School of Education Teacher Education Office
  1228 SEB
  (734) 615-1528
teacher.education@umich.edumwww.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.

**Prerequisites**: 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, ECECS 183 or equivalent.

Every candidate for a teaching certificate must take one course from each of the following five groups (chosen with the approval of a teaching certificate advisor) and completed with a grade of at least C–:

1. Modern Algebra/Number Theory: MATH 312, 412, 475, or 493
2. Geometry: MATH 431 or 531
3. Probability: MATH 425 or 525
4. Analysis: MATH 351 or 451
5. Secondary Mathematics: MATH 486

The program requires ten 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 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/).

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.

**Mathematics Minor**

A minor in Mathematics is not open to students with any major in Mathematics. However, a student who graduated with a minor in Mathematics may return to complete a major in Mathematics. The additional course work used to satisfy the requirements of the major must include 12 in residence, upper-level credit hours.

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.
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 at:
www.math.lsa.umich.edu/undergrad/

Prerequisites to the Minor: One of the sequences MATH 115&116, 175&176, 185&186, or 295&296; 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.

Requirements for the Minor: 15-18 credits of courses, including either two courses from category A and three courses from category B, or one course from category A and four courses from category B. No more than one course may be elected from each of the three areas of category A. The courses in category B must be selected from exactly two of the six listed areas. A student planning to take linear algebra and differential equations courses in category B must be selected from exactly two of the six listed areas. A student planning to take linear algebra and differential equations courses in category B must be selected from exactly two of the six listed areas. Students should note that not all of MATH 215, 216, and 217 will count toward the minor, whereas all of MATH 215, 216, and 217 will.

All courses for the minor program must be completed with a grade of at least a C-.

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**Program in Microbiology**

Microbiology is an Interdepartmental Program supervised by the Microbiology Major Committee, with academic support provided by the Microbiology Major Committee.

**Microbiology (B.S.)**

May be elected as an interdepartmental major, supervised by the Microbiology Major Committee.

Exclusions: Students who elect a major in Microbiology may not elect the following majors: Biology; General Biology; Cell and Molecular Biology; Ecology and Evolutionary Biology; 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.

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. Students intending to go to graduate school will need research experience as well as two terms of Calculus and two terms of Physics. Students intending to go to medical school will need to take two terms of Physics and CHEM 230.

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**Prerequisites to the Major.**

- BIOLOGY 171, 172/174, and 173; or BIOLOGY 195; or BIOLOGY 162 or 163
- CHEM 210/211 and 215/216
- PHYSICS 125/127 and 126/128; or PHYSICS 135/136 and 235/236; or PHYSICS 140/141 and 240/241.

The PHYSICS 135/136 and 235/236 or 140/141 and 240/241 sequence is recommended for students interested in an Honors plan and for those who anticipate graduate work in the field of microbiology.

- Quantitative Analysis 1: MATH 115, 120, 156, 175, 185, or 295
- Quantitative Analysis 2: One of
  - MATH 116, 121, 255, 176, 186, or 296
  - STATS 250; 400-level or above
  - BIOPHYS 290 / PHYSICS 290
  - EECS 203 or 280
  - EARTH 468
  - Any other course with a MATH 115 prerequisite chosen in consultation with a major advisor

[Note: any course used to meet this requirement cannot also be used as a major elective, i.e., a course cannot “double count”.

Requirements for the Major

1. Core:
   a. Microbiology: BIOLOGY 207.
   b. Genetics: BIOLOGY 305.
   c. Biochemistry: one of MCDB 310 or BIOLCHEM 415 or CHEM 351.

2. Upper-Level Requirements (minimum 19 credits). A minimum of eleven credits must be selected from Groups 1 and 2 which must include at least two courses from Group 1 and one course from Group 2. The remaining eight credits may be selected from Groups 1, 2, or 3.
A. **Group 1 – Microbial Genetics, Physiology, Cellular Biology, Diversity and Ecology** (select at least two courses):
- MCDB 401 (appropriate sections only), 415, 432, 444, 489
- EEB 315, 446, 468, 470
- MICRBIOL 320, 430, 460
- INTMED 320, 460

B. **Group 2 – Microbial Pathogenesis, General Virology & Immunology** (select at least one course)
- MICRBIOL 405, 415
- EPID 460
- MCDB 436 or MICRBIOL 440 / IMMUNO 440 (only one of these will count toward the major).

C. **Group 3 – Advanced Electives.** A maximum of eight credits from the courses listed below may be applied toward a Microbiology major.

i. **Advanced Biochemistry, Molecular Biology, Cellular Biology:**
   - MCDB 427, 428
   - MCDB 411 or CHEM 452.

ii. **Ecology:**
    - EEB 476, 483.

iii. **Epidemiology:**
    - EPID 504, 505, 507, or 525

iv. **Microbiology & Immunology:**
    - Any MICRBIOL course at the 500-level or higher (with approval of advisor).

v. **Advanced Mathematics:**
    - Any course with a MATH 116 prerequisite.

vi. **Statistics:**
    - Any STATS course at the 400-level or above.

vii. **Research:**
    - MICRBIOL 399
    - EPID 399 (2nd term)
    - EEB 400
    - MCDB 400 (maximum of 3 credits)
    - INTMED 499 (2nd term)

*Note:* A maximum of 3 credits of independent research can be applied to the major. A course must be taken for a minimum of two credits and completed in a single term to count as an elective course.

Other courses with permission of advisor.

**Field of major.** For purposes of calculating grade point average, the term “field of major” means the following:
1. All mandatory prerequisites.
2. All courses from participating departments (BIOLOGY, EEB, MCDB, MICRBIOL, INTMED, and EPID)
3. Any other course used to satisfy requirements for the major.

**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 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.

**Honors Plan.** The Microbiology B.S. degree is the basis for the Honors degree in Microbiology. Students must elect two terms of independent research, maintain a 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 Microbiology Honors plan, students must identify a research mentor in one of the participating departments. Students may conduct Honors research with faculty in other units on the University of Michigan campus, but must have a formal co-sponsor relationship with a research track or tenure-track faculty in one of the participating departments. Students apply to the Honors Program in Microbiology by submitting a research proposal along with a letter from the research mentor indicating their willingness to sponsor the student’s research.

**Using non-LSA coursework in the Microbiology major.** Epidemiology (EPID) courses are offered under the School of Public Health. Microbiology & Immunology (MICRBIOL) courses are offered by the Medical School. These and any other external courses not cross-listed through an LSA department (including some BIOLCHEM offerings) count as non-LSA course work (see “Non-LSA Course Work” on the LSA website). Majors may elect 20 credits of non-LSA course work in the minimum 120 required for an A.B. or B.S. degree. See an advisor with questions about your non-LSA elections.

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**Microbiology and Immunology**

Microbiology and Immunology  
U-M Medical School  
5641 Medical Science Building, II  
1150 West Medical Center Drive  
(734) 763-3531 (phone)  
(734) 764-3562 (fax)  
www.med.umich.edu/microbio

**Not a major**

Undergraduates may pursue Microbiology through a major offered by the Interdepartmental Program in Microbiology.

The Department of Microbiology and Immunology (Medical School) is a participating unit in the interdepartmental Microbiology major listed under Microbiology.
Center for Middle Eastern and North African Studies (MENAS)

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 Africa. The ISP supports projects that enhance research and teaching related to Islam, Islamic societies, and Muslim diasporas in the West. In particular, it encourages collaborative, interdisciplinary work that explores interregional and global contexts in which Islam plays a dynamic role.

Advising. Prospective majors are encouraged to work closely with the area department advisor not only to ensure completion of the program requirements, but also to provide support in planning for future opportunities. Academic advising appointments are scheduled at 1080 South University Avenue, Suite 3603. Students interested in the minor in Modern Middle Eastern and North African Studies should develop a specific plan for its completion in consultation with the academic advisor. Appointments are scheduled the center’s office at 1080 South University, Suite 3603, (734) 764-0350.

Students pursuing the Islamic Studies minor must discuss their plans and course elections in consultation with the ISP advisor. Appointments with the academic advisor are scheduled by emailing ispadvising@umich.edu

Middle Eastern and North African Studies

May be elected as an area major

Not open to those who elect a major in Near Eastern Studies

The Center for Middle Eastern and North African Studies offers a multidisciplinary area major to students who want to obtain a broad background on the modern Middle East and North Africa.

Prerequisites to the Major. One of the following first-year language sequences or the equivalent:

- Arabic: ARABIC 101 and 102
- Armenian: ARMENIAN 101 and AAPTIS 172, or AAPTIS 173; ARMENIAN 105 and AAPTIS 182, or AAPTIS 183
- Hebrew: HEBREW 101 and HJCS 102
- Persian: PERSIAN 101 and AAPTIS 142; or AAPTIS 143
- Turkish: TURKISH 101 and AAPTIS152; or AAPTIS 155).

Strongly recommended:

- NEAREAST 100 (Peoples of the Middle East)
- AAPTIS 204 (Introduction to Islam).

Requirements for the Major. 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
2. Electives
3. Honors Plan
4. Minors
Requirements for the Minor: 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 middle eastern language, anthropology, history, history of art, middle eastern literature, political science, religion, sociology, or women’s studies.

Constraints: At least one half of the courses counting toward the minor must be taken at the UM–Ann Arbor campus. Elementary and intermediate-level language courses in Arabic, Armenian, Persian, and Turkish may not count toward the minor.

No course may be used to satisfy the requirements of more than one minor.

Islamic Studies
The Islamic Studies Program (ISP) offers an interdisciplinary academic minor to students who wish to

a. better understand the history and culture of the Islamic religion and Muslim societies and
b. 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.

Prerequisites to the Minor: None.

Requirements for the Minor: At least 16 credits, selected in consultation with and approved by the ISP undergraduate academic advisor, from the following.

1. AAPTIS 262 (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
- AAPTIS 262 / RELIGION 204 Introduction to Islam
- AAPTIS 285 / HISTART 285 Islamic Visual Culture
- AAPTIS 361 Jihad in History
- AAPTIS 363 / RELIGION 363 The Qur’an and Its Interpretations
- AAPTIS 365 The Prophet Muhammad in Islam
- AAPTIS 462 / HISTORY 428 The Rise of Islam
- AAPTIS 465 / RELIGION 465 Islamic Mysticism
- AAPTIS 467 / HISTORY 487 / RELIGION 467 Shi’ism: The History of Messianism and the Pursuit of Justice in Islam
- AAPTIS 468 Islamic Law
- AAPTIS 469 Islamic Intellectual History
- AAPTIS 495 / HISTORY 429 / RELIGION 496 / WOMENSTD 471 Gender & Sexuality in Pre-Modern Islam
- AAPTIS 567 Readings in Classical Islamic Texts
- HISTORY 243 / MENAS 243 Islamic World History
- HISTORY 428 / AAPTIS 462 The Rise of Islam
- HISTORY 429 / AAPTIS 495 / RELIGION 496 / WOMENSTD 471 Gender & Sexuality in Pre-Modern Islam
- HISTORY 487 / AAPTIS 467 / RELIGION 467 Shi’ism: The History of Messianism and the Pursuit of Justice in Islam
- HISTART 285 / AAPTIS 285 Islamic Visual Culture
- MENAS 243 / HISTORY 243 Islamic World History
- MUSICOL 343 Music and Islam

- REEES 490 / SOC 490 / WOMENSTD 492 Women & Islam
- RELIGION 204 / AAPTIS 262 Introduction to Islam
- RELIGION 363 / AAPTIS 363 The Qur’an and Its Interpretations
- RELIGION 465 / AAPTIS 465 Islamic Mysticism
- RELIGION 467 / AAPTIS 467 / HISTORY 487 Shi’ism: The History of Messianism and the Pursuit of Justice in Islam
- RELIGION 496 / AAPTIS 495 / HISTORY 429 / WOMENSTD 471 Gender & Sexuality in Pre-Modern Islam
- SOC 490 / REEES 490 / WOMENSTD 492 Women & Islam
- WOMENSTD 471 / AAPTIS 495 / HISTORY 429 / RELIGION 496 Gender & Sexuality in Pre-Modern Islam
- WOMENSTD 492 / SOC 490 / REEES 490 Women & Islam

Middle East & North Africa
- AAPTIS 287 / HISTORY 290 / JUDAIC 290 Jews and Muslims
- AAPTIS 296 / GTBOOKS 296 Great Books of the Middle East
- AAPTIS 331 Introduction to Arab Culture: Race, Ethnicity and Gender Issues
- AAPTIS 339 Turkey: Language, Culture, Society between East and West
- AAPTIS 341 / HISTORY 306 History of the Ottoman Empire: The “Classical Age”, (ca. 1300-1600)
- AAPTIS 342 / HISTORY 307 History of the Ottoman Empire: The “Post-Classical Age”, (ca. 1600-1922)
- AAPTIS 368 / AMCULT 368 / WOMENSTD 368 Women and War in the Middle East
- AAPTIS 381 Introduction to Arabic Literature in Translation
- AAPTIS 459 Ottoman Turkish Culture
- AAPTIS 461 / HISTORY 442 The First Millennium of the Islamic Near East
- AAPTIS 487 / HISTORY 443 Modern Middle Eastern History
- AMCULT 368 / AAPTIS 368 / WOMENSTD 368 Women and War in the Middle East
- ANTHRCUL 409 Peoples and Cultures of the Near East & North Africa
- GTBOOKS 296 / AAPTIS 296 Great Books of the Middle East
- HISTORY 290 / AAPTIS 287 / JUDAIC 290 Jews and Muslims
- HISTORY 306 / AAPTIS 341 History of the Ottoman Empire: The “Classical Age”, (ca. 1300-1600)
- HISTORY 335 The Ottoman Enterprise
- HISTORY 442 / AAPTIS 461 The First Millennium of the Islamic Near East
- HISTORY 443 / AAPTIS 487 Modern Middle Eastern History
- JUDAIC 290 / AAPTIS 287 / HISTORY 290 Jews and Muslims
- WOMENSTD 368 / AAPTIS 368 / AMCULT 368 Women and War in the Middle East

Sub-Saharan Africa. Topics courses as approve by the ISP advisor

South Asia
- AAPTIS 325 / HISTORY 325 / ASIAN 324 / RELIGION 325 The History of Islam in South Asia
- ASIAN 324 / HISTORY 325 / AAPTIS 325 / RELIGION 325 The History of Islam in South Asia
- HISTORY 325 / AAPTIS 325 / ASIAN 324 / RELIGION 325 The History of Islam in South Asia
- RELIGION 325 / HISTORY 325 / AAPTIS 325 / ASIAN 324 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
- HISTORY 470 / ASIAN 464 / RELIGION 464 From Mystic Saints to Holy Warriors: Islam in Southeast Asia
- RELIGION 464 / ASIAN 464 / HISTORY 470 From Mystic Saints to Holy Warriors: Islam in Southeast Asia

Central Asia
- AAPTIS 340 / HISTORY 340 / ASIAN 340 / MENAS 340 / REEES 340 From Genghis Khan to the Taliban: Modern Central Asia
Molecular, Cellular, and Developmental Biology (MCDB)

1121 E.H. Kraus Natural Science Building
830 North University Avenue
(734) 764-2446 (phone)
(734) 647-0884 (fax)
www.lsa.umich.edu/mcdb

Majors. The department offers majors in Cell and Molecular Biology (CMB) and a CMB-Biomedical Engineering joint B.S. and M.S. program. Students interested in majors in Biology or General Biology or the minor in Biology should refer to information listed under the Program in Biology. Students interested in the major in Neuroscience or Microbiology should refer to information listed under the Program in Neuroscience or the Program in Microbiology.

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 CMB 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/.

Field of Major and GPA Calculation. For purposes of calculating grade point average, the term “field of the major” (for all majors) means the following:
1. All BIOLOGY, EEB, MCDB, and Biological Station courses, including cross-listed ones, at the 200-level and above.
2. All required cognate courses (if any).
3. All mandatory prerequisites.

Introductory Biology Credit Limitation: The maximum amount of credit that can be earned in introductory biology courses is 17 credits. Students interested in majoring in Biology, General Biology, CMB, EEB, Microbiology, or Plant Biology must complete BIOLOGY 171, 172/174 and 173, or BIOLOGY 195 and 173, or equivalent.

Cell and Molecular Biology

May be elected as a departmental major program

Exclusions: Students who elect a major in Cell and Molecular Biology may not elect the following majors: Biology; General Biology; Microbiology; Plant Biology; Biochemistry; Biomolecular Science; or Neuroscience. They may also not elect a minor in Biology; Plant Biology; Chemistry; or Biochemistry.

The curriculum in Cell and Molecular 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.

Prerequisites to the Major

- BIOLOGY 171, 172/174 and 173; or
- BIOLOGY 195 and 173; or
- BIOLOGY 162 or 163
- an PHYSICS 125/127 and 126/128; or
- PHYSICS 135/136 and 235/236; or
- PHYSICS 140/141 and 240/241.
- CHEM 210/211 and 215/216
- Quantitative Analysis 1: MATH 115, 120, 156, 175, 185, or 295
- Quantitative Analysis 2: One of
  - MATH 116, 121, 255, 176, 186, or 296
  - STATS 250; 400-level or above
  - BIOPHYS 290 / PHYSICS 290
  - EECS 203 or 280
  - EARTH 468
  - Any other course with a MATH 115 prerequisite chosen in consultation with a major advisor

[Note: any course used to meet this requirement cannot also be used as a major elective, i.e., a course cannot “double count”.

Requirements for the Major. Minimum of 32 credits for the major, including:

1. Required courses.
   Genetics: BIOLOGY 305; Biochemistry: one of MCD 310 or BIOCHEM 415 or CHEM 351
   Cellular and Molecular Biology: MCD 427; MCD 428.
2. Advanced laboratory requirement. Two advanced lab courses from among: MCD 306, 400*, 413, 419, 423, or 429.
3. Biology/Chemistry elective. One course chosen from:
   - BIOLOGY 205, 207, 222, 225
   - MCD 308, 421
   - CHEM 230 or 260, or 241/242 or 245/246/247, or 452
   - any advanced CMB course (See #4).
4. Advanced CMB courses. Choose two courses from:

A third (or fourth) advanced CMB lab course (MCD 306, 400*, 413, 419, 423, or 429) may also be used to meet this requirement.
**Cell and Molecular Biology and Biomedical Engineering Program (B.S. and M.S.)**

*May be elected as a departmental major*

**Exclusions:** Students who elect a major in CMB:BME may not elect the following majors: Biology; General Biology; Cell and Molecular Biology; Microbiology; Plant Biology; Biochemistry; or Neuroscience. They may also not elect a minor in Biology; Plant Biology; Chemistry; or Biochemistry.

This program is designed for students enrolled in the College of Literature, Science, and the Arts. The Department of MCDB (College of LSA) and the Department of Biomedical Engineering (BME) (College of Engineering) jointly administer the program. A matriculating student will receive the BS in Cell and Molecular Biology from the College of LSA and an MS in Biomedical Engineering from the College of Engineering upon completion of all program requirements. A student will apply to both the Molecular, Cellular, and Developmental Biology and Biomedical Engineering Departments for entrance. A student will be admitted into the program only after completing the first year of the major prerequisites with a GPA of 3.2 or higher.

**Advisors from the Departments of MCDB and BME must approve admission to the program.**

**Prerequisites to the Major**

- BIOL 171, 172/174, 173; or BIOL 195 and 173; or BIOL 162 or 163
- CHEM 210, 211, 215, 216;
- MATH 115 and 116;
- PHYSICS 125/127 and 126/128; or PHYSICS 135/136 and 235/236; or 140/141 and 240/241.
- ENGR 101 or EECS 183

**A. Undergraduate Major (BS Phase). 51 credits.**

1. **Core courses:**
   - a. Genetics: BIOLGY 305;
   - b. Biochemistry: MCDB 310 or BIOLCHEM 415 or CHEM 351
   - c. Cellular and Molecular Biology: MCDB 306; MCDB 427; MCDB 428 or BIOMEDE 418; MCDB 429.

2. **Advanced Cell and Molecular Biology:** one course [such as EE 416, MCDB 401, 402, 403, 405, 410, 411, 413, 415, 416, 417, 418, 419, 422, 423, 426, 430, 432, 435, 436, 437, 440, 441, 444, 450, 454, 455, 456, 459, 489, 504, and 589; appropriate sections of MCDB 401; MCDB 400], selected in consultation with, and approved by, the program advisors. (BIOMEDE 584 is elected in the graduate phase, and does not count toward this requirement.)

3. **Biology Elective:** One course chosen in consultation with, and approved by, the program advisors. This course can be any BIOLGY, EEB, or MCDB course at the 200-, 300-, or 400-level (except BIOLOGY 200, 201, 262; EEB 300, 302, MCDB 300, 302, 320, or 412). One course in Evolution, Ecology, or Organismal Biology is strongly encouraged, as is undergraduate research.

4. **Engineering courses:**
   - a. BIOMEDE 419 (BIOMEDE 419 counts as an advanced CMB course in the CMB major).
   - b. Choose a Track
      - i. Biomedical Engineering Track: BIOMEDE 221, 321, and 331
      - OR
      - ii. Chemical Engineering track: CHE 230, 330, AND either CHE 342 or 344.

5. **Cognates:**

**B. MS (Graduate) Phase.**

1. **Advanced Cell and Molecular Biology:** BIOMEDE 584.
2. **Graduate Biomedical Engineering Core:** BIOMEDE 500, 550, and 590.
3. **Graduate Engineering:** seven credits, chosen in consultation with the program advisor.
4. **One advanced Mathematics course:** three credits, chosen in consultation with the program advisor.
5. **One advanced Statistics course:** three credits, chosen in consultation with the program advisor.

**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.

**MS phase.** A student may apply to the M.S. phase during the fourth year, when the student has achieved senior standing. For admission to the M.S. phase, the student must minimally have completed all major prerequisites and be judged by both academic advisors as making satisfactory progress towards the B.S. 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 CMB 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:

www.rackham.umich.edu/help/academic_records/sugs_information_for_engineering/

**Honors Program**

The CMB Honors Program trains students to conduct independent research in the fields of cell biology, genetics, biochemistry, and molecular biology. In addition to completing all the requirements for the CMB major, an Honors degree requires a GPA in the major of at least 3.4, and the completion of a significant piece of independent research that is reported in an Honors thesis and presented in a public forum. It is recommended that students discuss the Honors Program with a department advisor early in their undergraduate career.

**Declaring an Honors Plan in CMB.** Students are encouraged to meet with a CMB advisor to declare their Honors plan as soon as they have arranged an Honors research advisor to discuss their proposed project with a CMB advi-
Multidisciplinary Design Program

Multidisciplinary Design Program
College of Engineering
Engineering Programs Building (EPB), Rooms 201-207
(734) 763-7421 (phone)
www.engin.umich.edu/minors/multidisciplinarydesign

Michigan students are working on exciting design projects that are changing how the world works.

Multidisciplinary design is an engineering design process that incorporates the skills of different majors balancing their needs and constraints, via systems engineering, resulting in superior products. A design team requires solid engineering knowledge, hands on experience, teamwork, creativity, and ingenuity to produce the best results.

The Multidisciplinary Design (MD) Program offers student the opportunity to use engineering knowledge to design, build, test, and implement new and interesting projects working with a team of students who bring a variety of academic backgrounds and ways of approaching a problem.

For Information: Shawn Salata, ssalata@umich.edu

Wilson Student Team Project Center. At the Walter E. Wilson Student Team Project Center (WSTPC), students can find dedicated space and facilities for teams to design, build and test projects. Located behind the FXB Building and adjacent to the Wave Field, the Wilson Center has space for design, assembly, machining, electronics, painting and some testing. The Wilson Center offers training in mill work, lathe, Welding I, Welding II, CNC router, and CAD/CAM.

Minor in Multidisciplinary Design

Undergraduate students can benefit from practical experience designing technology systems in collaboration with students from other disciplines both inside and outside of engineering. This experience requires students to apply their developing disciplinary skills to projects that also require broader multidisciplinary concepts and approaches. This will expose participating students to systems engineering concepts and will help them succeed in the fast-paced, global and entrepreneurial market for graduate students and professionals in the 21st century. A minor in Multidisciplinary Design requires students to exercise their acquired disciplinary expertise in the context of a significant multi-semester team design-build-test project. This project must be multidisciplinary and involve concepts and approaches from at least two other disciplines to be completed successfully. The projects closely follow the following elements or steps:

1. problem definition based on qualitative and/or quantitative requirements
2. generation of creative solution concepts
3. analysis of the quality of proposed concepts
4. selection and optimization of a final concept
5. evaluation of the final concept through the building
6. testing of prototypes in realistic settings (or virtual models with models of the applicable environment), and iteration and/or detailed recomendation for improvement of the final concept based on the lessons learned from Steps 1 through 5.

These design projects are conducted during or after the student has taken a defined set of preparatory courses and ideally feature a meaningful connection with at least one discipline outside of engineering.

Intended Audience. While the minor would be open to all qualified students at the Ann Arbor, Dearborn, and Detroit campuses, it is expected to be of interest primarily to students in Life Sciences, Physical Sciences, and Mathematics. The Multidisciplinary Design minor promotes a wide range of experiential, project-based opportunities that engage areas of broad interest, e.g., the environment, sustainability, social service, global health, space exploration, etc.

Specializations. Students may join a program specialization that has been designed by a faculty member(s) around their particular interests. Students must apply to and be accepted by the faculty member managing the specialization. Specializations typically include a specified set of courses and projects. Students who complete a specialization will have it noted on their transcripts. There are currently two specializations: Global Health and Social Innovation.

Prerequisites to the Minor: None for the minor per se, although individual courses elected to meet the requirements of the minor may have course prerequisites.

Minor Program. At least 15 credits (at least two courses must be upper division courses) chosen in consultation with and approved by the minor advisor, distributed as follows:

A. Completion of at least 2 credits of introductory "Design, Build, Test" (DBT) experience. This provides students with a foundation in the experience of creating solutions for a specified problem.

Approved examples include: appropriate sections of ENGR 100, AOSS 280, MECHENG 250, BIOLOGY 173, and MCDB 306; Other courses considered upon request.
The Museum Studies Program was established in 2002. The program offers an undergraduate minor through the College of Literature, Science, and the Arts, and a graduate certificate through the Rackham School of Graduate Studies.

Museums have changed dramatically in the last few decades. Today’s museums are dynamic institutions playing increasingly important roles in the communities they serve. In addition to being a place for collecting, preserving, studying and exhibiting “objects,” the museum has become a vital arena for learning, exploring and negotiating the complex relationships that individuals and groups have with the social and natural environments in which they live.

In response to this movement, the museum profession has seen significant growth that has led to greater demand for qualified museum specialists. It is a profession that offers many exciting opportunities for the application of knowledge, skills and critical thinking associated with a variety of disciplines.

The field of museum studies is inherently interdisciplinary in nature. Interdisciplinarity is fostered through the inclusion of ideas drawn from a variety of subject areas and from a structured examination of collecting institutions of varying types (e.g., art museums, science centers, botanical gardens, zoos), in various geographic settings, from different cultures, in both the past and the present. The curriculum is organized thematically, balancing history and theory with opportunities for practical engagement. This applied theory emphasis will feature ongoing exposure to the rich resources of the University of Michigan including museums, museum collections, and engaging museum professionals in the classroom as an integral part of student learning. Students will learn the value of bridging theory and practice.
Objectives 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 majoring in Anthropology, Classical Archaeology, History, History of Art, American Culture, and Communication Studies, where students are first introduced to these topics.

Prerequisites to the Minor: 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).

Minor Program. The minor requires at least 18 credits as stated:

1. Core Courses: MUSEUMS 301 and 401.

MUSEUMS 301 and 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

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.

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 Director and Associate Director advise students on issues concerning elective course selection, graduate study, and career planning.

Museum Studies Program Partner Institutions

Students will benefit greatly from a diverse range of partnerships formed by the Museum Studies Program with museums, archives, special collections, and private businesses across the state. Students may encounter staff from these institutions as guest lecturers in the classroom, hosts for site visits, practicum sponsors, or through class assignments.

University of Michigan Institutions

- Bentley Historical Library
- Museum of Natural History
- Herbarium
- Kelsey Museum of Archaeology
- Map Library
- Museum of Anthropological Archaeology
- Museum of Art
- Museum of Paleontology
- Museum of Zoology
- Nichols Arboretum and Matthaei Botanical Gardens
- Sinddecuse Museum of Dentistry
- Special Collections Library
- Stearns Collection of Music Instruments
- U-M Detroit Observatory

Local and Regional Institutions

- African American Cultural and Historical Museum of Washtenaw County
- American Museum of Magic
- Ann Arbor Hands-On Museum
Music, Theatre & Dance

School of Music, Theatre & Dance
2290 E.V. Moore Building
1100 Baits Drive
(734) 763-0583 (phone)
(734) 763-5097 (fax)
www.music.umich.edu
Professor Christopher Kendall, Dean

Music Performance Courses. Students of advanced ability may elect instrumental or voice instruction through the University of Michigan School of Music, Theatre & Dance provided teaching assistant or faculty time is available. This instruction, which consists of half-hour weekly lessons for two credits, is not available to beginners.

The online application process for Studio (private) instruction opens at the start of each term, for the upcoming term. Students who cannot earn degree credit for performance courses must provide their own instruments (except organ and piano); practice facilities are limited, and priority is given to performance majors in the School of Music, Theatre & Dance. If you do not see a studio assignment by the second week of the term at the following link: www.music.umich.edu:444/dw-1/studio_assign/studioassignment_lookup.php, you can assume the department was unable to accommodate you. You may, however, apply again before the start of the next term. Students who cannot earn degree credit for performance courses cannot be accommodated by this program.

Ensembles. 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).

Questions concerning registration for performance instruction should be directed to the SMTD Office of Academic Affairs, 2277 Moore, phone 734-764-2516.

Please note that not all applicants can be placed – available teacher-hours are limited, and priority is given to performance majors in the School of Music, Theatre & Dance. If you do not see a studio assignment by the second week of the term at the following link: www.music.umich.edu:444/dw-1/studio_assign/studioassignment_lookup.php, you can assume the department was unable to accommodate you. You may, however, apply again before the start of the next term. Students who cannot earn degree credit for performance courses cannot be accommodated by this program.

Music

Bachelor of Musical Arts and Bachelors of Music degrees offered within the University of Michigan School of Music, Theatre & Dance.

The objectives of this major are to encourage the study of music as art and culture in the many contemporary and historical contexts of its creation, performance, dissemination, reception, and representation, including an understanding of the relationships and distinctions among the musical cultures of diverse historical epochs, civilizations, and geographical regions. Musical study fosters an awareness of the aesthetic, social, political, religious, and personal values that may be embedded in musical works and practices; an understanding of theoretical approaches to music and the relations between music and other arts and disciplines; and an awareness of the impact of technology on musical creation and production.

May be elected as an interdepartmental major

The Music Major provides students with broad experience in the study of music (both creative expression and critical analysis), through musicology and music theory, along with introductions to musical composition and performance. The LSA Major works in conjunction with the LSA Bachelors of Arts and Sciences degrees and provides a liberal arts alternative to the

Dance

Dance Building
1310 North University Court
(734) 763-5460 (phone)
www.dance.umich.edu

Not an LSA major. Students with an interest in Dance should contact the Department of Dance.

Arab American National Museum
Charles H. Wright Museum of African American History
Cranbrook Art Museum
Cranbrook Institute of Science
Detroit Historical Museum
Detroit Institute of Arts
Detroit Observatory
Detroit Zoological Institute
Flint Institute of Arts
Frederik Meijer Gardens & Sculpture Park
The Gerald R. Ford Presidential Library and Museum
The Heidelberg Project
The Henry Ford
Jim Crow Museum of Racist Memorabilia
Michigan Science Center
Museum of Contemporary Art Detroit
Public Museum of Grand Rapids
Toledo Museum of Art
Toledo Zoo
Yankee Air Museum

The objectives of this major are to encourage the study of music as art and culture in the many contemporary and historical contexts of its creation, performance, dissemination, reception, and representation, including an understanding of the relationships and distinctions among the musical cultures of diverse historical epochs, civilizations, and geographical regions. Musical study fosters an awareness of the aesthetic, social, political, religious, and personal values that may be embedded in musical works and practices; an understanding of theoretical approaches to music and the relations between music and other arts and disciplines; and an awareness of the impact of technology on musical creation and production.
Requirements for the Major. A minimum of thirteen courses are required; with the permission of the department advisor, as many as five courses from outside the University of Michigan may be accepted to satisfy requirements for the major. Eight courses must be taken at the University of Michigan, including the following:

1. **Musicology (MUSICOL):** one introductory course in music (MUSICOL 121, 122, or 123 or the equivalent) and two additional courses in Musicology or Ethnomusicology (MUSICOL 122, 123, 343, 345, 346, 351, 411, 450, 456, 458, and other 300-400 level courses, or the equivalent). MUSICOL 139, 140, 239, or 240, may be elected to meet requirements for the major with permission of the instructor and the department advisor.

2. **Music Theory (THEORY):** two courses of basic music theory (THEORY 137 [section 001, plus a lab section 002–005] and 238 [section 001, plus a lab section 002–003], or 139/149 and 140/150, or 239/240 and 240/250 or the equivalent (by permission of instructor).

3. **Music Composition (COMP):** COMP 221, 222, PAT 201, or equivalent (students with an historical or ethno-musicological focus within the major may request that this requirement be waived through substitution of another 400-level course in Musicology).

4. **Music Performance:** a total of four courses of performance instruction, selected from PIANO 110, 111, 112, 113 or private instruction 150. At least two courses of private instruction are required (applied piano class is acceptable as “private” instruction). Ensemble may be elected to cover two of the four required terms.

5. **Two additional MUSICOL, THEORY, COMP, or PAT courses at the 400 level or above.** One of these must be a junior-senior seminar in MUSICOL or THEORY for majors with a focus in either of these areas. The core requirements listed here typically demand approximately 30 credits. Music majors may select the remaining music courses in accordance with their personal interests. Students should acquaint themselves with graduate school requirements if they plan to do graduate work in composition, musicology, theory, or performance. The department advisor can assist students in arranging the best program in preparation for graduate studies and discuss the possibility of transferring into the University of Michigan School of Music, Theatre & Dance.

Honors Plan. Qualified students are encouraged to consider an Honors plan in Music. The standards for admission are a cumulative grade point average of at least 3.5 and evidence of outstanding ability in music. Application is made and admission is granted to the Honors plan during the first term of the junior year. Two additional courses (in performance instruction or at the 400-level or above) are required, and the primary focus of an Honors program is a written senior Honors Thesis or a lecture recital with extensive program notes approved by a Music department advisor. Independent research study with an advisor may satisfy the additional course requirement. Honors majors should elect one term of junior-senior seminar in Musicology or Music Theory.

Advising. A major is developed in consultation with and must be approved by the music department advisor. Appointments are scheduled through the LSA Academic Advising Center, 1255 Angell Hall (764-0332). For additional information regarding the music major and minor, see: site-maker.umich.edu/lsamusich

**Minor in Music**

A minor in Music is developed in consultation with an undergraduate advisor in music. Appointments are scheduled through the Newman LSA Academic Advising Center, 1255 Angell Hall (764-0332).

Prerequisites to the Minor: None.

Requirements for the Minor: At least 15 credits (and five courses), to be chosen from the following two categories as stated below:

1. **Required Survey Course:**
   - MUSICOL 121, Introduction to World Music
   - MUSICOL 122, Introduction to World Music

2. **Electives:** at least 12 credits in Music courses, with at least two courses at the 300-level or above. Electives must include one or more courses in two of the following five areas: Composition, Musicology, Music Theory, Performance, and Performing Arts Technology.

**Electives for Music**

- AAS 354 / RCHUMS 354 / WOMENSTD 354 / HONORS 354. Race and Identity in Music
- AAS 366. Music of Africa
- AMCULT 209. History of American Popular Music
- AMCULT 226 / HISTORY 226 / 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 411 / WOMENSTD 411. Rednecks, Queers, and Country Music
- AMCULT 436. Music of Asian Americans
- COMM 445. Music and Mediated Identities
- ENS 406 / RCHUMS 406. Beginning Javanese Gamelan
- ENS 407 / RCHUMS 407. Javanese Gamelan Ensemble
- HISTORY 226 / AMCULT 226 / LATINOAM 226. The Latin Tinge
- LATINOAM 226 / AMCULT 226 / HISTORY 226. The Latin Tinge
- PHYSICS 288. Physics of Music
- RCHUMS 249. Foundations of Music
- RCHUMS 250. Chamber Music
- RCHUMS 251. Topics in Music
- RCHUMS 252. Topics in Musical Expression
- RCHUMS 253. Choral Ensemble: Residential College Singers
- RCHUMS 256. Studying and Playing Southeast Asian Music
- RCHUMS 258. Afro-Cuban Drumming and Styles
- RCHUMS 259. Music Improvisation
- 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
- RCHUMS 406 / ENS 406. Beginning Javanese Gamelan
- RCHUMS 407 / ENS 407. Javanese Gamelan Ensemble
- SOC 255. Sociology of Music
- WOMENSTD 354 / RCHUMS 354 / AAS 354 / HONORS 354. Race and Identity in Music
The Department of Theatre and Drama participates in the Drama major offered through the Residential College. Theatre faculty contribute expertise in design, production and practicum work. (For students planning a professional career in theatre, the department’s B.F.A. or B.T.A. programs may be more appropriate.) The department offers minors in Global Theatre and Ethnic Studies, Design and Production, and Performing Arts Management.

**Productions and Facilities.** A number of fully executed productions are presented each year by the Theatre & Drama Department in three campus theatres – The Arthur Miller Theatre, Power Center for the Performing Arts, and the Lydia Mendelssohn Theatre. Scenery, properties, and costumes for all departmental productions are prepared, with substantial student assistance, in studios and shops in the Arthur Miller Theatre and Power Center. In addition, students have the opportunity to direct, design, stage, and perform in their own low-budget and experimental productions through Basement Arts. This student-run production organization performs in the Walgreen Drama Center.

**Theatre Shops.** Our comprehensive production facilities include two scene shops, a paint shop, prop shop, electrics shop, sound studio, costume shop, dye room and costume lab.

**Design Studios.** Our design studios are equipped with Macintosh computer workstations, a color plotter, scanner, a variety of computer-assisted design software, and a large format photocopier.

### Design and Production (D&P) Minor

**Exclusions:** Students enrolled in the Theatre Department’s current degree programs: Performance, Design & Production, Directing and the BTA are not eligible for this minor, nor are the students majoring in the InterArts degree.

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.

**Prerequisites to the Minor:** None.

**Prerequisites to Declaration.** Students will choose one of the four D&P tracks 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 minor. 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 D&P minor and are declared into the minor by the D&P advisor ONLY.

**Advising.** Students must develop a plan for the minor in consultation with an advisor in the Design and Production Program. Contact the Design and Production Program, (734) 764-5350; ask to speak with an advisor in the Design & Production program.

**Requirements for the Minor.** At least 18 credits chosen in one of the four tracks.

#### A. Track in Scenic Design
- THTREMUS 263 Rendering (3)
- THTREMUS 260 Scene Design I (3)
- THTREMUS 360 Scene Design II (3)
- THTREMUS 460 Scene Design III (3)
- THTREMUS 462 Drafting (3)
- THTREMUS 464 Scene Painting (3)

#### B. Track in Costume Design
- THTREMUS 263 Rendering (3)
- THTREMUS 277 History of Dress or THTREMUS 478 History of 20th Century Dress (3)
- THTREMUS 270 Costume Design I (3)
- THTREMUS 370 Costume Design II (3)

And six credits to be chosen from:
- THTREMUS 470 Costume Design III (3)
- THTREMUS 476 Costume Crafts (3)
- THTREMUS 452 Costume Construction (3)
- THTREMUS 471 Women’s Pattern Drafting (3)
- THTREMUS 571 Men’s Pattern Drafting (3)
- THTREMUS 172 or 472 Make-up Design (1-2)
- THTREMUS 251, 252 Production Practicum (1 ea.)

#### C. Track in Lighting Design
- THTREMUS 245 Intro to Stage Management (3)
- THTREMUS 256 Lighting Design I (3)
- THTREMUS 356 Lighting Design II (3)
- THTREMUS 456 Lighting Design III (3)
- THTREMUS 251 Practicum I – Light Board Op. (1)
- THTREMUS 252 Practicum II – Focus Crew (1)
- THTREMUS 261 Practicum III – Assistant ME (2)
- THTREMUS 351 Practicum V – Assist Lighting Des. (2)

#### D. Track in Stage Management

### All other group music ensembles offered at the 300-level in the Residential College

- WOMENSTD 411 / AMCULT 411. Rednecks, Queers, and Country Music
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.

Advising. Students must develop a plan for the minor in consultation with the advisor, Professor Anita Gonzalez, Department of Theatre & Drama (School of Music, Theatre & Dance).

Prerequisites to the Minor: None.

Requirements for the Minor. At least 5 courses and 15 credits chosen from the following categories as stated:

A. Core courses:
   i. Introductory Survey: THTREMUS 222 – Introduction to Global Theatre and Ethnic Studies
   ii. Introductory Studio Practice: THTREMUS 233 – Modern Rituals/Traditional Practices

B. Capstone Community Engagement course:
   i. THTREMUS 324 – Global Communities Practicum

ii. Through performance practice with any one of the following courses:
   - THTREMUS 334 – Special Topics in the Humanities, section titled “Community Empowerment through the Arts”
   - RCCORE 301 – Community Based Internship – Semester in Detroit
   - ARTDES 312 – Arts Workshops in Prisons
   - or an approved GIEU program with immersive performance experiences

C. Electives: One course in each of the following categories:
   i. Dramatic Performance Literature. These courses expand and deepen student knowledge of global or ethnic performance literatures.
      - THTREMUS 325 – Contemporary American Theatre and Drama
      - THTREMUS 326 – Intercultural Drama
      - THTREMUS 328 – Theater of Politics
      - ENGLISH 311 – Theater of Politics
      - ASIAN 356 – Contemporary Chinese Performance Culture
      - ASIAN 373 – The Performing Arts in South and Southeast Asia
      - ITALIAN 471 – Italian Theatre
      - POLISH 214 / REEES 214 – Rock Poetry and Political Protest in Poland
      - REEES 214 / POLISH 214 – Rock Poetry and Political Protest in Poland
      - RUSSIAN 463 – Chekhov
      - RCHUMS 373 – The Performing Arts in South and Southeast Asia
      - SPANISH 425 – Latin-American Theatre
      - SPANISH 468 – Modern Spanish Theatre
   ii. Studio Electives. One of the following:
      - THTREMUS 332 – Performing Archives and Oral Histories
      - THTREMUS 340 – Devising Theatre
      - THTREMUS 440 – Special Topics in African American Theatre
      - DANCE 348 – Africanist Traditions, section titled “African Dance Traditions: From Minstrelsy to Hip Hop”
      - DANCE 342 – Topics in World Dance
      - AAS 358 – Topics in Black World Studies, section titled “African Dance Traditions: From Minstrelsy to Hip Hop”
      - RCHUMS 235 – Topics in World Dance
      - RCLANG 321 – Readings in German, section titled “Deutsches Theatre Play Production Seminar”
      - RCHUMS 334 Special Topics, section titled “Cultures in Dialogue”

Performing Arts Management Minor

Understanding organizational, promotional, and fundraising techniques can help advance all work in the arts. Whether teaching, creating, or working within a traditional performing arts institution (such as an orchestra, theatre, opera, or dance company), management training amplifies the symbiosis of artistry, institution, and community and enriches the performing arts and culture as a whole.

The minor in Performing Arts Management (PAM) invites exceptional undergraduate students to add an arts business and entrepreneurship background to their academic portfolio. Such a combination is intended to amplify the careers of students interested in advancing the performing arts in America. By gaining the business knowledge and skills of these arts, students throughout the University can add a significant dimension to their education.

Advising. Students wishing to pursue a minor in Performing Arts Management must develop a specific plan for its completion in consultation with Professor Greg Poggi (gpoggi@umich.edu), the department advisor, 2424 Walgreen Drama Center. For further information, contact the department office at theatre.info@umich.edu.

- THTREMUS 245 Intro to Stage Management (3)
- THTREMUS 250 Intro to Tech Theatre (3)
- THTREMUS 321 or 322 Theatre History I or II (3)
- THTREMUS 351 Practicum V – 1st ASM (3)

And six credits chosen from:

- THTREMUS 101 Intro to Acting (3)
- THTREMUS 240 Intro to Design (3)
- THTREMUS 256 Lighting Design I (3)
- THTREMUS 345 Stage Managing Plays (3)
- THTREMUS 385 Performing Arts Management (3)
- THTREMUS 435 Producing in American Theatre (3)
- THTREMUS 446 Advanced Stage Management (3)
- THTREMUS 462 Drafting (3)
Prerequisites to the Minor: none

Prerequisite to Declaration: Students interested in this minor must take two classes listed from the Required Topics curriculum to become eligible for this program. Once completed successfully, the student would interview with the Performing Arts Management Advisor and apply for admission to the minor.

Requirements for the Minor: At least 15 credits with a minimum of five courses, to be chosen from the following two categories as stated:

1. Required Topics Courses: Complete at least 10 credits in the following courses:
   - THTREMUS 385 (Performing Arts Management) – 2 credits
   - THTREMUS 426 (Fundraising for the Arts) – 2 credits
   - THTREMUS 435 (Producing the American Theatre) – 3 credits
   - THTREMUS 438 (Legal Issues in the Arts) – 3 credits
   - PAT472 (Business of Music) – 3 credits
   - JAZZ480 (Career Development for Jazz Musicians) – 2 credits
   - ARTSDMN 491 (Special Projects, 1-2 credits)
   - ARTSDMN 591 (Internship, 1-2 credits)
   - ORGSTUDY 495 (Non-Profit Organizations: Theory and Practice) – 3 credits

2. Electives: The remaining credits can be earned in courses chosen from the following courses:
   - ACC 271 (Principles of Accounting I)
   - ACC 272 (Principles of Accounting II)
   - COMM 101 (The Mass Media)
   - COMM 102 (Media Processes and Effects)
   - COMM 351 (Understanding Media Industries)
   - COMM 371 (Media, Culture, and Society)
   - COMM 454 (Media Economics)
   - COMM 462 (Designing Persuasive Communication)
   - COMM 463 (Computer Mediated Communication)
   - COMM 466 (Internet, Society and the Law)
   - ECON 101 (Introduction to Economics I)
   - ECON 102 (Introduction to Economics II)
   - MKT 300 (Marketing Management)
   - MKT 301 (Marketing Management II)
   - MKT 310 (Fundamentals of Sale Management)
   - ORGSTUDY 215 (Organization and Society)
   - ORGSTUDY 305 (Inside Organizations)
   - ORGSTUDY 310 (Formal Organizations and Environments)
   - ORGSTUDY 395 (Current Issues in Organizational Studies)
   - ORGSTUDY 495 (Special Topics other than Non-Profit Organizations)
   - PSYCH 260 (Introduction to Organizational Psychology)
   - RCHUMS 334 (section title “Community Empowerment through the Arts”)
   - STATS 250 (Introduction to Statistical Data Analysis)
   - SW 300 (Leadership in the Nonprofit Sector)

Residency Requirement: Upon CDR approval, up to six credits earned outside of the University of Michigan or its sponsored programs may be used to satisfy requirements for the minor.

Exclusions: Production practica are not eligible courses for the minor.

Native American Studies (see American Culture)

Near Eastern Studies

4111 Thayer Academic Building
202 South Thayer Street
(734) 764-0314 (phone)
(734) 936-2679 (fax)
www.lsa.umich.edu/neareast

The Department of Near Eastern Studies (NES) teaches the diverse histories, religions, languages, and literatures that originated in a vast region of the world extending from the Nile to the Oxus Rivers, and from the Mediterranean Sea to the Indian Ocean. Faculty provide students majoring in Near Eastern Studies with an interdisciplinary and comparative approach to societies, beginning with the emergence of cities and writing in Sumer and Ancient Egypt to the rise of ancient Levantine and Anatolian cultures, the formation of Judaism, Christianity, and Islam, and onwards to the Modern Middle East, extending to its transnational and diasporic communities. The course offerings in the major are designed to provide an understanding of the dynamics that have shaped the literary, linguistic, visual, social and political histories of Middle Eastern societies past and present.

In the Near Eastern Studies curriculum, all non-language/cultural studies courses fall under the NEAREAST subject code while the language courses are divided into the following subjects: ARABIC, ARMENIAN, HEBREW, PERSIAN, TURKISH, and NESLANG (for the ancient languages).

Advising: Students interested in declaring a Near Eastern 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 in the department office.

Near Eastern Studies (NES)

May be elected as a departmental major

Students who elect Near Eastern Studies major may not also elect a major in Middle Eastern and North African Studies. Students who elect the Hebrew Studies submajor may not also elect a major in Judaic Studies. Students can both major and minor in Near Eastern Studies if different languages are used toward each.

The major in Near Eastern 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.

Submajor | Disciplinary Requirement
--- | ---
Ancient Near Eastern Studies | Cultural Studies
Arabic Studies | History
Armenian Studies | Linguistics
Hebrew Studies | Literature
Persian Studies | Religion
Turkish Studies | Visual Culture

Prerequisites to Major

- NEAREAST 100: Peoples of the Middle East (or ACABS 100 / AAPTIS 100 / HICS 100 / HISTORY 132).
- 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 subfield.

Requirements for the Major

The major in Near Eastern 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 NES Major Language requirement with a submajor-appropriate selection.
No course will count toward the major unless the student receives a grade of C- or better.

Submajor Requirement. Students must declare one submajor: Ancient Near Eastern 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 Near Eastern Studies. Disciplinary courses can be chosen from a pre-approved list or, by exception, a course chosen in consultation with, and approved by, an NES department advisor.

Near Eastern 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 NES Major by placement test (different procedures in different languages in place) 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 Near Eastern Studies**: Two additional terms of language beyond the prerequisite.

Students pursuing the Ancient Near Eastern 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 NES 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, Ancient 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 Near Eastern Studies. These courses may be in a single discipline or cross-disciplinary. Electives can be chosen from a pre-approved list or, by exception, a course chosen in consultation with, and approved by, an NES department advisor. Up to two courses may be 200 level or above in a second Near Eastern Studies language.

At least one course within either the Disciplinary or the Elective Requirement must be from the pre-modern period and at least one course within either the Disciplinary 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 Near Eastern Studies can be applied toward the Elective Requirement. No more than one course elected outside the department of Near Eastern Studies can be applied toward the Disciplinary Requirement.

Residence Requirement. A minimum of 14 of the required 26 credits for the major must be taken at the U-M Ann Arbor campus.

Honors Plan. The Honors plan 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 NES 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 Near Eastern 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 plan can be obtained at the departmental office or the Honors Program Office (1330 Mason Hall).

Near Eastern Studies Minors

Early Christian Studies

Students can both major and minor in Near Eastern Studies if different languages are used toward each.

The minor in Early Christian Studies provides students with the opportunity of gaining fundamental knowledge of early Christianity in its Near Eastern and Classical contexts, through the study of lower and upper level language and humanities courses in the Near Eastern Studies and Classical Studies Departments.

Prerequisites to the Minor:

1. ACABS 122 / RELIGION 122: Introduction to the New Testament
2. Three terms of classical or koine Greek

Requirements for the Minor: At least 16 credit hours of courses to be chosen from the following categories.

1. At least one broad introductory course in the fundamentals of early Christianity (ACABS 221: Jesus and the Gospels), or in early Christianity in its Near Eastern context (ACABS 200: Introduction to World Religions: Near Eastern Religions), or its Mediterranean context (HISTORY 201: The Roman Empire and its Legacy). [4 credits minimum]
2. At least two upper-level courses in the literature of early Christianity in the original Greek (GREEK 307, 308, 427, 428, 429 and courses currently under development). [6 credits minimum]
3. At least two upper level (300-400 level) courses in early Christianity and its Mediterranean roots. [6 credits minimum]

- ACABS 322, 323, 421, 491 (section subtitled “Jewish Life in Late Antiquity”)
- CLARCH 442
- CLCIV 456, 466, 476
- HISTORY 307, 405
- HISTART 442
- RELIGION 359, 468, 476

Near Eastern Languages and Cultures

Students can both major and minor in Near Eastern Studies if different languages are used toward each.

The minor in Near Eastern Languages and Cultures provides students with the opportunity of gaining fundamental knowledge of Near East civilizations, through the study of lower and upper level language and humanities courses in one of the three divisions of the Near Eastern Studies Department, Ancient Civilizations and Biblical Studies (ACABS), Arabic, Armenian, Persian, Turkish, and Islamic Studies (AAPTIS), and Hebrew and Jewish Cultural Studies (HJCS).

Prerequisites to the Minor:

1. AAPTIS 100 / ACABS 100 / HJCS 100 / HISTORY 132: Peoples of the Middle East.
2. First three terms of a Near Eastern language: Akkadian and Sumerian, Classical Hebrew, Arabic, Armenian, Persian, Turkish, or Modern Hebrew.
Requirements for the Minor: At least 16 credits of courses to be chosen from the following categories:

1. Language course: Fourth term of the Near Eastern language chosen for the prerequisite.
2. Culture/Society courses: at least three courses in the same division as the language chosen for the prerequisite, one of which must be at the 400- or 500-level.

Because of the great variety of divisions in Near Eastern Studies, and the diversity of its curriculum, there is no pre-set sequence, but courses are chosen from the set of courses open for major. Each student determines his or her course work in consultation with a department advisor at the beginning of the program. Student progress will be regularly monitored by the appropriate undergraduate advisor.

Undergraduate Program in Neuroscience

1140 Undergraduate Science Bldg. (USB)
204 Washtenaw Ave.
(734) 763-7984 (phone)
(734) 647-7892 (fax)
www.lsa.umich.edu/neurosci

Neuroscience is an interdepartmental program administered by the Undergraduate Program in Neuroscience (with oversight by the Neuroscience Steering Committee) and represents a collaboration between 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

Exclusions: Students who elect a major in Neuroscience may not elect the following majors: Brain, Behavior, and Cognitive Sciences (BBCS); Bio-molecular Science; Biopsychology, Cognition, and Neuroscience (BCN); Biology, General Biology; Cell and Molecular Biology; Microbiology; Plant Biology; or Biochemistry. They may also not elect a minor in Biology; Plant Biology; Chemistry; or Biochemistry.

Student double majoring in Psychology and Neuroscience may share a maximum of 3 courses toward their two programs.

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 Cellular and Molecular Biology (CMB), 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.

Prerequisites to the Major.
• BIOLOGY 171 and 172/174 and 173; or BIOLOGY 195 and 173; or BIOLOGY 162 or 163; and
• CHEM 210/211 and 215/216
• Quantitative Prerequisites – Two courses from the following:
  o Calculus I (MATH 115, 120, 185, or equivalent)
  o Calculus II (MATH 116, 121, 156, 176, 186, or equivalent)
  o Physics I (PHYSICS 125, 135, 140, 160, or equivalent)
  o Physics II (PHYSICS 126, 235, 240, 260, or equivalent)
  o Any STATS course that has STATS 250 as a prerequisite
  o [With the permission of an advisor, other courses that help students develop quantitative skills can be substituted.]

Requirements for the Major. A minimum of 37 credits are required.

1. Core:
   A. Neurobiology: BIOLOGY 225 [This course should be taken as early as possible but no later than the end of the first term of the student’s fourth year]
   B. Genetics: BIOLOGY 305
   C. Biochemistry: one of MCDB 310, BIOCHEM 415, or CHEM 351
   D. Biopsychology: PSYCH 230
   E. Statistics: STATS 250

2. Electives (5 courses, minimum 16 credits).
   A. Molecular and Cellular Neuroscience. At least two courses from the following (at least one course must be at the 300-level):
      MCDB 351, 352, 401 (appropriate sections), 402, 403, 418, 421, 422, 426, 450, 455, 456, 459
   B. Behavioral Neuroscience. At least two courses from the following:
      • PSYCH 240, 245, 345, 402 (appropriate sections, 3-4 credits only), 431, 433, 434, 435, 436, 437, 438, 531, 532, 533
      • ANATOMY 541
      • NEUROSCI 520.
      • PHYSiol 541
   C. Optional Courses. Elect no more than one course from the follow-
      • BIOLOGY 205;
      • MCDB 397, 401 (appropriate sections), 405, 408, 411, 417, 427, 428, 435, 436, 441, 462, 469;
      • EEB 492;
      • PSYCH 346, 420 (3 credits only), 430, 447, 448, 531, 541;
      • Any STATS course that has STATS 250 as a prerequisite and is not used as a QR prerequisite
      [Note: With the permission of an advisor, other upper-level courses that are highly relevant to neuroscience can be substituted.]

3. Lab requirement. At least two different courses for a minimum of four credits total from the following categories, with at least one course being a Methods-Based laboratory:
   A. Method-Based Laboratory courses: Choose at least one course from:
      • BIOLOGY 226
      • MCDB 306, 308, 419, 423, 424, 429
      • PSYCH 302.
   B. Research-Based Laboratory Courses:
      • MCDB 300, 400
      • PSYCH 326, 331, 332, 422, 424/426, 428.
   
   Note: 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.

Students who take 6 credits of upper-level psychology lab courses related to neuroscience (Area D1 and D2) can receive a waiver for BIOLOGY 173
Organizational Studies

2016 Ruthven Museums Building
1109 Geddes Avenue
(734) 764-6767 (phone)
(734) 764-6554 (fax)
www.lsa.umich.edu/orgstudies
e-mail: org.studies@umich.edu

Organizational Studies is an interdisciplinary major, 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, 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.

Organizational Studies

May be elected as an interdepartmental major

Prerequisites to the Major. Students must complete one course in each of the following three areas:

1. Introduction to Economics (ECON 101)
2. Introduction to Psychology (PSYCH 111, 112, 114, or 115)
3. Introduction to Sociology (SOC 100, 101, 102, or 195).

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.

Advising. 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:
www.lsa.umich.edu/neurosci/academics/advisingprogrampolicies

Honors Plan. 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, MCD 300, or MCD 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.

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, students 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 for the Major. The major requires a minimum of 34 credits, distributed as follows:

1. Core requirements. Two courses are required (6 credits):
   • ORGSTUDY 305 Inside Organizations
   • ORGSTUDY 310 Formal Organizations and Environments

2. Senior Capstone Research Requirement. ORGSTUDY 410 (or ORGSTUDY 498&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 from any cluster;
   • Two of the cluster courses must be ORGSTUDY courses.

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) [Two 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) [Two course minimum]. Cluster B courses are those that focus mainly on questions and topics con-
cerning 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, 400, or 405
   • ECON 404 or 405.

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.

Additional courses may on occasion be used as part of the plan for the major with written approval from the department advisor.

Also, no more than six credits of upper-level independent study / experience credit may count toward the major. ORGSTUDY 499 does not automatically count toward the major, but may be petitioned in individual cases.

Advising: Appointments may be scheduled with the department advisor, or the prospective student advisors via our online web scheduling system. See our homepage: www.lsa.umich.edu/orgstudies.

Organizational Studies Honors Plan

The Organizational Studies Honors Plan (OSHCH) 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 3.5 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.

Philosophy

Philosophy

May be elected as a departmental major

Prerequisites to the Major. Any 100- or 200- level course other than PHIL 180, 201, 296 (logic courses). None of these courses counts toward the requirements for the major.

Major. Majors must take at least 25 credits of Philosophy. At least 16 credits, including requirement 5a, must be taken in residence. No course will count toward the major unless the student receives a grade of C- or better.

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: PHIL 388 or PHIL 389 and one additional course from among: PHIL 371, 388, 389, 405, 406, 458, 460, 461, 462, 463, 464, 467, 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)

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 major or minor in Philosophy can also be a superb complement to a major in another field. Further details are available on the department’s web page: www.lsa.umich.edu/philosophy.

The department also is the administrative home of the interdepartmental program in Philosophy, Politics, and Economics.
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.

**Honors Plan.** Qualified students who are interested in an Honors plan in Philosophy should consult a department advisor as early as possible in order to work out an appropriate, unified plan for its completion in consultation with the department’s designated advisor.

The intended audience for this minor includes students majoring in scientific or mathematical disciplines who wish to explore the philosophical aspects of their subject, as well as students who have a more general interest in the history of philosophy – including, for example, students of literature, history, anthropology, or sociology – who wish to acquire the necessary background to understand recent debates relating to the sociology of knowledge.

**Constraints:** At least nine credits, including the required 400-level course, must be taken in residence. No course will count toward the minor unless the student receives a grade of C– or better.

**Prerequisites to the Minor:** One general introduction to Philosophy: Any 100- or 200-level course other than PHIL 180, 201, 296 (logic courses).

**Requirements for the Minor:** Minors must take at least 15 credits of Philosophy, in one of the following patterns.

**COMMON REQUIREMENTS FOR ALL PHILOSOPHY 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 EACH PHILOSOPHY MINOR**

1. **General Philosophy**
   a. One course in Logic or Formal Methods (PHIL 180, 201, 296, 303, 305, 413, or 414)
   b. Two courses from: PHIL 345, 361, 365, 366, 367, 381, 383, 388, 389
   c. One 400-level course, which must not include PHIL 401, 402, 413, 414, or 455

2. **History of Philosophy**
   a. Either PHIL 345, 361, 366, 367, or 383
   b. PHIL 388 or 389
   c. One additional course from: PHIL 388, 389, 405, 406, 458, 460, 461, 462, and 464
   d. One additional course from “c” expanded to include: PHIL 371, 385, 433, 463, 466, 467, 474, 492
3. Moral and Political Philosophy
   a. One of PHIL 361 or 366 or 367 or PPE 300
   b. Three additional courses from: PHIL 355, 356, 359, 361, 366, 369, 385, 429, 430, 431, 433, 442, 443, 485 (at least one course must be at the 400-level)

4. Mind and Meaning
   a. Formal Methods: One course in symbolic logic: PHIL 296, 303, 305, 413, or 414
   b. PHIL 345, 381, or 383

5. Epistemology and Philosophy of Science
   a. One course in symbolic logic: PHIL 296, 303, 413, or 414
   b. PHIL 345, 381, or 383
   c. Two other courses from: PHIL 320, 322, 381, 383, 420, 422, 423, 424, 425, 427, 443, 477. At least one course must be at the 400-level, other than formal methods (PHIL 413, 414).

Program in Philosophy, Politics, and Economics

The Program in Philosophy, Politics, and Economics (PPE) offers a rigorous, integrated, interdisciplinary major for students interested in exploring questions that lie at the intersection of philosophy, political science, and economics. Because it demands cultivation of expertise in three disciplines, including considerable training in formal methods, students must meet high standards of academic achievement. For this reason, the major will require an application. The program also is intended to be small, to provide extensive opportunities for discussion and cooperative learning in small-group settings.

Phenomenology

May be elected as an interdepartmental major, administered by the Department of Philosophy

The Department of Philosophy, in conjunction with the Department of Economics and the Department of Political Science, offers PPE as an interdisciplinary major 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.)
- One course in symbolic logic
- One introduction to political science

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.

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://www-a1.lsa.umich.edu/advising/AA_STUSelfSvcs.aspx?ctgy=PHIL.

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 once each Fall and Winter academic terms. Application deadlines will be announced on the PPE website. Students may apply for admission to the major as early as the winter term of their second year. Second-year applicants must complete with final grades showing at least the prerequisites to the major, and should be enrolled, have completed at least one further course that can be counted toward the major. Students who apply in the fall of their junior year must have completed the prerequisites and be enrolled in, or have completed, at least two further courses that can be counted toward the major. Admissions will be 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.

Prerequisites to the Major

1. One 100- or 200-level PHIL course other than PHIL 180, 201, 296 (logic)
2. One introduction to political science: POLSCI 101 or 111 or 140 or 160
3. Courses must be distributed as follows:
   1. **PPE Core Courses:**
      - **Economics:** ECON 401: Intermediate Microeconomics
      - **Gateway:** PPE 300: Introduction to Political Economy
      - **Capstone:** PPE 400: Senior Seminar in Political Economy (Honors students take PPE 401-402 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
            - STATS 250: 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
            - POLSCI 381: Political Science Research Design
            - POLSCI 391 / CMPLXSYS 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
            - MATH 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:
        - 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 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
        - 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 / WOMENSTD 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
        - WOMENSTD 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.
      - ECON 330: American Industries
      - 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

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.

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.

**Honors Plan.** 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 take PPE 401-402 as their capstone course.

To be admitted to the Honors PPE program, students must have at least a 3.5 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.

Honors students will submit a thesis proposal for approval by the director of PPE. They will write a thesis in their theme under one of the following options:
- PPE 401 (thesis preparation seminar) and PPE 402 (an independent study thesis-writing course under the principal supervision of a faculty member in one of the three departments).

**Physics Programs.** The Department of Physics offers: (1) a Major in Physics (Honors); (2) a Major in Interdisciplinary Physics (Honors); (3) a minor in Physics.

A total of 60 credits of mathematics and natural science must be elected to receive the Bachelor of Science degree.

**Physics (BS)**

**May be elected as a departmental major**

The undergraduate curriculum in Physics is designed to provide a thorough introduction to our current understanding of the physical world. It prepares students for quantitative analysis of the world. The Physics BS degree provides strong preparation for graduate study in Physics and related fields. It also prepares students for direct entry into the job market in a wide variety of technical, analytic, and education settings.

**Prerequisites to the Major**
- PHYSICS 135/136 and 235/236 or PHYSICS 140/141 and 240/241 (or PHYSICS 160/161 and 260/261); and
- PHYSICS 340 and PHYSICS 351.

Students interested in majoring in Physics should have an understanding of mathematics through differential equations.

**Requirements for the Major.** At least 29 credits in PHYSICS numbered 390/391 and above. The Physics Department requires no less than 15 credits toward the major be completed in residence.

The major must include:
1. **Core:** PHYSICS 390/391, 401, 405, 406, and 453.
   - PHYSICS 390, 401, 405, 406, and 453 must be completed with a minimum grade of a C– in each course and a cumulative average of C or higher.
   - PHYSICS 390/391 can be taken concurrently with PHYSICS 401 or 405; PHYSICS 401 and 405 should precede PHYSICS 453; PHYSICS 453 is a prerequisite to most courses numbered above.

2. **Advanced Laboratory:** Any two of PHYSICS 441, 442, or 445.
3. **Electives:** Two courses from among PHYSICS 402, 411, 413, 417, 430, 433, 435, 438, 452, 457, 460, 463, and 470.

PHYSICS 419, 420, 481, and 489 may not be used to satisfy the B.S. degree requirements.

**Honors Plan.** Students who have a cumulative grade point average of at least 3.4 are encouraged to elect an Honors plan in Physics. In addition to
the regular departmental requirements for major, candidates for an Honors plan must elect six credits of PHYSICS from courses numbered 401 and above which are not otherwise required and must also complete a senior Honors thesis based on research (PHYSICS 498/499) done under the supervision of a faculty member.

Interdisciplinary Physics (AB or BS)  

May be elected as a departmental major

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. To declare a major in Interdisciplinary Physics a student must develop an individual plan with 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 in a document available on the department website.

Prerequisites to the Major

- 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 PHYSICS 351.

Students interested in majoring in Interdisciplinary Physics should have an understanding of mathematics through differential equations.

Requirements for the Major. At least 26 credits, including at least 11 in PHYSICS courses numbered 390/391 and above. The Physics Department requires no less than 12 credits toward the major be completed in residence.

The major must include:

1. PHYSICS 390/391.
2. Two additional Physics courses at the 400 level and beyond. PHYSICS 390/391 and these 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.
3. Fifteen credits of cognate courses as part of an interdisciplinary plan designed with the approval of a Physics department advisor. Nine of these credits should be at the 200 level or above.

Honors Plan. 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.

Physics Minor

A minor in Physics is not open to students with any major in the Department of Physics.

The minor is designed to allow students from a wide range of academic backgrounds to learn more about the physical universe. Students who elect to minor in Physics will gain an understanding of basic physical principles. 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.

Students interested in minorig in Physics should have an understanding of mathematics through differential equations.

Prerequisites to the Minor: None

Requirements for the Minor: 18 credits of courses as follows:

1. One of the following introductory sequences and labs:
   - PHYSICS 135/136 and 235/236
   - PHYSICS 140/141 and 240/241
   - PHYSICS 160/161 and 260/261
2. PHYSICS 340
3. PHYSICS 390/391.

Advanced Placement Credit and the Physics minor

Although course credit for PHYSICS 125/126/127/128 or PHYSICS 140/141/240/241 may be awarded on Advanced Placement (AP) Physics exams B or C, LSA policy does not allow those AP credits to be counted toward the minimum credits required for a minor. To qualify for the minor, students with AP exam credit must complete additional eligible courses within the Physics department for a total of at least 15 PHYSICS course credits. Eligible courses include PHYSICS 333 and 334 (Tutoring of PHYSICS 140 and 240), and PHYSICS 401. Other 400-level PHYSICS courses may also be used, subject to approval by a department advisor.

To get your AP Credit, please schedule an appointment with a department advisor as soon as possible.

Physiology

Molecular and Integrative Physiology
U-M Medical School
7744 Medical Science II
1301 East Catherine Street
(734) 763-5727 (phone)
www.physiology.med.umich.edu

Not a major

The essential concern of physiology is how living things work and, as physiology relates to man, it is the study of the normal functioning of the human body. The methods and tools of physiology are those used in the experimental sciences, and its range cuts across many different scientific disciplines. Physiology emphasizes 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. A knowledge and understanding of the functioning of the body and its component parts is an essential part of a general education.
Political Science

5700 Haven Hall
(734) 764-6313 (phone)
(734) 764-3522 (fax)
www.lsa.umich.edu/polisci
E-mail: polisci@umich.edu

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.

Roster of POLSCI subfields and courses:

- Methods: 381, 391, 488, 490, 499

Advising. Students can schedule an appointment to declare their major, get assistance with plan requirements, and obtain a senior release at www.lsa.umich.edu/polisci

Political Science

May be elected as a departmental major

Prerequisites to the Major

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 for the Major

At least 30 credits in POLSCI at the 300 level or above (in addition to required prerequisites).

Core courses must be elected from the 300-level or higher and include at least two courses at the 400-level. 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.

Ann Arbor Campus Requirement. At least 12 credits – including both 400 level courses – must be taken on the Ann Arbor campus.

Exclusions. 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.

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.

Teaching Certificate. Students interested in obtaining a secondary teaching certificate with a teaching major or minor in Political Science should consult the “Teacher Certification Program” section in this Bulletin and the School of Education Teacher Education office, 1228 School of Education Building, (734) 615-1528.

Honors Plan. 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.

Political Science Minor

A minor in Political Science is not open to students with a major in the Department of Political Science.

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. Advising appointments are scheduled by going to the Political Science website: polisci.lsa.umich.edu or by contacting the department office.

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.

Prerequisites to the Minor

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 for the Minor
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.

At least three of the five upper level courses must be taken on the Ann Arbor campus.

Only three credits of Experiential and Independent Study credit may be included in the minor.

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**Michigan in Washington Program (MIW)**

5700 Haven Hall
(734) 615-6491 (phone)
(734) 764-3520 (fax)
www.lsa.umich.edu/michinwash
e-mail: MIWDC@umich.edu

The MIW program offers an opportunity each year for 45-50 undergraduates from any major to spend a semester (Fall or Winter) in Washington. The program provides a chance for students to combine coursework with an internship that reflects each student’s particular area of interest such as American politics, international studies, history, the arts, public health, economics, the media, the environment and science and technology. Students gain access to local Washington experts through speaker courses, internships, contacts with U-M alumni and alumnae, and other networking opportunities made available through the program.

**Internships**

Students are free to pursue internships at any organization. They are coached in internship searching strategies as part of the prep class that is taken the semester before going to D.C. In addition to Congressional internships, students have interned at the White House, Smithsonian, CNN, Brookings Institution, American Enterprise Institute, National Defense University, Center for American Progress, Children’s Defense Fund among others.

**Academic Requirements**

Most students admitted to the program are of junior or senior standing, with a cumulative grade point average of at least 3.0.

- Students participate in a Prep Class (2 credits) prior to leaving for Washington. The Prep Class (which is held one evening a week for 3-4 weeks) focuses on the student’s internship search, interview techniques, and negotiation skills.
- The Research Seminar (4 credits) is the core course of the program. Students are expected to produce a substantial research paper on a topic of their choosing and interest. Credit for the research course can be earned in Political Science or other departments with faculty oversight and prior arrangements.
- Students receive 2 credits for internships. Typical work hours are Monday through Thursday, 9-5. Credit for the internship can be earned in Political Science or other departments with prior arrangements.
- The Washington Experience course (1 credit) is a requirement which features prominent local speakers.
- Electives (3 credits) are taught by U-M faculty and faculty from other schools sharing the residence hall (University of Pennsylvania, University of California, Washington University). Students may take up to 2 electives.

**Housing**

Students admitted to the MIW program live in the UCDC Washington Center, near DuPont Circle and less than a mile from the White House. This modern facility is in a vibrant residential and commercial area. Students from the University of Pennsylvania and Washington University also live in the building. The Metro system and walking are the primary methods of transportation. Meals are not included.

**Mentors**

Each MIW student is assigned to a mentor in D.C. who is a U-M graduate and professional. Mentors meet students regularly throughout the term for lunch, MIW events, and weekend excursions.

**Costs**

Participants are registered as full-time University of Michigan students and remain eligible for financial aid (other than work study). Tuition costs are the same as on the main campus; however, housing and living costs are higher. MIW will work with students to compensate for additional costs.

**Applications**

Applications for the MIW program are accepted and reviewed in October and February. Early admission is available and recommended for students interested in internships that require security clearance (e.g., State Department, CIA, FBI, Department of Justice). Application materials are available on the website. All students who apply to the program will be interviewed. Forms are available on the MIW website (www.lsa.umich.edu/michinwash).

For further information, contact the MIW office (734) 615-6491, or send an email to MIWDC@umich.edu.

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**Psychology**

1343 East Hall
530 Church Street
(734) 764-2580 (phone)
(734) 764-3520 (fax)
www.lsa.umich.edu/psych
e-mail: psych.saa@umich.edu

Undergraduate courses in psychology give students an opportunity to learn what research has shown about:

- how behavior is motivated;
- how we perceive, learn, and think;
- how individuals differ from one another;
- how the personality develops from infancy to maturity and is expressed by behavior; and
- how interpersonal factors affect human relationships in the home, on the job, and in the community.

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 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.

The overall goal of the Psychology major is to provide students with a broad background in the various levels of analysis and methodological ap-
proaches 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 disci-
plines, can prepare students for careers interacting with people of all ages
and backgrounds in a wide range of fields.

The overall goal of Biopsychology, Cognition, and Neuroscience major is to
and backgrounds in a wide range of 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 hu-
man cognition, biopsychology, behavioral neuroscience, comparative ani-
mal 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.

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, howev-
er, 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 de-
partment 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 departmental website.

Peer Advising. Advising by Undergraduate Psychology Academic Peer Ad-
vising Program students is available at 1343 East Hall during fall and winter
terms.

Teaching Certificate. Students interested in obtaining a secondary teaching
certificate with a teaching major or minor in Psychology should consult the
“Teacher Education Program” section on the LSA website and the School of
Education Teacher Education Office, 1228 School of Education Building,
(734) 615-1528.

Curriculum Guides. Curriculum Guides are available for both Psychology
and Biopsychology, Cognition, and Neuroscience majors. Guides 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 guides when making academic and career goals.

The following guides 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

### Biopsychology, Cognition, and Neuroscience (BCN)

**May be elected as a departmental major**

**Exclusions:** Students who elect a major in Biopsychology, Cognition, and
Neuroscience may not elect the Neuroscience or Psychology majors.

Of the 40 overall credits (pre-requisites and courses for the major), 24
must be completed in-residence directly through University of Michigan’s
Department of Psychology." Of these 24 credits, 12 credits must be upper-
division (300 or above).

**Prerequisites to the Major.** Before declaring a major in Biopsychology,
Cognition, and Neuroscience, students must complete:

- an introductory course (PSYCH 111, 112, or 114) with a minimum letter grade of “C”;
- STATS 250

**Requirements for the Major.** A minimum of 32 credits is required for the
major.

100-level courses may not be used to meet the requirements for the major
or the credit requirement.

Although some courses that are graded credit/no credit may be used to
meet the lab requirement, 24 credits must be letter graded.

1. **Gateway requirement.** At least one course from each of the groups
below:

<table>
<thead>
<tr>
<th>Group</th>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavioral Neuroscience</td>
<td>PSYCH 231</td>
</tr>
<tr>
<td>Cognitive Gateway</td>
<td>PSYCH 240</td>
</tr>
<tr>
<td>Breadth Gateway</td>
<td>PSYCH 250, 270, 280, 290, or 291</td>
</tr>
</tbody>
</table>

2. **Advanced Courses.** A minimum of four additional courses (at least two
of which are at the 300-level and at least one of which is at the 400-
level), for a minimum of 12 credits selected from the following:

- PSYCH 330 Topics in Biopsychology
- PSYCH 332 Biological Rhythms & Behavior
- PSYCH 333 Affective Neuroscience
- PSYCH 334 Neuroscience of Learning & Memory
- PSYCH 335 Introduction to Animal Behavior
- PSYCH 336 Drugs of Abuse, Brain, and Behavior
- PSYCH 337 Hormones & Behavior
- PSYCH 338 / ANTHRBIO 368 Primate Social Behavior I
- PSYCH 339 Biopsychology of Cooperation
- PSYCH 340 Topics in Cognition and Cognitive Neuroscience
- PSYCH 343 Cognitive Neuroscience of Learning and Memory
- PSYCH 345 Introduction to Human Neuropsychology
- PSYCH 346 Learning & Memory
- PSYCH 347 Perception
- PSYCH 348 Psychology of Thinking
- PSYCH 352 / LING 352 Development of Language and Thought
- PSYCH 355 Cognitive Development
- PSYCH 356 Educational Psychology
- PSYCH 358 Psychology of Adolescence
- PSYCH 359 Psychology of Aging
- PSYCH 414 / WOMENSTD 452 Sexuality and Science
- PSYCH 420 Faculty Directed Advanced Tutorial Reading for Psy-
  chology as a Natural Science
- PSYCH 430 Advanced Topics in Biopsychology
- PSYCH 431 Advanced Topics in Behavioral Neuroscience
- PSYCH 432 Advanced Topics in Evolutionary & Comparative Psy-
  chology
- PSYCH 433 Advanced Topics in Neuroscience
- PSYCH 434 Neuroscience of Fear and Anxiety
- PSYCH 435 Neurobiology of Attention and Attentional Disorders
- PSYCH 438 Primate Social Behavior II
- PSYCH 440 Advanced Topics in Cognitive Neuroscience
- PSYCH 441 Neuroscience and Society
- PSYCH 442 Cognitive Neuroscience of Expertise
- PSYCH 443 Creativity
- PSYCH 444 Cognitive Aging
3. **Lab requirement.** Students must elect two different courses for a minimum of five credits total. Each course must be taken for a minimum of two credits each and be completed in a single academic term. At least one course must be methods-based. Only one non-departmental course may be elected to satisfy the lab requirement.

**Note:** Credit/No-credit courses may be used toward the Lab requirement, but will not count toward the total number of psychology credits required for the major.

**Methods-Based Lab Courses:**
- PSYCH 302, 303, 331, 341, 343, 422, 423, 424/426, 428
- BIOLOGY 226

**Research Lab Courses** (2 credits minimum to satisfy requirement):
- PSYCH 226, 322, 326, 422, 423

Students wishing to pursue the Biopsychology, Cognition, and Neuroscience (BCN) Honors Research program should acquire research and statistical skills early in their major before applying.

4. **Cognate course requirement.**

One course selected from the following list:
- ANTHRBIOL 467, 478
- BIOCHEM 415
- BIOLOGY 205, 208, 222, 225, 305
- CHEM 351
- COGSCI 200
- EEB 381, 390, 440, 442, 450, 451, 492
- EECS 281, 492
- ENVIRON 381, 422, 451
- LING 315, 516
- MCB 307, 310 (or 311 or 412), 418, 422
- NRE 422, 451
- PHIL 340, 345, 450, 482
- PSYCH 394 / WOMENSTD 394
- STATS 401, 406
- WOMENSTD 394 / PSYCH 394

5. **Additional credits.** If additional credits are needed for the minimum required for the major, students may select additional courses from:
- the advanced courses in biopsychology and cognitive psychology
- approved lab courses
- approved cognate courses

### Psychology (General Social Science)

**May be elected as a departmental major**

**Exclusions:** Students who elect a major in Psychology may not elect the major in Brain, Behavior, and Cognitive Sciences (BBCS) or Biopsychology, Cognition, and Neuroscience (BCN).

Student double majoring in Psychology and Neuroscience may share a maximum of 3 courses toward their two programs.

**Prerequisites to the Major.** Before declaring a major in Psychology, students must complete:
- an introductory course (PSYCH 111, 112, or 114) with a minimum letter grade of "C";
- two gateway courses (PSYCH 230, 240, 250, 260, 270, 280, 290) from different breadth groups;
- STATS 250; and
- An orientation for the major.

**Requirements for the Major.** A minimum of 24 credits is required for the major. Of the 40 overall credits (pre-requisites and courses for the major), 24 must be completed in-residence directly through University of Michigan’s Department of Psychology." Of these 24 credits, 12 credits must be upper-division (300 or above). 100-level courses may not be used to meet the requirements for the major or the credit requirement. Only one course from the breadth groups may be used toward the major. Although some courses that are graded credit/no credit may be used to meet the lab requirement, the 24 credits for the major must be letter graded.

1. **Breadth Requirement:** At least one course from each of the groups below. Only one course from each group may be used toward either the prerequisite or credits for the major.

<table>
<thead>
<tr>
<th>Group</th>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biopsychology/Cognitive</td>
<td>PSYCH 230, 240, or 245</td>
</tr>
<tr>
<td>Developmental/Psychopathology</td>
<td>PSYCH 250 or 270</td>
</tr>
<tr>
<td>Organizational/Social/Personality</td>
<td>PSYCH 260, 280, or 290</td>
</tr>
</tbody>
</table>

2. **Lab Requirement:** To meet the lab requirement, students may complete either:

a. two (at least 3 credits each) courses from the list of Methods-based Lab courses;

b. 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 Experimental Lab courses (i.e., Community-based or Research-based);

c. the Psychology Honors Research sequence (6 credits total) and one course (at least 3 credits) from the list of Methods-based Lab courses.

**Methods-Based Lab Courses:**
- PSYCH 303, 331/332, 341, 351, 361, 371, 381, 383, 391.

**Experimental 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 226/222, 232, 236, 237, 422, 423, 428, 429

- **Honors Research Sequence:** PSYCH 424 & 426, or 425 & 427.

**Note:** Credit/No-credit courses may be used toward the Lab requirement, but will not count toward the total number of psychology credits required for the major. A total of six credits of Psychology letter-graded Experimental lab (community or research-based courses) may be counted towards the Psychology major. 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 program 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 upper-level (300- and 400-level) psychology courses, which must include at least 9 credits of lecture or seminar courses. It is strongly recommended that majors elect at least one 400-level course.

Courses which may not be used as part of a major in Psychology are identified in the course listings.

Majors who are planning to earn graduate degrees in psychology may find a supplementary background in the biological sciences or in the social and behavioral sciences (i.e., anthropology, sociology, etc.) helpful in their later studies. Majors are also advised that additional courses in mathematics, communication sciences, and logic are likely to facilitate advanced study in psychology. A student's personal interests should determine the shape of the plan for the major.
**Honors Program**

Psychology and Biopsychology, Cognition, and Neuroscience majors with strong academic records and an interest in research are encouraged to consider participating in the Honors Program. The program 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 major effort to create new scientific knowledge. The Honors Program can serve as a capstone for their undergraduate studies, and as important preparation for graduate training or employment in a variety of fields.

The Honors Program in Psychology and in Biopsychology, Cognition, and Neuroscience:

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 undergraduate 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 Program.** A student and their faculty research mentor must apply together for admission to the program; 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. Students will need to have completed their Statistics requirement and have completed or planned completion of their Methods-based lab requirement before applying to the program.

4. **Courses.** Once accepted into the Honors Program, Psychology majors will elect both PSYCH 425 and 427; Biopsychology, Cognition, and Neuroscience majors will elect both PSYCH 424 and 426. The Honors courses are graded, may be used towards the required experiential lab credits for the major (Psychology major: for a maximum of 6 experiential lab credits and BCN major: maximum of 3 credits) and PSYCH 426 or 427 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 department 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 possibly a representative of the Honors Program. 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.

**Public Health**

School of Public Health
1700 School of Public Health I
1415 Washington Heights
(734) 764-5425 (phone)
(734) 763-5455 (fax)
www.sph.umich.edu
e-mail: sph.inquiries@umich.edu

**Public Policy**

Gerald R. Ford School of Public Policy
2245 Weill Hall
735 South State Street
(734) 764-0453 (phone)
(734) 647-7486 (fax)
www.fordschool.umich.edu
e-mail: fordschoolinfo@umich.edu

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**Not a major**

The School of Public Health offers LSA students an accelerated degree program through the departments of Environmental Health Sciences, Epidemiology, or Health Behavior and Health Education that leads to a bachelor’s degree from LSA and a Master of Public Health (MPH) degree from the School of Public Health. The program is described website. Undergraduates wishing further information about course offerings and degree requirements should contact the School of Public Health.

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**Not a major**

The Gerald R. Ford School of Public Policy offers a Bachelor of Arts (BA) program in public policy. Students apply to the program during their sophomore year and are admitted to the Ford School for their final two years. Program size is limited to approximately 55 students per year.

Undergraduates wishing further information about course offerings and degree requirements should contact the Gerald R. Ford School of Public Policy.
Studies in Religion

The College does not currently offer a major, although a student may emphasize Studies in Religion in the LSA Individual Major (IMP). Students interested in pursuing an Individual Major in Studies in Religion should contact the IMP advisor in 1255 Angell Hall.

The Department of History offers a minor in Religion and the Departments of Near Eastern Studies and Classical Studies offer a minor in Early Christian Studies.

Residential College

133 Tyler, East Quadrangle
701 East University Avenue
(734) 763-0176 (phone)
(734) 763-7712 (fax)
www.lsa.umich.edu/rc

The Residential College is a four year program within the College of Literature, Science, and the Arts devoted exclusively to undergraduate education. The RC offers courses and majors of its own. Students in the RC elect a substantial number of courses within LSA and often complete LSA majors. Honors students are eligible to join the RC.

The College opened in 1967 and presently has over 900 students. The faculty consists of over fifty full or part-time lecturers and professors, most of the latter on joint appointment with LSA departments or other schools and colleges of the University. The curriculum includes multidisciplinary approaches to the humanities, natural sciences, and social sciences. Courses are also offered in fine arts, music, and languages. RC Majors open to LSA students include: Drama, Creative Writing, Arts and Ideas in the Humanities, and Social Theory and Practice; the RC Individualized Major is open exclusively to RC students. RC faculty advisors assist students with academic planning and personal concerns.

Residential College students are required to live in RC Housing for the first two years of the undergraduate program. The building houses administrative and faculty offices, classrooms, a library, art and music studios, a theatre, a computer room, a snack shop, and other facilities supportive of the academic and community life of the Residential College.

University of Michigan students interested in Residential College programs and courses should contact the RC Academic Services Office (134 Tyler, East Quadrangle), (734) 763-0032, or visit in person. Others should contact the RC Admissions Office, 133 Tyler House, East Quad.

Graduation Procedures

Residential College students submit all completed audit forms to the Residential College, 133 Tyler House, East Quad.

Residential College Majors

Arts and Ideas in the Humanities

May be elected as a departmental major

Students wishing to pursue a major 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, 134 Tyler, East Quad, or by calling (734) 763-0032.

The Arts and Ideas Major offers students the ability to construct an interdisciplinary major in the arts and humanities. Majors can combine either two humanities disciplines or a humanities discipline with an artistic practice. Many courses focus on a specific historical moment or context, encouraging students to examine a particular culture through a broad range of different media. In these courses, students are asked to develop interpretive and analytical skills appropriate to the arts. Courses in visual studies, performance, and studio art provide training in the comparative analysis or practice of different art forms. By combining practice with the academic study of art, the Arts and Ideas curriculum encourages students to reflect on the origins of art, and to engage in its contexts, whether productive or historical.

Requirements for the Major: a minimum of five courses to be elected from (1) History and Theory and (2) Visual Studies, Performance and Studio Arts, completed by seven courses of Specialized Study. (Total: minimum of 12 courses)

1. History and Theory: There are two areas: (A) Historical Perspectives and (B) Issues of Modernity. Students take two courses in one area and one in the remaining area:

   A. Historical Perspectives
   RCHUMS 309 Classical Sources of Modern Culture
   RCHUMS 310 Pagans, Christians, Barbarians in Late Antiquity and the Early Middle Ages
   RCHUMS 314 The Figure of Rome in Shakespeare and 16th-Century Painting
   RCHUMS 315 Representations of History in the Literature and Visual Arts of Rome
   RCHUMS 344 Reason and Passion in the 18th Century
2. Honors Plan. Qualified students may be admitted to a program of advanced study in the beginning or middle of the junior year. An Honors Thesis is required.

3. Specialized Study: Seven upper-level courses (300 and above) distributed among two areas of focus. Four courses must be selected from one area and three in the remaining area. These areas and the specific courses considered appropriate for inclusion are determined by the student in consultation with the Arts and Ideas designated advisor. Possible areas of specialization include, for example: drama and anthropology; photography and history of art; literature and history; creative writing and African-American studies. However, no more than one of the two specializations may be in the practice of an art form.

Creative Writing and Literature

May be elected as a departmental major

Not open to those pursuing the minor in Creative Writing

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.

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, CLOV 390, ENGLISH 401) or medieval (RCHUMS 310, ENGLISH 370) literature.

Drama

May be elected as a departmental 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 attain 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.
Prerequisites to the Major: None

Requirements for the Major: Students wishing to pursue a sustained exploration of dramatic literature and its performance must complete a minimum of 35 credits of course work, distributed as follows:

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

RC Players. The RC Players is a student-run theatre 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/

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 stage 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.
www.rc.lsa.umich.edu/shakespeare/

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.
www.lsa.umich.edu/rc/currentstudents/studentactivities/germantheatre_ci

Social Theory and Practice

May be elected as an interdepartmental 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 that requires the following:

Prerequisites to the Major:
1. 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.
2. 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 for the Major. 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, SOC 310 or 312, or ECON 251.
   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 must choose at least one, typically STATS 310 or 312, or ECON 251. These courses must help develop a prospectus for the major.

   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.

RC Individual Major Program

May be elected as a special major by students enrolled in the Residential College

The Residential College offers the opportunity to formulate an individualized major to RC students unable to find an existing degree program within the Residential College, or in the College of Literature, Science and the Arts, that meets their specific academic needs and interests. Students wishing to pursue this option must have a good idea of what they want to achieve, consult with RC faculty and (where appropriate) other U-M faculty, and develop a carefully thought out academic plan of study.

Students interested in this option should start by discussing the matter with the head of the RC Individualized Major Program (IMP), whose name may be obtained at the RC Academic Services Office in 134 Tyler. With the assistance of the IMP coordinator, the student will need to identify one or two faculty members – at least one of whom is on the RC faculty – willing to serve as her/his department advisor(s). The department advisor(s) will help the student formulate an appropriate academic plan of study, and that plan must be approved by the advisor(s) and by the IMP coordinator before the student can formally declare the individualized major. After the major is declared, the student must continue to consult with her/his advisor(s) at least once a term before registering for courses in the following term; and completion of the major must be certified by an advisor who is a member of the RC faculty.

Note: Students who wish to declare an individualized major are strongly advised to do so before the end of their sophomore year. Under excep-
sional circumstances an individualized major may be approved as late as during the junior year, but in no cases during the senior year.

**Minors in the Residential College**

RC minors are open to all LSA students.

**Crime and Justice Minor**

A minor in Crime and Justice is not open to students pursuing a major in the Department of Sociology 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 Law, Justice, and Social Change or a minor in History of Law and Policy.

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.

Students wishing to pursue a minor in Crime and Justice must develop a specific plan for its completion in consultation with the program’s designated advisor. Appointments may be scheduled at the RC Academic Services Office, 134 Tyler, East Quad, or by calling (734) 763-0032.

**Prerequisites to the Minor:** None for the Minor per se, although individual courses elected to meet the requirements of the minor may have course prerequisites.

**Requirements for the Minor:** 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 303 / 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 330 / 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 434 / SOC 434: Social Organization of Black Communities
   - AAS 454 / ANTHRCUL 453 African-American Culture
   - AMCULT 304 / SOC 304: American Immigration
   - AMCULT 336 / AAS 334: Popular Culture in Contemporary Black America
   - AMCULT 337: A Survey of American Blues Music
   - AMCULT 369 / HISTORY 369: U.S. Mass Culture from Minstrelsy to Hip Hop
   - AMCULT 374 / HISTORY 374: Politics and Culture of the “Sixties”
   - AMCULT 399: Race in America
   - AMCULT 421 / SOC 423: Stratification
   - ANTHRCUL 347 / AAS 420: Race and Ethnicity
   - ANTHRCUL 453 / AAS 454 African-American Culture
   - ARCH 357 / UP 357 Architecture, Sustainability, and the City: Ideas, Force, and People Shaping the Built Environment
   - CEE 307 / ENVIRON 407: Sustainable Cities
   - COMM 318 / 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
   - ENVIRON 408: Land Use Policy, Law, and the Environment
   - ENVIRON 408: Land Use Policy, Law, and the Environment
   - ENVIRON 408: Land Use Policy, Law, and the Environment
   - ENVIRON 408: Land Use Policy, Law, and the Environment

   **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 428 / WOMENSTD 428 / RCSSCI 428: Sex Panics in the U.S. and UK since 1890
   - COMM 425: Internet, Society, and the Law
   - 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 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 257 / HISTORY 257: Law in the Pre-modern World
   - JUDAIC 265 / HISTORY 256: Introduction to Jewish Law: Sources, Legal History, and Legal Theory
   - PHIL 359: Law and Philosophy
   - POLSCI 307: Topics in American Political Thought
   - POLSCI 319 Politics of Civil Liberties and Civil Rights
   - PSYCH 318 / COMM 318: Media and Violence
   - RCSSCI 330 / AAS 330: Urban and Community Studies, I
   - SOC 303 / AAS 303: Race and Ethnic Relations
   - SOC 304 / AMCULT 304: American Immigration
   - SOC 423 / AMCULT 421: Stratification
   - SOC 434 / AAS 434: Social Organization of Black Communities
   - SOC 435: Urban Inequality and Conflict
   - UP 357 / ARCH 357 Architecture, Sustainability, and the City: Ideas, Force, and People Shaping the Built Environment
   - WOMENSTD 375 / HISTORY 375: History of Witchcraft: The 1692 Salem Trials in Historical and Cross-Cultural Perspective

   **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)
   - 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”)

   **PHIL 224: Global Justice**
   - PHIL 355: Contemporary Moral Problems
   - RCSSCI 307: Topics in American Political Thought
   - RCSSCI 319 Politics of Civil Liberties and Civil Rights
   - PSYCH 318 / COMM 318: Media and Violence
   - RCSSCI 330 / AAS 330: Urban and Community Studies, I
   - SOC 303 / AAS 303: Race and Ethnic Relations
   - SOC 304 / AMCULT 304: American Immigration
   - SOC 423 / AMCULT 421: Stratification
   - SOC 434 / AAS 434: Social Organization of Black Communities
   - SOC 435: Urban Inequality and Conflict
   - UP 357 / ARCH 357 Architecture, Sustainability, and the City: Ideas, Force, and People Shaping the Built Environment
   - WOMENSTD 375 / HISTORY 375: History of Witchcraft: The 1692 Salem Trials in Historical and Cross-Cultural Perspective

   **PHIL 359: Law and Philosophy**
   - POLSCI 307: Topics in American Political Thought
   - POLSCI 319 Politics of Civil Liberties and Civil Rights
   - PSYCH 318 / COMM 318: Media and Violence
   - RCSSCI 330 / AAS 330: Urban and Community Studies, I
   - SOC 303 / AAS 303: Race and Ethnic Relations
   - SOC 304 / AMCULT 304: American Immigration
   - SOC 423 / AMCULT 421: Stratification
   - SOC 434 / AAS 434: Social Organization of Black Communities
   - SOC 435: Urban Inequality and Conflict
   - UP 357 / ARCH 357 Architecture, Sustainability, and the City: Ideas, Force, and People Shaping the Built Environment
   - WOMENSTD 375 / HISTORY 375: History of Witchcraft: The 1692 Salem Trials in Historical and Cross-Cultural Perspective

   **PHIL 359: Law and Philosophy**
   - POLSCI 307: Topics in American Political Thought
   - POLSCI 319 Politics of Civil Liberties and Civil Rights
   - PSYCH 318 / COMM 318: Media and Violence
   - RCSSCI 330 / AAS 330: Urban and Community Studies, I
   - SOC 303 / AAS 303: Race and Ethnic Relations
   - SOC 304 / AMCULT 304: American Immigration
   - SOC 423 / AMCULT 421: Stratification
   - SOC 434 / AAS 434: Social Organization of Black Communities
   - SOC 435: Urban Inequality and Conflict
   - UP 357 / ARCH 357 Architecture, Sustainability, and the City: Ideas, Force, and People Shaping the Built Environment
   - WOMENSTD 375 / HISTORY 375: History of Witchcraft: The 1692 Salem Trials in Historical and Cross-Cultural Perspective
Peace and Social Justice (PSJ) Minor

A minor in Peace and Social Justice is not open to students majoring in Social Theory & Practice in the Residential College.

Students wishing to pursue a minor in Peace and Social Justice must develop a specific plan for its completion in consultation with one of the program’s designated advisors (currently, Helen Fox or Frank Thompson).

The goal of the Peace and Social Justice (PSJ) minor is to integrate the study of social inequity with the peaceful resolution of conflict. In a world threatened by ethnic and religious strife, a widening gap between rich and poor, and violent confrontations over dwindling resources, the need to solve conflicts fairly and nonviolently has never been more pressing. The PSJ minor takes an interdisciplinary approach to these problems, combining insights from political science, history, psychology, human physiology, environmental science, anthropology, and cultural studies, among others. Students may explore the roots of violence in human behavior, including the violence of racism and economic inequality, the origins and perpetuation of war and terrorism, approaches to nonviolent conflict resolution, and various paths to social and economic justice.

Peace and social justice are natural companions. Peace cannot last without the just resolution of conflict, and justice pursued through violent means all too often results in the same pattern that caused the original injustice: lack of respect and understanding between peoples, social and economic inequalities, and control of restive populations through violence or the threat of violence. Thus, students who pursue social justice should also study insights from peace studies, while those who are attracted to nonviolent social change, and various paths to social and economic justice.

Area A Electives address the psychology, sociology, and biology of interpersonal and organized violence. Exploring questions that underlie the abuse of social and interpersonal power: Is physical violence innate to humans (or human males)? How is violence defined differently by perpetrators and victims? In what ways do religious, political, and cultural institutions glorify, perpetuate, and/or alleviate violence? Area B Electives give students background and historical facts about specific wars, intractable conflicts, and attempts at global or state control of the social order. These detailed examples from different historical periods and cultural contexts help students understand and apply the more general theories of power.

Area C and Area D Electives give students an understanding of how these conflicts, inequalities, and injustices have been dealt with in different cultures and contexts, and in some cases, provide opportunities for experiential learning and activism. Area C comprises courses that address nonviolent responses to conflict: social justice movements, dialogues across differences, interpersonal conflict resolution, and legal means of addressing injustice. Courses in Area D center on the reasons for specific social and economic disparities, analyses of social and political movements that address injustice, and the ways that communities can be organized to pursue nonviolent social change.

Prerequisites to the Minor: There are no prerequisites for the minor per se, although individual courses elected to meet the requirements of the minor may have course prerequisites.

Requirements for the Minor: Students are required to complete at least 18 credits of course work. Twelve or more credits must be at the 300 level or above. These courses must include:

1. Core Course. Choose one of the following:
   - RCSSCI 354. Nonviolence in Action
   - INTLSTD 401. International Studies Advanced Seminar, section titled “Nonviolence: A Global Perspective”
   - AAS 458. Issues in Black World Studies, section titled “Nonviolence: A Global Perspective”
   - RCSSCI 226. Globalization

2. Electives
   a. One course from Area A or Area B
   b. At least two courses from Area C or two courses from Area D or one course from Area C and one from Area D

Area A: Understanding Violence — Courses that address the psychology, sociology, and biology of interpersonal and organized violence.

- AMCULT 235/WOMENSTD 235. From Harems to Terrorists: Representing the Middle East in Hollywood Cinema
- AMCULT 498. Humanities Approaches to American Culture, section titled “Why Do They Hate Us? Perspectives on 9/11”
- ANTHCRL 326/WOMENSTD 326. Politics of Health and Social Suffering
- ASIAN 305/RELIGION 305. Religion and Violence in the Secular World
- COMM 481/PSYCH 481. Media and Violence
- COMPLIT 490. Comparative Cultural Studies, section titled “The Imagination of Disaster: From The War of the Worlds to 9/11”
- HISTORY 345/RCSSCI 357. History and Theory of Punishment
- ORGSTUDY 495. Special Topics in Organizational Studies, section titled “The Organization of Violence” (limited enrollment)
- POLSCI 330. Psychological Perspectives on Politics
- PSYCH 393. Political Psychology
- PSYCH 401. Special Problems in Psychology as a Social Science, section titled “Psychological Aspects of War and Peace”
- PSYCH 481/COMM 481. Media and Violence
- RCHUMS 312/SLAVIC 312. Central European Cinema
- RCSSCI 280/SOC 280. Moral Choice in Context: Social-Psychological and Historical Perspectives
- RCSSCI 357/HISTORY 345. History and Theory of Punishment
- RELIGION 305/ASIAN 305. Religion and Violence in the Secular World
- SLAVIC 225. Arts and Cultures of Central Europe
- SLAVIC 312/RCHUMS 312. Central European Cinema
- SOC 280/RCSSCI 280. Moral Choice in Context: Social-Psychological and Historical Perspectives
- SOC 368. Criminology
- WOMENSTD 235/AMCULT 235. From Harems to Terrorists: Representing the Middle East in Hollywood Cinema
- WOMENSTD 326/ANTHRCRL 326. Politics of Health and Social Suffering

Area B: Conflict And Control — Courses that explain 20th- and 21st-century wars, intractable conflicts, globalization, and attempts at world order.

- AAPPITIS 361. Jihad in History
- AAPPITIS 491. Topics in AAPPITIS, section titled “Islam and the West” (some background in Middle East, South Asian, and/or Islam intro courses required)
- AAS 322/ENVIRON 335. Introduction to Environment Politics: Race, Class, and Gender
- AAS 328/WOMENSTD 328. Women, Agency and Sexual Safety
• AAS 408. African Economies: Social and Political Settings, section titled “African Development from the Pre-Colonial Era to Structural Adjustment and Beyond”
• AAS 413. Theories of Black Nationalism
• AAS 432. Violent Environments: Oil, Development, and the Discourse of Power
• AAS 458. Issues in Black World Studies, section titled “The Politics and Culture of Fair Trade”
• AMCULT 301. Topics in American Culture, section titled “The Global Cold War: Dreamworlds and Catastrophes”
• AMCULT 356/HISTORY 356. World War Two in the Pacific
• AMCULT 368/AAPTIS 368. Women and War in the Middle East
• ANTHRCUL 309. Anthropology of Europe, section titled “Radicalism, Post-Socialism, Refugees and Rights”
• ANTHRCUL 346/HISTORY 347. Latin America: The Colonial Period
• ASIAN 280. Topics in Asian Studies, section titled “Sacred Collectives: Nation and Religion in South Asia”
• ASIAN 354/HISTORY 354. Rebellion and Revolution in China Through Two Centuries
• COMPLIT 430. Comparative Studies in Fiction, section titled “The Arab-Israeli Conflict in Middle Eastern Literature”
• COMPLIT 490. Comparative Cultural Studies, section titled “Islam and the West: Critical Perspectives on European Literature”
• ENGLISH 317. Literature and Culture, section titled “Writing Islam”
• ENVIRON 335/AAS 322. Introduction to Environmental Politics: Race, Class, and Gender
• ENVIRON 490/HISTORY 440. War and the Environment: A Lethal Reciprocity
• FRENCH 272. French and Francophone Film, Media and Culture, section titled “The Algerian War in Film and Literature”
• HISTORY 224/PUBPOL 224. Global Nuclear Proliferation
• HISTORY 241. America and Middle Eastern Wars
• HISTORY 266. Twentieth-Century American Wars as Social and Personal Experience
• HISTORY 303. Topics in History, section titled “The Atlantic Slave Trade: Histories and Legacies”
• HISTORY 347/ANTHRCUL 346. Latin America: The Colonial Period
• HISTORY 354/ASIAN 354. Rebellion and Revolution in China Through Two Centuries
• HISTORY 356/AMCULT 356. World War Two in the Pacific
• HISTORY 440/ENVIRON 490. War and the Environment: A Lethal Reciprocity
• MENAS 491. Proseminar on the Arab World, section titled “Modern Islamic Movements in Comparative Perspective” (some background in Middle East, South Asian, and/or Islam intro courses required)
• MENAS 591. Interdisciplinary Middle East Topics Seminar, section titled “Arab-Israeli Conflict”
• NAVSCI 310/UC 310. Evolution of Warfare
• POLSCI 353. The Arab Israeli Conflict
• PUBPOL 224/HISTORY 224. Global Nuclear Proliferation
• RCLANG 324. Readings in Spanish, section titled “Place, Identity and Rights in the Americas”
• RCCSCI 360. Social Science Junior Seminar, section titled “Struggles for Democracy in Mexico: Seminar and Field Study” [with RCCORE 409. Study Off-Campus]
• REEES 405. Topics in REEES, section titled “Nowhere People: Exiles from the State of Ideology” (some background in Middle East, South Asian, and/or Islam intro courses required)
• SOC 495. Topics in Sociology, section titled “Culture and Power”
• UC 310/NAVSCI 310. Evolution of Warfare
• WOMENSTD 328/AAS 328. Women, Agency and Sexual Safety
• WOMENSTD 368/AMCULT 368/AAPTIS 368. Women and War in the Middle East

Area C: Conflict Resolution – Courses that address nonviolent responses to conflict: social justice movements, race relations, interpersonal conflict resolution, and legal paths to a just society.
• AAS 303/SOC 303. Race and Ethnic Relations
• AAS 324. Dealing With the Past and Doing Justice in Africa: South African, Rwanda, Sierra Leone.
• AAS 451. Law, Race and the Historical Process, II
• ANTHRCUL 349. Indigenous Political Movements
• ANTHRCUL 445. Cultural Anthropology Mini-Course, section titled “Examing Apartheid and Its Aftermath in South Africa”
• ASIAN 259/HISTORY 255. The History of Modern South Asia
• ENVIRON 306. Global Water
• HISTORY 255/ASIAN 259. The History of Modern South Asia
• INTLSTD 401. International Studies Advanced Seminar, section titled “The International Law and Politics of Human Rights”
• POLSCI 364. Public International Law
• PSYCH 310/SOC 320/UC 320. Processes of Intergroup Dialogues Facilitation and PSYCH 311/SOC 321/UC 311. Practicum in Facilitating Intergroup Dialogues (a two semester commitment)
• PSYCH 312/UC 375/SOC 375. Intergroup Conflict and Coexistence: Religion, Ethnicity, and Culture
• SOC 203. Sociology of Multiculturalism
• SOC 303/AAS 303. Race and Ethnic Relations
• SOC 320/UC 320/PSYCH 310. Processes of Intergroup Dialogues Facilitation and SOC 321/UC 321/PSYCH 311. Practicum in Facilitating Intergroup Dialogues (a two semester commitment)
• SOC 375/UC 375/PSYCH 312. Intergroup Conflict and Coexistence: Religion, Ethnicity, and Culture
• UC 320/PSYCH 310/SOC 320. Processes of Intergroup Dialogues Facilitation and UC 321/PSYCH 311/SOC 321. Practicum in Facilitating Intergroup Dialogues (a two semester commitment)
• UC 375/PSYCH 312/SOC 375. Intergroup Conflict and Coexistence: Religion, Ethnicity, and Culture

Area D: Social, Economic, and Environmental Justice – Courses that center on the reasons for social and economic disparities, social and political change, community empowerment, and human rights
• AAPTIS 331. Introduction to Arab Culture: Race, Ethnicity, and Gender Issues
• AAS 304/WOMENSTD 304. Gender and Immigration: Identity, Race, and Place
• AAS 323/HISTORY 388/WOMENSTD 323. Black Feminist Thought and Practice
• AAS 328/WOMENSTD 328. Women, Agency and Sexual Safety
• AAS 330/RCCSCI 330. Urban and Community Studies, I
• AAS 337/WOMENSTD 337/HISTORY 337. Black Women in the United States, Part II
• AAS 390/WOMENSTD 390. Homophobia in the Black World
• AAS 409/ANTHRCUL 408. Maternal/Child Health and Environmental Pollution in Africa
• AAS 418/POLSCI 324. Black Americans and the Political System
• AAS 426. Urban Redevelopment and Social Justice, section titled “Cities in Contemporary Africa”
• AAS 443/WOMENSTD 443. Pedagogy of Empowerment: Activism in Race, Gender, and Health
Science, Technology & Society (STS) Minor

Science, Technology, and Society Program
www.lsa.umich.edu/sts
e-mail: sts.minor.advisor@umich.edu

Not open to students with a minor in Medical Anthropology or History of Medicine

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.
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. Appointments may be scheduled by sending e-mail to sts.minor.advisor@umich.edu. Students may not declare the STS minor later than the first week of the first term of their senior year.

No course may be counted simultaneously toward both STS and any other minor.

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 web site.

Prerequisites to the Minor: None for the minor per se, although individual courses elected to meet the requirements of the minor may have course prerequisites.

Requirements for the Minor: A minimum of 15 credits of courses, to be elected from the categories as stated below:

1. **Core course**: RCSSCI 275.

2. **Electives**: A minimum of 2 courses for at least 7 credits, subject to the following conditions:
   - A maximum of one elective at the 100 level is permitted (up to 4 credits).
   - One elective must be at the 300 level or above.
   - Students may also count any research seminar (as below) as an elective.
   - At least one elective and the research seminar must be drawn from one of the focus clusters: science and society, technology and society, or medicine and society.

A. **Science and Society Focus Cluster**
   - ANTHRBC 360, 362, 467
   - ANTHRUC 256
   - AOSS 172, 300
   - BIOLOGY 101
   - CHEM 120 (section subtitled “The History and Philosophy of Chemistry”)
   - EARTH 140, 172, 380, 496 (section subtitled “Global Oil System and the Middle East”)
   - ECON 370
   - EEB 498
   - ENSCEN 172
   - ENVIRON 111, 201, 211, 256, 263, 270, 318, 350, 360, 361, 375, 280, 391, 414
   - GEOG 111
   - HISTORY 301, 302 (section subtitled “Science, Technology, and Defining the Human”), 366, 397 (section subtitled “Human Nature and its Sciences”), 427
   - MENAS 491 (section subtitled “Global Oil System and the Middle East”)
   - NURS 220
   - PHIL 420
   - PSYCH 384, 385
   - Residential College
     - RCNSCI 232, 260, 263, 270, 350, 415, 461 (section subtitled “Global Oil System and the Middle East”)
     - RCIDIV 318, 351 (section subtitled “Evolution and Intelligent Design”), 391
   - SOC 111
   - UP 263

B. **Technology and Society Focus Cluster**
   - AOSS 172, 300
   - CEE 260

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3. **One research course or seminar**, at the 300- or 400-level, in the student’s chosen focus cluster, chosen in consultation with, and approved by, the advisor. The research course or seminar will normally be completed in the student’s junior or senior year. To be approved for this requirement, a course must include a major research project (typically a long term paper) or a significant field study component.

**Approved STS Research Courses and Seminars**

ANTHRHCUL 325
- EARTH 496 (section subtitled “Global Oil System and the Middle East”)
- EEB 498
- ENVIRON 318
- HISTORY 396 (section subtitled “Human Experimentation”, “Global Nuclear Proliferation”, and other colloquia, if appropriate), 498 (section subtitled “Steam Engines and Computers: From Proletariats to Information Workers”)
- MENAS 491 (section subtitled “Global Oil System and the Middle East”)
- PHYSICS 481
- Residential College
  - RCIDIV 318

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**C. Medicine and Society Focus Cluster**

- AAS 355
- ANTHRCUL 258 (section subtitled “Culture and Medicine”), 325, 344, 355, 416
- BIOLOGY 118
- HBEHED 516
- HISTORY 284, 300, 310, 355, 396 (section subtitled “Human Experimentation”)
- NURS 220
- PSYCH 211 (section subtitled “Health, Illness, Society”), 359, 401 (section subtitled “Health Psychology”)
- Residential College
  - RCNSCI 260 (section subtitled “From Shamans to Cyborgs: Socio-Cultural Studies of Health, Illness, and the Biomedical Sciences” and other topics as appropriate)
  - RCIDIV 351 (section subtitled “Law and Bioethics”)
- SOC 475
- UC 210
- WOMENSTD 220, 324, 400.

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**Approved STS Research Courses and Seminars**

ANTHRHCUL 325
- EARTH 496 (section subtitled “Global Oil System and the Middle East”)
- EEB 498
- ENVIRON 318
- HISTORY 396 (section subtitled “Steam Engines and Computers: From Proletariats to Information Workers”)
- MENAS 491 (section subtitled “Global Oil System and the Middle East”)
- PHYSICS 481
- Residential College
  - RCIDIV 318
Drama: Text-to-Performance (T-t-P) Minor

Not open to students pursuing a minor or major in the Department of Theatre and Drama

Students in this minor learn about the complete process from how a 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.

Students wishing to pursue a minor in Drama: Text-to-Performance must develop a specific plan for its completion in consultation with the program’s designated advisor. Appointments may be scheduled at the RC Academic Services Office, 134 Tyler, East Quad, or by calling (734) 763-0032.

Prerequisites to the Minor: None for the minor per se, although individual courses elected to meet the requirements of the minor may have course prerequisites.

Requirements for the Minor: 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.
   - B. RCHUMS 481. Play Production Seminar.

2. Electives. Each student will select three electives in consultation with the Drama: 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 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.
   - 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 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 460. The Spanish Comedia.
   - SPANISH 468. Modern Spanish Theater.
   - RUSSIAN 463. Chekhov.
   - THTREMUS 222 / AAS 341. Introduction to Black Theatre.
   - THTREMUS 323 / ENGLISH 349. American Theatre and Drama.
   - THTREMUS 332. Performing Gender: Drama from Oral Sources.

Urban Studies Minor

For students with majors in other LSA programs, only one of the courses taken to complete this minor may be counted toward the major. Courses used to meet the Urban Studies minor may not be counted simultaneously toward any other minor.

The goal of the Urban Studies minor is to facilitate students’ active engagement with local communities while fostering the integration of their practical experience with classroom instruction. Urban Studies is an interdisciplinary minor that allows students to explore varied and multiple dimensions of urban and community life through differing theoretical approaches. In addition to coursework in the social sciences and humanities, the minor combines theoretical and analytical concepts from African American studies, social work, urban studies, and other fields to help students understand the challenges of urban life and to expand their capacity for civic engagement and community work.

Students wishing to pursue a minor in Urban Studies must develop a specific plan for its completion in consultation with the program’s designated advisor. Appointments may be scheduled at the RC Academic Services Office, 134 Tyler, East Quad, or by calling (734) 763-0032.

Prerequisites to the Minor: None for the minor per se, although individual courses elected to meet the requirements of the minor may have course prerequisites.

Requirements for the Minor: A minimum of 5 courses (at least 16 credits), to be elected from categories as stated:

1. Core Course: One of the following:
   - RCSSCI 330, “Urban and Community Studies I: Historical and Theoretical Perspectives.”
   - UP 425

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.

   A. Theory / Perspectives – Courses that present intellectual background for the study of urban communities. Drawn from history, sociology, political science, 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 332 / ENVIRON 336 / NRE 336 Environment and Inequality
   - AAS 434 / SOC 434 Social Organization of Black Communities
   - AAS 358, section subtitled “Asians and Blacks in Detroit”
   - AAS 426 Urban Redevelopment and Social Justice
   - AAS 443 / WOMENSTD 443 The Pedagogy of Empowerment: Activism in Race, Gender, and Health
   - AAS 495, section subtitled “Race and the City in American Culture”
   - AMCULT 301 section subtitled “Detroit Politics and Community Organizing”
   - AMCULT 305, section subtitled “Asians and Blacks in Detroit”
   - AMCULT 399 Race, Racism, and Ethnicity
   - ANTHRCL 438 Urban Anthropology
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.

- ANTHRCUL 446 / WOMENSTD 446 Sex and the City: Urban Geography and Sexual Locations
- ARCH 443 / UP 443 History of Urban Form
- ARCH 519 / UP 519 Theories of Urban Design
- ENVIRON 336 / AAS 332 / NRE 336 Environment and Inequality
- HISTORY 344 / RCSSCI 344 History of Detroit in the 20th Century
- HISTORY 302 Topics in History, section subtitled “Mapping Black Detroit”
- HISTORY 364 History of Suburbia
- HISTORY 468, section subtitled “Asians and Blacks in Detroit”
- HISTORY 393 Topics in US History, section subtitled “Detroit Politics and Community Organizing
- NRE 336 / AAS 332 / ENVIRON 336 Environment and Inequality
- NRE 573 / UP 573 Urban and Regional Theory
- POLSCI 327 The Politics of the Metropolis
- RCSSCI 344 / HISTORY 344 History of Detroit in the 20th Century
- RCSSCI 345 Community Strategies Against Poverty
- SOC 434 / AAS 434 Social Organization of Black Communities
- SOC 435 Urban Inequality and Conflict
- UP 443 / ARCH 443 History of Urban Form
- UP 519 / ARCH 519 Theories of Urban Design
- UP 521 The Social Life of Public Spaces
- UP 568 Real Estate and Urban Development
- UP 573 / NRE 573 Urban and Regional Theory
- UP 655 Neighborhood Planning (requires instructor approval for undergraduates)
- WOMENSTD 443 / AAS 443 The Pedagogy of Empowerment: Activism in Race, Gender, and Health
- ANTHRCUL 446 / WOMENSTD 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 UP 423 / ARCH 423 / ENVIRON 370 Introduction to Urban and Environmental Planning to meet the core course requirement.

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 in urban contexts. Prominent among these will be “field work” or “field study” courses – that is, courses in which students work in community settings.

- AAS 358, section subtitled “Urban and Community Studies II
- AAS 634 / SOC 634 The Urban Ethnographic Tradition: Theory, Method, Standpoint (requires instructor approval for undergraduates)
- AMCULT 306 / PSYCH 317 Community-Based Research
- AMCULT 310, section subtitled “Race, Politics, and Activism in Detroit”
- AMCULT 319 / PSYCH 319 Empowering Families and Communities
- AMCULT 321 / PSYCH 325 Practicum in the Multicultural Community
- HISTORY 393, section subtitled “Race, Politics, and Activism in Detroit”
- POLSCI 496, section subtitled “Senior Seminar in Urban Research”
- PSYCH 317 / AMCULT 306 Community-Based Research
- PSYCH 319 / AMCULT 319 Empowering Families and Communities
- PSYCH 325 / AMCULT 321 Practicum in the Multicultural Community
- RCCORE 301: Internships with Semester in Detroit
- RCCORE 309, section 006: Spanish Language Internship Placement
- RCHUMS 334: sections subtitled: “Writing in Detroit;” “Empowering our Communities through Creative Expression;” and “Telling it: Community-Based Arts and Literature”
- RCLANG 334: Tutoring Latinos in the Community

* RCSSCI 360, section subtitled “Urban and Community Studies II”
* RCSSCI 460, section subtitled “Social and Political Movements in Post-War Detroit”
* SOC 389 Practicum in Sociology
- SOC 634 / AAS 634 The Urban Ethnographic Tradition: Theory, Method, Standpoint (requires instructor approval for undergraduates)
- WOMENSTD 350 Women and the Community
- WOMENSTD 351 Women and the Community II

* SOC 389, RCSSCI 360, and RCSSCI 460 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).
Romance Languages and Literatures

4108 Modern Languages Building  
812 East Washington Street  
(734) 764-5344 (phone)  
(734) 764-8163 (fax)  
www.lsa.umich.edu/rll  
e-mail: rll.mailbox@umich.edu

The department offers courses in French, Italian, Portuguese, Spanish, Romance linguistics, and Romance languages and cultures. The primary goals of the undergraduate program are:

1. mastery of the language;  
2. an understanding and interpretation of Romance literatures and cultures; and  
3. preparation for teaching or other careers requiring specialized linguistic knowledge and skill.

The study of a second language expands the outlook and interests of the educated citizen. By providing insight into the social and intellectual life of other peoples, language study fosters humanistic attitudes and cultivates a spirit of tolerance and understanding.

Students supplement their training in classes by use of the Language Resource Center facilities and by participation in extra-curricular language activities.

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: https://webapps.lsa.umich.edu/AdvAppts/AA_StuSelfSvc1.aspx?ctgy=RLL  
or at the department office, 4108 Modern Languages Building, (734) 764-5344.

French and Francophone Studies

May be elected as a departmental major

Majoring 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.

Prerequisites to the Major. FRENCH 235.

Requirements for the Major. 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 courses taught in English without language prerequisites. 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. Majors must take one of the following courses in RLL at the Ann Arbor campus: FRENCH 340-379, 391-392, 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 FRENCH 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 majors are encouraged to elect courses related to their field of study outside of the department and to consider the possibility of studying at the year abroad program in Aix.

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.

Honors Plan. Qualified students may be admitted to a program of advanced study in the beginning or middle of the junior year (or at the beginning of the senior year following participation in a junior year in France program), 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.

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.

The normal requirements for the major in French and Francophone Studies must be completed along with the following:

1. Three additional credits in French and Francophone Studies at the level of 300 or above;  
2. Composition of a thesis, in French, incorporating the results of individual research, the minimum length being 30 pages; and  
3. A discussion of the thesis and of an agreed upon set of related readings with the student’s faculty advisor and one other faculty reader.

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. Intending students should contact the Honors advisor toward the end of their junior year, and fill out an application form. Upon admission, they enroll in FRENCH 491 and 492, Senior Honors I and II, usually in both terms of their senior year, writing their thesis under the supervision of a member of the professional staff.

Requirements for the Major in French and Francophone Studies for Students Preparing Teacher Certification. Candidates for a secondary school teaching certificate should study the general information about teaching certificate requirements, which appears under the Teacher Certification Program on the LSA website.

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. FRENCH 333, 335, and 438 are required (438 must be elected as EDCURINS 456 and will not count in the 30 credits). Only one course in the major may be chosen from courses taught in English without language prerequisites. 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.

For information on receiving credit for study abroad in other programs, consult a department advisor.

Italian

May be elected as a departmental major

Majoring 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.

Prerequisites to the Major. ITALIAN 230, 232, or 233; or the equivalent

Requirements for the Major. A minimum of 30 credits in Italian courses numbered ITALIAN 235 and above. 18 credits must be conducted in the target language of Italian. Of these, at least one course must be at the 200-level beyond ITALIAN 233, at least one at the 300-level, and at least two at the 400-level. Two courses must be focused on Italian literature and/or culture of periods prior to 1900. 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 requirements for the Italian major.

Residence requirement: 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.
Honors Plan. Students holding a cumulative GPA of 3.5 and Italian GPA in the major of 3.5, 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 Italian. In addition to the normal requirements for the major, students are required to prepare a 30-page thesis in Italian and to pass an oral examination in Italian on the same subject before the last two weeks of classes. In order to be admitted to the program, students must obtain written approval from the professor with whom they wish to write the thesis and complete an application, available on the department website at www.lsa.umich.edu/rll.

Portuguese

Not a major

Portuguese is one of the 10 most widely spoken languages in the world unifying 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. A minor is offered.

Spanish

May be elected as a departmental major

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.

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.

Prerequisites to the Major

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 for the Major

A minimum of 10 courses (30 approved credits), of at least 3 credits each, beyond the prerequisite.

SPANISH 308 does not count toward the major.

Required Courses in SPANISH

- 12 to 15 credits chosen from SPANISH courses numbered 279 to 399
- 15 to 18 credits chosen 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 415 toward the Spanish major
- One approved optional cognate course (3 credits), taught in English in the area of Hispanic studies, is allowed.
- No more than one Independent Study and one internship course (6 credits) can be included in the major/minor.
- Students are encouraged to develop a balanced program of study that addresses the cultural production of various countries and historical periods.

Minimum Credit Requirement

Each course to be counted toward the major must be at least 3 credits.

Residence Requirement

A minimum of 15 of the required 30 credits for the major must be taken either in residence or through a study-abroad program affiliated with the University of Michigan.

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

Honors Plan

Qualified students holding a cumulative GPA of 3.5 and a Spanish major GPA of 3.7 may apply to the Honors plan in Spanish at the beginning of the junior year. To apply students must fill out an application available on the department website at www.lsa.umich.edu/rll, and submit a copy of their transcript, a one-page statement of purpose, and a sample essay in Spanish. After reviewing the materials, the Honors advisor will interview the applicant to discuss his/her interests and objectives.

Spanish Honors majors are required to complete 33 credits of coursework and successfully defend a thesis:

I. Course Requirements. 11 courses (33 credits total): all regular Spanish major requirements must be completed (30 credits) and an additional Spanish course at the 400-level (3 credits). Also, 6 of the required 33 credits must include:

- ROMLANG 498 in the fall of students’ senior year
- SPANISH 491 in the winter term of students’ senior year

II. Thesis Requirement

- Composition of a thesis in Spanish (40 pages minimum)
- A presentation and discussion of the thesis and of an agreed-upon set of related readings with members of the faculty (thesis defense).

Romance Languages and Literatures

May be elected as a departmental major

A major 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 two 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.

**Study Abroad.** Majors in Romance Languages and Literatures are encouraged to consider the possibility of studying abroad for at least one of their languages.

**Prerequisites to the Major.** Same as those for majors in the individual languages:

- FRENCH 235 for students of French
- ITALIAN 230, 232 or 233 for students of Italian
- PORTUG 232 or 280 for students of Portuguese
- SPANISH 277 (or SPANISH 275 & 276) for students of Spanish

In addition, upper-level courses have the following prerequisites:

- Two French courses FRENCH 250-299 for most French courses 300 and above
- ITALIAN 235 for other major-level Italian courses
- Three 300-level Spanish courses for 400-level Spanish courses

**Requirements for the Major.** A minimum of 42 credits consisting of the following:

I. A minimum of 33 credits of coursework in two languages (from French, Italian, Portuguese, or Spanish) that meet the following qualifications:

- only courses that would count towards the individual language majors may be used to satisfy this requirement
- courses must be listed in the LSA Course Catalog or LSA Course Catalogue as taught in the target language
- a minimum of 12 credits in each of the first two target languages
- a minimum of 21 credits from upper-level courses (at least six credits in each language)

*N.b. “upper-level” means:
- 300 or above in French and Italian
- 400 or above in Spanish and Portuguese

II. A minimum of 9 additional credits in any Romance Language, including:

1. one course in Romance philology or comparative Romance linguistics
2. one elective:
   a. a ROMLANG/ROMLING number; or
   b. another major-level course in French, Spanish, Italian, or Portuguese (in English or the target language)
3. ROMLANG 498, the Senior Seminar in RLL

**Part I of the requirements** gives students the choice between treating the languages more or less equally and having “primary” and “secondary” languages.

**Part II of the requirements** fosters “bridges” between the two languages that are of both a practical/linguistic nature and an intellectual one.

**Requirement II.1** grounds the major in Romance Languages and Literatures in an understanding of the linguistic “kinship” between Romance languages. The following courses have been approved by the RLL curriculum committee as options for meeting the linguistics requirement (II.1):

- ROMLING 300, Introduction to the Romance Languages
- ROMLING 400, Topics in Romance Languages and Literatures, sections titled “Romance-Based Pidgins and Creoles” or “Romance-Based Bilingualism”
- LING 446/LACS 446.

**Requirement II.2** encourages students to explore the intellectual connections between the fields of French and Francophone studies, Hispanic studies, Italian studies, and Portuguese studies while fostering both a comparative and interdisciplinary understanding of Romance studies. Students should have their elective (Requirement II.2) approved by the RLL advisor.

All RLL majors will be enrolled in the senior seminar (Requirement II.3) during the fall academic term of their senior year. This seminar relies on students’ prior coursework as a basis for reinforcing connections between courses in French, Italian, Portuguese, and Spanish as well as offering an introduction to the methods of Romance Studies and an exploration of potential topics for which crossing boundaries between languages might provide productive avenues of inquiry. A major component of the senior seminar involves individual research projects tailored to each student’s linguistic competences.

**Residence requirement:** A minimum of 21 of the required 42 credits must be taken either in residence or through a study abroad program affiliated with the University of Michigan.

**Honors Plan.** Qualified students may be admitted to a program of advanced study, leading to the degree of Bachelor of Arts 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. Interested students should contact the Honors advisor in Romance Languages and Literatures toward the end of their junior year. Admission to senior-level Honors work in Romance Languages and Literatures is by application only. In addition to the application form (available on the department website at www.lsa.umich.edu/rll), students should submit a copy of their transcript, a one-page statement of purpose, and a sample essay.

The normal requirements for the major in Romance Languages and Literatures must be completed along with the following:

1. Composition of a thesis incorporating the results of individual research, the minimum length being 40 pages; and
2. A discussion of the thesis and of an agreed upon set of related readings with the student’s faculty advisor and one other faculty reader. Ideally, the two readers will represent the student’s two languages.

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. For students opting to write an Honors thesis in Romance Languages and Literatures, the senior seminar constitutes their fall term of work on the thesis. In the winter term of their senior year, they enroll in ROMLANG 499, the Senior Honors Course, in which they will complete their thesis under the supervision of a faculty member whose research interests are more closely aligned with the student’s.

**Teacher Certification.** 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/secondary/coursesrequirements/majorminor

Candidates for a secondary school teaching certificate should study the general information about teaching certificate requirements, which appears under the “Teacher Certification Program” on the LSA website, and contact the School of Education.

**Romance Languages & Literatures Minors**

**French and Francophone Studies**

The French and Francophone Studies minor is not open to students electing a major in French and Francophone Studies or any other minor in Romance Languages and Literatures.

The French and Francophone Studies minor offers students majoring in other fields the opportunity to acquire additional competence in French and Francophone studies. The linguistic and cultural knowledge gained in the process may help expand not only the students’ career opportunities,
but also their critical awareness of the intellectual problems and possibilities involved in the study of cultures other than their own.

Prerequisites to the Minor: FRENCH 235.

Requirements for the Minor: 18 credits of courses in FRENCH numbered FRENCH 240 and above, with a minimum of 9 credits at the 300 level.

Constraints: No more than one French course taught in English without language prerequisites may be counted toward the minor. 300-level courses must include at least one course in Cultural and Literary Studies. 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. Minors must take one of the following courses in RLL at the Ann Arbor Campus: FRENCH 340-379, 391-392, 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 FRENCH 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.

Italian
The Italia minor is not open to students electing a major in Italian or any other minor in Romance Languages and Literatures.

The objective of the minor in Italian are to develop some facility in the use of Italian, to recognize major monuments of Italian literature, 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.

Prerequisites to the Minor: ITALIAN 230, 232, or 233; or the equivalent

Requirements for the Minor: 18 credits of courses in ITALIAN numbered ITALIAN 235 or higher, of which four courses must be conducted in the Italian language.

ITALIAN 410 (Italian for Spanish Speakers) does not count toward the Italia minor requirements.

The 18 credits must include at least one course each at the 200-level beyond ITALIAN 233, the 300-level, and the 400-level.

Constraints: 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.

Portuguese
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.

Prerequisites to the Minor: One of PORTUG 232, 280, or 415, or the equivalent.

Requirements for the Minor: 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 course work.

Constraints. Neither PORTUG 280 nor PORTUG 415 may be counted toward the 18 credits for the Portuguese minor.

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 Requirement: 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.

Spanish Language, Literature, and Culture
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.

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.

Prerequisites to the Minor
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 for the Minor
A minimum of 7 courses (21 credits) of at least 3 credits each, beyond the prerequisite, including:

- 12 credits chosen from courses numbered SPANISH 279 to 399
- 9 credits chosen from courses at the 400 level

Specific course selections must include three literature courses. Other courses, or “electives in Spanish,” may be selected in Hispanic culture, linguistics, and film. 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
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 PORT 415 toward the Spanish minor

SPANISH 308 does not count toward the minor.

Residence Requirement. At least 12 of the required 21 credits for the minor must be taken in residence or through a study-abroad program affiliated with the University of Michigan.
The University of Michigan Center for Russian, East European, and Eurasian Studies is dedicated to advancing and disseminating interdisciplinary knowledge about the peoples, nations, and cultures of Russia, Central and Eastern Europe, and Eurasia, past and present. A constituent unit of the International Institute since 1993 and affiliate of the Weiser Center for Europe and Eurasia since 2008, CREEES is a long-time recipient of federal education funding as a National Resource Center for this broad world area. It is one of the nation’s leading institutes for interdisciplinary research and training on Russia, Central and Eastern Europe, and Eurasia.

Students with questions about the program are encouraged to schedule a meeting with the CREEES undergraduate academic advisor online at www.ii.umich.edu/crees.

Russian, East European, and Eurasian Studies

May be elected as an area major

The undergraduate curriculum in Russian, East European, and Eurasian Studies offers broad, interdisciplinary training for students who wish to acquire extensive knowledge of a country or countries of the former Soviet Union and East Central Europe. Proficiency in a language of the region is an important component of the REEES major. The degree prepares majors for graduate study as well as professional opportunities in areas ranging from government to business to teaching.

Prerequisites to the Major. One introductory course, usually SLAVIC 225: Arts and Cultures of Central Europe or RUSSIAN 231: Introduction to Russian Culture; or (if authorized by the CREEES advisor) another 200-or 300-level REEES approved course, with a similar emphasis on breadth of coverage. (Narrowly focused courses, even if they appear on the REEES-approved list, are generally not acceptable as prerequisites.)

Requirements for the Major. A minimum of 30 credits, including:

1. REEES 340, 395, 396, or 397.
2. REEES 401 or its equivalent.
3. Electives: At least 20 credits of REEES-approved upper-level (300-400) courses.
   - Geographic distribution: at least one 3-credit course in each sub-area (Russia, Eastern Europe, and Central Eurasia) – including at least two of the three REEES survey (“gateway”) classes: REEES 340, 395, 396/397 (i.e., may not count REEES 396 and 397 as different gateways)
   - Disciplinary distribution: at least one 3-credit course in each sub-area (arts/culture, history, and social science). Courses (including REEES surveys) may count for both geographic and disciplinary distributions.

A list of REEES-approved and REEES-related courses is available on the CREEES website at www.ii.umich.edu/crees.

REEES Language Requirement for the Major. Students must show proficiency at the level equivalent to three complete years of the sequence in Russian or Polish, or two years of the sequence for other languages, as demonstrated either by a placement test or by a grade of B- or higher in the final term. Further, all students in the REEES major must actually complete at least two years (four terms) of relevant university-level language training as approved by the CREEES advisor – through enrollment in language classes (of 3 credits or more) for a grade, not as an auditor or P/F, and earning a grade of B- or better in the final term. This training requirement means that students who satisfy the proficiency standards without actually taking classes, e.g., native speakers or those with prior experience or advanced high-school training, may choose either to take language (not literature) courses at the advanced-to-superior level or to begin acquiring a new language, usually a second area language (Russian, East European, or Central Eurasian). In some cases intellectual interests or career plans may justify another language (e.g., Persian, Turkish, German, Greek, etc.).

Honors Plan. Undergraduate majors who have maintained a 3.5 grade point average in the REEES major and a 3.4 overall GPA may apply for admission to the Honors program. Applications for the program, which are available at the CREEES office, are accepted annually in November of the applicant’s junior year. In addition to the application, students must submit a current transcript and a sample paper in the discipline in which they intend to write their Honors thesis. A maximum of 15 students will be accepted each year into the program.

Those accepted are expected to meet occasionally in an informal workshop at CREEES and to work individually with their thesis advisor to prepare a prospectus. Credit for this preliminary work may be obtained by enrolling in REEES 402 for two credits. During their senior year, students may elect REEES 403 for each term (receiving a Y grade in December), for a two-term total of six credits. Completed theses, which must be submitted by a due-date in late March, will be read by at least two faculty members including the student’s advisor. These theses ideally involve substantial use of foreign-language (REE) texts/sources/documents/databases. Grades for theses will be based on the quality of the research, analysis, and writing they display. The letter grade for REEES 403 and the levels of Honors with which the student will be graduated are:

A+ Highest Honors
A High Honors
A– Honors
B+ or below No Honors

Students with questions about the program are encouraged to schedule a meeting with the CREEES undergraduate academic advisor online at www.ii.umich.edu/crees.

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 CREEES advisor about applying for enrollment in LSA and the Rackham Graduate School through the Concurrent Undergraduate-Graduate Studies (CUGS) Program in LSA.

Advising. Appointments are scheduled online at: www.ii.umich.edu/crees/academics

Arrangements for continuing contacts are made in the first meeting with the undergraduate academic advisor. This meeting should be scheduled during the second term of the sophomore year.

REEES Minors

The minors provide interdisciplinary surveys of three separate geographic sub-domains covered by the major in Russian, East European, and Eurasian Studies. The Center offers three 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.
Those electing a major in the Department of Slavic Languages and Literatures may pursue a REEES minor, but may not count any Slavic Department courses toward satisfying the requirements for the REEES minor. Students may concurrently pursue a minor in both REEES and Slavic Languages and Literatures, with the following restrictions:

1. REEES minors may not count any courses for which Slavic is the home unit;
2. Slavic Department minors may not count REEES 397 or any courses for which REEES is the home unit, which includes SLAVIC 395 and 396.

Students pursuing a REEES minor must discuss their plans and course elections with the CREEES undergraduate academic advisor. Appointments can be scheduled online at: www.ii.umich.edu/crees/academics

Central Eurasian Studies
Central Eurasia stretches from Turkey in the west through Mongolia in the east. It includes a variety of religious and cultural communities, from historically Christian groups such as the Armenians and Georgians to Buddhist communities such as the Buryats. It includes the Turkic, Mongolian, Iranian, and Tibetan peoples that fall between the well-known areal blocks of European topics, selected in consultation with and approved by the CREEES undergraduate academic advisor. A minimum of 3 courses that will be counted toward the minor must be upper-level (300- or 400-level).

2. Disciplinary distribution: at least one 3-credit course in each sub-area (arts/culture, history, and social science).

Constraints: Not open to those electing a major or another minor in REEES.

East European Studies
CREEES 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.

Prerequisites to the Minor: None.

Requirements for the Minor: At least 15 credits of courses on East European topics, selected in consultation with and approved by the CREEES undergraduate academic advisor. A minimum of 3 courses that will be counted toward the minor must be upper-level (300- or 400-level).

1. REEES 396 – Survey of Central and Eastern Europe and the Enlarged European Union
   OR
   REEES 397 – Communism and Capitalism in Eastern Europe
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. Not open to those electing a major or another minor in REEES.

Russian Studies
CREEES offers an interdisciplinary minor to students who wish to: a) better understand the history and culture of Russia and the former Soviet Union and b) gain insight into the political, economic, and social transitions taking place in this region. The minor in Russian Studies does not have prerequisites or require knowledge of a language of the region.

Prerequisites to the Minor: None.

Requirements for the Minor: At least 15 credits of courses on Russian specific topics, selected in consultation with and approved by the CREEES undergraduate academic advisor. A minimum of 3 courses that will be counted toward the minor must be upper-level (300- or 400-level).

1. REEES 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 REEES 395 should not enroll in HISTORY 434.

Constraints: Russian language courses may not count toward the minor. Not open to those electing a major or another minor in REEES.

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**Program in Science, Technology and Society (STS)**

2713 Haven Hall (office) / 1029 Tisch Hall (post)
435 South State Street
(734) 763-2066 (phone)
(734) 647-4881 (fax)
www.umich.edu/~umsts
e-mail: umsts@umich.edu
Undergraduate Advising: sts.minor.advisor@umich.edu
Graduate Advising: sts.grad.advisor@umich.edu

The U-M STS Program offers a structured academic curriculum through which students can explore the social, cultural, ethical, and political dimensions of science, technology, and medicine. Our program addresses a number of U-M’s most important research and education priorities, including:

- Explaining how science, technology, and medicine vary among the world’s cultures, past and present
- Educating citizens to be engaged participants in the ongoing revolutions in science, technology, medicine, and information

STS presently offers an undergraduate minor, administered by the Residential College STS Program, as well as a graduate certificate.

**Minor.** Technology often precipitates the most drastic, 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.

For information on the minor in Science, Technology and Society, please see the minor’s description under the Residential College.

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**Screen Arts and Cultures**

6330 North Quad
105 South State Street
(734) 764-0147 (phone)
(734) 936-1846 (fax)
www.lsa.umich.edu/sac
e-mail: sac.info@umich.edu

The curriculum in Screen Arts and Cultures 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 Screen Arts and Cultures 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.

**Screen Arts and Cultures**

*May be elected as an interdepartmental major*

**Prerequisite to the Major.** SAC 236 and SAC 272, each completed with a minimum grade of C-.

Students will apply for entry to the major after having completed the prerequisites with a minimum grade point average of 2.0. In accord with LSA policies, students who do not meet the minimum grade requirement but still hope to declare the Screen Arts and Cultures major may retake one prerequisite course. If they meet the criteria above with the new grade they earn in the re-taken course, they may declare Screen Arts and Cultures as their major.

**Requirements for the Major** (30 credits). A grade of C— or better must be achieved in any course taken to satisfy the requirements for the major.

1. **Core Required Courses** (21 credits).
   - A. Two history courses: SAC 352 and one additional history course selected from among the following: SAC 353, 354, or 355.
   - B. One theory course beyond the prerequisite selected from among the following: SAC 372, 375, 376, or 461.
   - C. Introduction to production course: SAC 290.
   - D. Two production or writing courses selected from the following: SAC 300, 301, 302, 304, 306, 307, 310, 311.
   - E. One studies course selected from among the following courses: SAC 250, 313, 314, 316, 332, 333, 334, 341, 365, 368, 380, 381, 440, 441, 442, 458, 470, 485, or a similar course pre-approved by the advisor.

2. **Required Electives** (9 credits; 3 courses): Three SAC courses at the 300 or 400 level, with no more than two courses in production.

**Production Courses**

- SAC 300
- SAC 301
- SAC 302
- SAC 304
- SAC 306
- SAC 307
- SAC 310
- SAC 311
- SAC 400
- SAC 401
- SAC 402
- SAC 403
- SAC 404
- SAC 405
- SAC 406
- SAC 410
- SAC 411
- SAC 423
- SAC 427

**Advising.** Students who may be interested in a major in Screen Arts and Cultures are encouraged to consult with a department advisor. Appointments are scheduled online at: https://webapps.lsa.umich.edu/AdvAppts/AA_StuSelfSvc1.aspx?ctgy=SAC

**Honors Plan.** The Honors plan in the Department of Screen Arts and Cultures offers qualified Screen Arts and Cultures 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 Screen Arts and Cultures Honors plan 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 Screen Arts and Cultures, 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 Screen Arts and Cultures to help with costs associated with Honors projects.

**Admission.** To be considered for the Honors plan, students must have a grade point average of 3.5 or higher in the Screen Arts and Cultures major. Students must also identify a Screen Arts and Cultures 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 Screen Arts and Cultures Department at (734) 764-0147.
Screenwriting submajor
The department offers a submajor in Screenwriting to undergraduate students in the Screen Arts & Cultures major who demonstrate a special talent for writing for the screen.

Students interested in the submajor must take the same prerequisite courses required of students wishing to declare the Screen Arts & Cultures major. Students must then take SAC 290 and 210, followed by SAC 310. After successful completion of SAC 310, and acceptance and successful completion, B or better, in SAC 410, the student may apply for the Screenwriting submajor. The student should contact the Coordinator of Screenwriting to state his/her interest in applying to the submajor.

Final approval for the Screenwriting submajor is based on the student’s acceptance and successful completion, B or better, of one of the following:

- SAC 427, Screenwriting III
- OR
- SAC 423, Practicum for the Screenwriter (only if the student is selected as one of the two screenwriters for the course)
- SAC 311, Screenwriting for Television

Note: If a student is not accepted into the Screenwriting submajor, he or she may continue with the Screen Arts and Cultures major. The courses required of the student to apply for the submajor will all satisfy requirements in the general SAC 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 Screen Arts & Cultures 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 Screen Arts and Cultures requirements for the major in the studies-based part of the curriculum.

Honors in Screenwriting. After successful completion of SAC 410, students with a GPA of 3.5 or above in the Screen Arts and Cultures major and 3.4 GPA overall may wish to declare Honors in Screenwriting. Interested students should consult the Coordinator of Screenwriting.

Screen Arts and Cultures Minor
Global Media Studies
The minor in Global Media Studies is not open to students with a major in the Department of Screen Arts and Cultures.

Students interested in the minor in Global Media Studies should develop a specific plan for its completion in consultation with one of Screen Arts and Cultures' designated advisors. Appointments are scheduled online.

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).

Prerequisites to the Minor: None.

Requirements for the Minor: At least 16 credits (and five courses), to be chosen from the following three categories as stated below, with at least two courses at the 300-level or above:

1. Required Core Courses: seven credits from the following:
   - SAC 236
   - OR
   - One of the following: SAC 351, 352, or 353.

2. Electives. Students should take at least two of their elective courses at the 300 level or higher. Students are prohibited in the Category A of this minor from taking more than one course grounded in any single national cinema.
   - Moving Image Media in National & Regional Contexts. Two courses totaling at least six credits are to be chosen from the following approved electives, with no more than one course centered on U.S. media or in a single, non-U.S. national cinema
     - U.S. media
       - AMCULT 334, 351, 490
       - SAC 334, 355, 365, 366 (approved topics), 367, 368, 381, 450, 451, 460
     - Non U.S. media
       - AAS 232, 440
       - AMCULT 420
       - ASIAN 245, 458, 475
       - GERMAN 172, 330, 331
       - RCHUMS 312, 313
       - SAC 232, 245, 440, 441, 455 (approved topics), 458
       - SLAVIC 312, 313
       - SPANISH 420
   - A. SAC 311
   - B. One of the following: SAC 351, 352, or 353.

3. Electives. Students should take at least two of their elective courses at the 300 level or higher. Students are prohibited in the Category B of this minor from taking more than one course grounded in any single national cinema.
   - Moving Image Media in National & Regional Contexts. Two courses totaling at least six credits are to be chosen from the following approved electives, with no more than one course centered on U.S. media or in a single, non-U.S. national cinema
     - U.S. media
       - AMCULT 334, 351, 490
       - SAC 334, 355, 365, 366 (approved topics), 367, 368, 381, 450, 451, 460
     - Non U.S. media
       - AAS 232, 440
       - AMCULT 420
       - ASIAN 245, 458, 475
       - GERMAN 172, 330, 331
       - RCHUMS 312, 313
       - SAC 232, 245, 440, 441, 455 (approved topics), 458
       - SLAVIC 312, 313
       - SPANISH 420
   - B. Comparative Media Studies. One course of at least three credits to be chosen from among the following approved electives:
     - AAS 232, 442, 470
     - AMCULT 380
     - ASIAN 440
     - PHIL 440
     - SAC 361, 366 (approved topics), 380, 420, 422, 442, 455 (approved topics), 470, 485
     - WOMENSTD 361

Independent Studies (SAC 499) may not be used toward the minor.

Slavic Languages and Literatures
3040 Modern Languages Building
812 East Washington Street
(734) 764-5355 (phone)
(734) 647-2127 (fax)
www.lsa.umich.edu/slavic
e-mail: slavic@umich.edu

The department teaches the languages, literatures, and cultures of the Slavic nations. The Russian language is the fifth-most spoken language in the world; in addition there are some one hundred and fifty million speakers of Czech, Polish, Bosnian/Croatian/Serbian, and Ukrainian. These are vehicles of some of the world’s great cultures and are of increasing importance as a key to communication in trade and technology. Courses are offered in Slavic languages, literatures, and cultures. The undergraduate curriculum is designed primarily to provide competence in Czech, Polish, and Russian along with knowledge of Czech, Polish, and Russian literature and cultures. The department also offers courses in Bosnian, Croatian, and Serbian, as well as Ukrainian. Majors are offered in Polish and Russian, minors in Bosnian / Croatian / Serbian, Czech, Polish, Russian, Ukrainian, and Cultures and Literatures of Eastern Europe.
The curriculum provides the language training prerequisite to specialization in a variety of careers (e.g., government, diplomacy, international trade, teaching), and offers an enriching cultural and linguistic background to non-majors, especially those interested in the ethnic heritage of the Slavic peoples.

**Russian**

*May be elected as a departmental 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.

Students have three possible ways to complete the Russian major: the standard major, based on the study of Russian literature and language; a Culture track and a Heritage Speakers track.

**Major**

**A. Russian Language and Literature**

1. **Prerequisites to the Major.** 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.

2. **Core Courses:** RUSSIAN 301 or RCLANG 323 and 302, or 303; RUSSIAN 451 or 499; RUSSIAN 347 and 348; and at least one course in Russian literature after 1900 (e.g., RUSSIAN 361, 450, 467, 468, 469, 470, 471, 472, 475).

3. **Upper-level Russian language and literature electives:** at least two courses (in addition to those listed above) from RUSSIAN 401*, 402*, 410, 413, 414, 415, 416, 417, 418, 419, 420, 453, 454, 455, 456, 460, 461, 462, 463, 464, 465, 466, 476, and 485. Russian majors who elect RUSSIAN 462, 463, or 464 are expected to read Russian texts.

*Advising Recommendation: For most students RUSSIAN 401/402 will be the preferred choice. Students who do not take the RUSSIAN 401/402 sequence will find RUSSIAN 451 or 499 much more difficult.

4. **Cognates for Russian Language and Literature:** three or more credits in advanced courses (300-level or above) in:
   - A cognate course studying some other aspect of Russia. (Special attention is called to courses listed under Russian, East European, and Eurasian Studies.) OR
   - another Slavic language (Czech; Bosnian, Croatian & Serbian; Ukrainian; and Polish) OR
   - another foreign language

**B. Culture track (subplan)**

1. **Prerequisites to the Major.** 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.

2. **Core Courses:** RUSSIAN 231 or SLAVIC 270 or SLAVIC 240 or SLAVIC 281; RUSSIAN 301 or RCLANG 323 and 302; or 303; RUSSIAN 401 and 402; RUSSIAN 451 or RUSSIAN 499.

3. **Upper-Level Electives for Culture Subplan:** At least two of RUSSIAN 322, RUSSIAN 477, SLAVIC 313, RUSSIAN 358, SLAVIC 481, RUSSIAN 347 or 348.

4. **Cognate requirement for Russian Language and Literature.**

**C. Heritage Speakers track (subplan)**

1. **Prerequisites for Heritage Speakers Subplan:** RUSSIAN 225 or 202, or equivalent, or placement in an upper-level course; and RUSSIAN 231.

2. **Core Courses for Heritage Speakers Subplan:** RUSSIAN 325 or 302, or equivalent; RUSSIAN 401, 402, 501, and 502; two of RUSSIAN 451, RUSSIAN 499, RCLANG 323

3. **Upper-Level Electives for Heritage Speakers Subplan:** At least two of RUSSIAN 347, 348, 361, 450, or other literature or culture courses with permission of advisor.

4. **Cognate requirement for Russian Language and Literature.**

**Honors Plan.** 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 plan. 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.

**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.

**Teaching Certificate.** Candidates for a teaching certificate with a teaching minor in Russian should consult Professor Makin and the School of Education Teacher Education office, 1228 School of Education Building, (734) 615-1528. Information about general requirements for a teaching certificate appears elsewhere.

**Polish**

*May be elected as a departmental 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, East European, and Eurasian 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 major is intended for undergraduates who have in 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 a minor in Polish Language, Literature, and Culture.

**Prerequisites to the Major.** POLISH 121, 122, 221, and 222, or the equivalent.

**Major (27 credits). 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 (appropriate sections)*

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.

**Residence Requirement.** 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.

**Honors Plan.** Undergraduate majors who have maintained a 3.5 grade point average in Polish courses and 3.4 overall GPA may apply for admission to the Honors Plan. 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.

**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.

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**Slavic Languages and Literatures Minors**

Students may concurrently pursue a minor in both REEES and Slavic with the following restrictions: (1) REEES minors may not count any courses for which Slavic is the home unit; (2) Slavic minors may not count REEES 397 or any courses for which REEES is the home unit, which includes SLAVIC 395 and 396.

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:

- Eastern Europe: Prof. Michael Makin
- Bosnian/Croatian/Serbian: Prof. Tatjana Aleksić
- Czech: Prof. Jindrich Toman
- Polish: Dr. Piotr Westwalewicz
- Russian: Prof. Michael Makin
- Ukrainian: Svitlana Rogovyk

Appointments are scheduled online at www.lsa.umich.edu/slavic/undergraduate/advising.

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**Bosnian/Croatian/Serbian (BCS) Literature & Culture**

Not open to those who are electing a major in Russian, East European, and Eurasian Studies. Students could concurrently pursue this minor with one in REEES with the following restrictions: (1). REEES minors may not count any course for which Slavic is the home unit. (2). Slavic minors may not count REEES 397 or any course for which REEES is the home unit, which includes SLAVIC 395 and 396.

This minor provides students with a fundamental competence in BCS, as well as the knowledge of literary and cinema masterpieces from the region.

The BCS 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 majors 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 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 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 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.

**Prerequisites to the Minor.** BCS 131, 132, and 231, or equivalent, as determined by the departmental placement examination.

**Minor Program.** 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 / REEES 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
  - HISTORY 431. History of the Balkans Since 1878
  - SLAVIC 471. Seminar in Cultural Studies of Central, Eastern and Southern Europe, section entitled “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 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)

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**Cultures and Literatures of Eastern Europe**

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:
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 Čapek, 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 discrimination as they have been dealt with in literature and film, a feature which would deepen students’ understanding through the comparative perspective it would provide.

Prerequisites to the Minor. None. No knowledge of the languages of Eastern Europe is required.

Czech Language, Literature, and Culture

Minor Program. 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:


- **Category B: Courses on Czech culture, literature, and cinema** (at least 6 credits are required from Category B):
  - CZECH 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)

Polish Language, Literature, and Culture

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.

Prerequisites to the Minor. POLISH 121, 122, and 221, or equivalent.

Minor Program. 16 credits of courses; at least 6 of which must be taken at the upper level (300 or above):

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”)

Residence Requirement. At least 8 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.

Russian Language, Literature, and Culture

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 major 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.

Prerequisites to the Minor. RUSSIAN 201 or equivalent.
Minor Program. RUSSIAN 202 or 203 or 223 or RCLANG 293, and 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

Ukrainian Language, Literature, and Culture

A minor in Ukrainian Language, Literature, and Culture would provide 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 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 majors 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.

Prerequisites to the Minor. UKR 251 (with a grade of “C” or better) or equivalent as determined by the Departmental placement examination.

Minor Program. At least 16 credits of courses including:

1. UKR 252
2. 12 credits in courses selected from the following two categories, with at least 6 credits from Category 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 (Topic: Introduction to Ukrainian Culture)
- UKR 320 (Introduction to Ukrainian Poetry)

Category B. Eastern European Slavic Culture (No more than 6 credits from this category):

- HISTORY 432 (Medieval and Early Modern Russia)
- SLAVIC 240 (Slavic Folklore)
- SLAVIC 270 (Contact and Conflict: Jewish Experience in Eastern Europe)
- SLAVIC 313 (Russian and Ukrainian Cinema)
- SLAVIC 395 (Survey of Russia: The Russian Empire, the Soviet Union, and the Successor States)
- RUSSIAN 435 (Cultural History of Russian Jews)
- SLAVIC 490 (Topics: Rock Kills Communism; Revolution in the Attic)

3. (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.

Social Work

School of Social Work
3833 School of Social Work Building
1080 South University Avenue
(734) 764-5733 (phone)
ssw.umich.edu/programs/undergrad
e-mail: cascminor@umich.edu

Not a major

The University of Michigan School of Social Work is a community of internationally recognized faculty, gifted students, and dedicated alumni who share a common objective: to create social change and promote social justice through excellence in research, education, and practice. Consistently ranked among the top schools of social work in the nation, the School of Social Work has a master of social work program that is held in the highest regard by educators and professionals in the field.

Community Action and Social Change (CASC) Minor

Students wishing to pursue a minor in Community Action and Social Change should meet with the program’s designated advisor. Appointments are scheduled through the School of Social Work CASC Undergraduate Minor Program [email: cascminor@umich.edu or telephone: (734) 763-5733], 3833 SSW.

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:
   - recognize the importance of contexts on individual, group and interpersonal dynamics;
   - engage in critical sociopolitical/historical/structural analyses;
   - use a multi-level and multidisciplinary structural analysis and perspective;
   - acknowledge and address the role of power and privilege in community action and social change efforts; and
   - identify goals for community change and the strategies and tactics to work with others towards these goals.

Advising. Advising responsibilities primarily reside with the School of Social Work. Core faculty from the other disciplines may also participate in advising. The faculty advisors work with students on minor course selection, career planning, and integrative learning processes. The questions regarding curricular requirements for the minor will be handled by the Associate Dean for Educational Programs at the School of Social Work.

Prerequisites to the Minor: None for the minor per se, although individual courses elected to meet the requirements of the minor may have course prerequisites.

Minor Program. The minor requires at least 16 credits from the following courses:

A. Required Core Foundation Course:
   SW 305: Theories and Practices for Community Action and Social Change

B. Electives. One course (minimum 3 credits) from each cluster and an additional 3 credits from any cluster

1. Context Cluster Electives (minimum three credits).
   These electives provide students with a range of context, theories and multidisciplinary perspectives to support understanding of various community action and social change efforts:
   - AAS 303/SOC 303: Race and Ethnic Relations
   - AAS 330/RCSSCI 330: Urban and Community Studies 1 (section titled "Historical and Theoretical Perspectives")
   - AAS 434/RCSSCI 434: Social Organization of Black Communities
   - AMCULT 311: Topics in Ethnic Studies (section titled "Race and Mixed Race")
   - AMCULT 348/RCSSCI 348: History of American Radicalism
   - AMCULT 374/RCSSCI 374: The Politics and Culture of the Sixties
   - AMCULT 399: Race, Racism and Ethnicity
   - AMCULT 421/SOC 423: Social Stratification (section titled "Gender, Sexuality, Disability, and Animal Inequality in America")
   - ANTHRCUL 370/LING 370: Language and Discrimination
   - ANTHRCUL 447: Culture, Racism and Human Nature
   - ASIAN 259/HISTORY 255: Gandhi’s India: The History of Modern South Asia
   - ENTR 599: Special Topics in Entrepreneurship (section titled “Educational Entrepreneurship”)
   - ENVIRON 203/ORGSTUDY 203: Activism
   - ES 445: Base of the Pyramid – Business Innovations for Solving Society’s Problems
   - ES 444: Introduction to Microfinance
   - GEOG 145/INTLSTD 101/UC 145: Introduction to International Studies
   - HISTORY 255/ASIAN 259: Gandhi’s India: The History of Modern South Asia
   - HISTORY 344/RCSSCI 344: The History of Detroit in the 20th Century
   - HISTORY 346/AMCULT 348: History of American Radicalism
   - HISTORY 374/AMCULT 374: The Politics and Culture of the Sixties
   - INTLSTD 101/GEOG 145/UC 145: Introduction to International Studies
   - LING 370/ANTHRCUL 370: Language and Discrimination
   - MO 314: Managing Change
   - MO 321: Leadership in Organizations
   - ORGSTUDY 203/ENVIRON 203: Activism
   - POLSCI 489: Advanced Topics in Contemporary Political Science (section titled “Citizenship and its Modern Challenges”)
   - PSYCH 498/WOMENSTD 498: Gender and the Individual
   - RCSSCI 330/AAS 330: Urban and Community Studies 1 (section titled “Historical and Theoretical Perspectives”)
   - RCSSCI 344/HISTORY 344: The History of Detroit in the 20th Century
   - SOC 303/AAS 303: Race and Ethnic Relations
   - SOC 345/WOMENSTD 345: Sociology of Sexualities
   - SOC 423/AMCULT 421: Social Stratification (section titled “Gender, Sexuality, Disability, and Animal Inequality in America”)
   - SOC 434/AAS 434: Social Organization of Black Communities
   - SOC 447/WOMENSTD 447: Sociology of Gender
   - SOC 454: Law and Society
   - SOC 458: Sociology of Education
   - SOC 461: Social Movements
   - SW 300: Leadership in the Nonprofit Sector
   - SW 400: Social Problems and Social Work Today
   - UC 145/INTLSTD 101/GEOG 145: Introduction to International Studies
   - WOMENSTD 345/SOC 345: Sociology of Sexualities
   - WOMENSTD 447/SOC 447: Sociology of Gender

2. Diversity Learning Cluster Electives (minimum three credits).
   These electives provide students with skills and learning opportunities to facilitate diversity learning to support community action and social change efforts:
   - AMCULT 321/PSYCH 325: Practicum in the Multicultural Community
   - AMCULT 363/WOMENSTD 363: Asian/Pacific American Women
   - AMCULT 390: Internship in Arab American Studies,
   - EDUC 390/ELI 390/LING 386/RCSSCI 390: Community Service and Language, Education, and Culture
   - ELI 390/LING 386/EDUC 390/RCSSCI 390: Community Service and Language, Education, and Culture
   - HISTORY 346/AMCULT 348: History of American Radicalism (section titled “From the Abolitionists to the Battle of Seattle”)
   - LING 386/ELI 390/EDUC 390/RCSSCI 390: Community Service and Language, Education, and Culture
   - PSYCH 122/UC 122/SOC 122: Intergroup Dialogues
   - PSYCH 310/UC 320/SOC 320: Processes of Intergroup Dialogues
   - PSYCH 311/UC 321/SOC 321: Practicum in Facilitating Intergroup Dialogues
   - PSYCH 312/UC 375/SOC 375: Intergroup Conflict and Coexistence: Religion, Ethnicity and Culture
   - PSYCH 324/SOC 324/UC 324: Advanced Practicum in Intergroup Relations
   - PSYCH 325/AMCULT 321: Practicum in the Multicultural Community
   - RCSTUDY 409: Study Off-Campus (section titled “Political Struggles in Mexico: Seminar and Field Study”)
   - RCSSCI 360: Social Science Junior Seminar (section titled “Political Struggles in Mexico: Seminar and Field Study”)
   - RCSSCI 390/ELI 390/LING 386/EDUC 390: Community Service and Language, Education, and Culture
   - SOC 122/UC 122/PSYCH 122: Intergroup Dialogues
   - SOC 218/UC 218: Foundations of Intergroup Relations
   - SOC 320/UC 320/PSYCH 310: Processes of Intergroup Dialogues
   - SOC 321/UC 321/PSYCH 311: Practicum in Facilitating Intergroup Dialogues
   - SOC 324/PSYCH 324/UC 324: Advanced Practicum in Intergroup Relations
3. Action Service Learning Cluster Electives (minimum 3 credits).

These electives provide students with opportunities to engage in service learning opportunities to promote community action and social change initiatives:

- AMCULT 301: Topics in American Culture (section titled “The Cody High School Project”)
- AMCULT 305: Asian Pacific American Community Service and Learning
- AMCULT 306/PSYCH 325: Practicum in Multicultural Community Relations
- AMCULT 319/PSYCH 319: Community Research
- AMCULT 321/PSYCH 325: Practicum in Multicultural Community Relations
- AMCULT 390: Internship Opportunities in Arab American Studies
- ARTDES 314: Change by Design
- EDUC 360: Partners is Authentic Learning in School
- EDUC 390/ELI 390/LING 386/RCSSCI 390: Community Service and Language, Education and Culture
- ELI 390/LING 386/EDUC 390/RCSSCI 390: Community Service and Language, Education and Culture
- ENGLISH 310: Discourse and Society
- ENGLISH 319: Literature and Social Change (section titled “Theater and Social Change”)
- ENGLISH 326: Community Writing and Public Cultures (section titled “The Portfolio Project”)
- ENGR 355 & 455: Multidisciplinary Engineering Design I & II (section titled “Engaged Urban Design”) [students must participate in both semesters]
- ENTR 390: Special Topics in Entrepreneurship (section titled “Leading Innovation through Social Entrepreneurship”)
- LING 386/ELI 390/EDUC 390/RCSSCI 390: Community Service and Language, Education and Culture
- POLSCI 389: Topics in Contemporary Political Science (section titled “Theory and Practice of Community Organizing”)
- PSYCH 211 (excluding any sections about career exploration)
- PSYCH 306: Project Outreach Group Leading
- PSYCH 317/AMCULT 306: Community Research
- PSYCH 319/PSYCH 319: Empowering Families and Communities
- PSYCH 325/AMCULT 321: Practicum in Multicultural Community Relations
- RCHUMS 334: Topics in Humanities (sections titled “Community Empowerment Through the Arts: An Introduction to Theory and Practice” and “The Atonement Project”)
- RCSSCI 390/ELI 390/LING 386/EDUC 390: Community Service and Language, Education and Culture
- SOC 325: The Sociology of Service Learning
- SOC 375/UC 375/PSYCH 312: Intercultural Conflict and Coexistence: Religion, Ethnicity and Culture
- UC 122/PSYCH 122/SOC 122: Intergroup Dialogues
- UC 218/SOC 218: Foundations of Intergroup Relations
- UC 320/PSYCH 310/SOC 320: Processes of Intergroup Dialogues Facilitation
- UC 321/PSYCH 311/SOC 321: Practicum in Facilitating Intergroup Dialogues
- UC 324/SOC 324/PSYCH 324: Advanced Practicum in Intergroup Relations
- UC 370: UC Special Topics (section titled “Intergroup Conflict & Coexistence: Religion, Ethnicity & Culture”)
- UC 375/PSYCH 312/SOC 375: Intergroup Conflict and Coexistence: Religion, Ethnicity and Culture
- UC 470: UC Special Topics (section titled “Social Justice in the Real World”)
- WOMENSTD 363/AMCULT 363: Asian/Pacific American Women in Race, Gender and Health
- WOMENSTD 420: Group Facilitation in Women’s Studies
- WOMENSTD 443/AAS 443: Pedagogy of Empowerment: Activism in Race, Gender and Health
- WOMENSTD 350: Nonprofit Management, Community Engagement, and Feminist Practice

The School of Social Work will also offer one credit mini-courses that are led by community leaders and social work faculty that will provide students additional elective opportunities linked to the core cluster areas.

4. Submission of an MSW program application, with all required supporting documents, by December 1st for the fall term prior to the proposed term of enrollment in the MSW Program.

Students in the Preferred Admission Program are encouraged to do the following: Undergraduate students may elect graduate (500 level) courses in the School of Social Work. If these courses are used for the undergraduate degree, and a “B” is obtained, these courses may be used as exemptions for the required courses toward the Master of Social Work degree (these exemptions do not reduce the 60 credit hour degree requirement). If these courses are not applied toward an undergraduate degree, they may be transferred to the School of Social Work, and counted toward the 60 credit hour degree requirement. Prior to enrolling in 500 level social work courses, students should meet with a counselor in the Office of Student Services (1748 SSWB).

During the period of enrollment in the CASC minor, School of Social Work admissions counselors will be available to meet with Preferred Admission program participants.

For information on the School of Social Work and the MSW program:
- SSW Website: www.ssw.umich.edu
- CASC Website: www.ssw.umich.edu/programs/undergrad/
- Email: ssw.msw.info@umich.edu
Sociology

3001 LSA Building
500 South State Street
(734) 764-6324 (phone)
(734) 763-6887 (fax)
www.lsa.umich.edu/soc
e-mail: sociology.department@umich.edu

Sociology is about people and their patterns; it seeks to understand and account for the complexities of human interaction and patterns of social life. It focuses on relations among people, groups, organizations, classes, cultures, and society. Sociology scientifically explores and analyzes issues vital to our personal lives, our communities, our society, and the world. In short, it involves all aspects of human experience and activity. Almost any aspect of how human beings gather together in groups, organizations, and societies can be studied within sociology. The study of sociology provides fascinating and distinctive perspectives on the social world. The field also offers a range of research techniques that can be applied to virtually any aspect of social life: crime and delinquency, family dynamics, corporate downsizing, how people express emotions, welfare or education reform, or global issues of peace and war. Because sociology addresses the most challenging issues of our time, it is a rapidly expanding field with broad implications. Students interested in learning more about the sociology major plan or intending to declare a major in sociology should attend an information meeting for prospective majors on one of the dates posted on the department’s website.

Special Opportunities. The Department of Sociology offers a wide range of special opportunities for undergraduates to actively engage in the design of their education. These include: department advising, service-learning through Project Community, independent studies with faculty, facilitation of Intergroup Dialogues, the Honors Program, SURO (Sociology Undergraduate Research Opportunities), writing competitions and awards, and a department-supported student organization, the Undergraduate Sociology Association.

Advising. A department advisor is available to students for one-on-one appointments to discuss the choice of sociology as a major, assist in course selection, and advise on co-curricular opportunities and career preparation. Students can schedule a major advising appointment by calling the department at (734) 764-6324 or using the online appointment scheduler at www.lsa.umich.edu/soc. Students can also email socadvisor@umich.edu with questions.

Project Community. A number of sociology majors participate in Project Community (SOC 225: Practicum in Sociology), an experiential learning and community service program. Students earn academic credit by reflecting on their volunteer experience in education, criminal justice, public health, and community organizing settings. Roles open for student volunteers include those of tutors, referral service workers, health care assistants, patient educators, prisoner and youth advocates, and recreational or artistic workshop leaders. This course is an ideal experiential complement to the academic instruction provided by the department. Students, assisted by trained undergraduate coordinators and graduate student instructors, gain useful skills and contacts while serving the needs of the community. Project Community administration is organized by the Ginsberg Center for Community Service. Students can find more information about Project Community at: ginsberg.umich.edu/projectcommunity.

Sociology

May be elected as a departmental 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 electives allow students to study the discipline broadly or to focus on a specific area of the discipline that inspires them.

Prerequisite to the Major. Students planning to concentrate 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, or 300. 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 are strongly encouraged to elect SOC 300, although there is limited space available for seniors in SOC 100 and 102 in academic terms in which SOC 300 is not offered. The prerequisite course cannot be included in the 33 credits required for completion of the major.

Students must earn at least a C- in the prerequisite for the major and in all courses they plan to include in the major. Courses elected as pass/fail may not be included in the major.

Requirements for the Major. 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 or STATS 250 (or their equivalent)
2. Research Methods: SOC 310 (Must be taken on the UM–Ann Arbor campus)
3. Sociological Theory: SOC 305 (Must be taken on the UM–Ann Arbor campus)

The remaining credits must come from SOC courses at the 200 level and above. Students who wish to focus their elective coursework on a particular area of sociology are encouraged to consult with the department advisor.

The department will allow up to two courses with significant sociological content from other LSA departments or transfer institutions to be included in the major. Students interested in petitioning to include a non-SOC course in their major should email their request to socadvisor@umich.edu and include a complete course syllabus.

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.

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.

Credit Limits and Exclusions. A combined total of eight INDEPENDENT or EXPERIENTIAL credits may be included in the major. This includes SOC 225 (and 389), 321, 324, 394, 395, and 396. There is an additional limit on SOC 225 (and 389) credits; only four credits of SOC 225 (and 389) may be included in the major.

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 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.
**Honors Plan in Sociology**

The Honors 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.

**Honors Application Prerequisites and Course Planning.** Applicants to the Honors plan in Sociology have at least a 3.5 GPA within their sociology courses and at least a 3.4 cumulative GPA. 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-term sequence of course and thesis work. Students typically apply as first-term juniors and begin with the first course, SOC 497, the following academic term.

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.”

More information about the Honors plan in Sociology is at www.lsa.umich.edu/soc/undergraduateprogram/honorsprogram.

Interested students are encouraged to make an appointment with the department advisor by calling the department at (734) 764-6324 or using the online appointment scheduler at: www.lsa.umich.edu/soc.

**Sociology Minors**

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

**Law, Justice, and Social Change Minor**

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.

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.

**Prerequisites to the Minor:**

One of SOC 100, 102, 195 or 300.

Students must earn at least a C- or better in the prerequisites to the minor and in all courses they plan to include in the minor. Courses elected pass/fail may not be included in the minor.

**Requirements for the Minor.**

A minimum of 15 credits from any combination of the courses listed below.

Students must earn at least a C- or better in the prerequisites to the minor and in all courses they plan to include in the minor.

- SOC 270 / WOMENSTD 270 – Gender and the Law
- SOC 350 – Human Rights in the United Nations
- SOC 368 – Criminology
- SOC 354 – Law and Society
- SOC 461 – Social Movements
- SOC 465 / PSYCH 488 / WOMENSTD 465 – Sociological Analysis of Deviance
- SOC 476 – Sociology of Bioethics
- SOC 489 – Community Organizing and Social Change
- 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 495 – Topics in Sociology
- SOC 395* – Independent Study

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 course in their minor should email their request to socadvisor@umich.edu and include a complete course syllabus.

**Restrictions:**

*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 (or 389) and 395.
Center for South Asian Studies (CSAS)

1080 South University Avenue, Suite 3603
(734) 764-0352 (phone)
(734) 936-0996 (fax)
www.ii.umich.edu/csas
e-mail: csas@umich.edu

Not a major. Undergraduates may pursue South Asian Studies through a major or minor in the Department of Asian Language and Cultures.

One of the largest programs devoted to South Asia in the U.S., the Center for South Asian Studies is a U.S. Department of Education National Resource Center, and is a unit of the International Institute within the University of Michigan. The Center is committed to promoting a broader and deeper understanding of South Asia and its peoples, cultures, and histories by providing resources for faculty, students, and the community to learn and disseminate knowledge about the region. Our goals are to ensure that our students graduate with a greater global perspective and understanding; and to support innovative and advanced faculty research on international issues of major importance to the United States and the world.

The Center for South Asian Studies offers a broad, interdisciplinary approach to the study of South Asia at the Master’s and Graduate Certificate levels. Undergraduates may pursue South Asian Studies through a major or minor in the Department of Asian Language and Cultures. In addition to the courses offered by the Center, students can find courses on South Asia offered by the various disciplinary departments, such as History, Anthropology, Political Science, etc. The Center posts a complete South Asia area course list on its web site each term.

Foreign Language and Area Studies (FLAS) Fellowships for Undergraduates. The Center offers a funding opportunity for students who are U.S. citizens or permanent residents, and are able to study a South Asian language (Hindi, Punjabi, Tibetan, or Urdu) at the second year level or beyond. An academic year fellowship covers $10,000 toward tuition and a $5,000 stipend. Contact the Center for details.

CSAS Undergraduate Fellows Program: Summer in South Asia. The Center for South Asian Studies offers a special opportunity to chart your own course in India. Thanks to a generous donation to the Center for South Asian Studies, undergraduate students at U-M have an opportunity to design and carry out their own fellowship programs in India during the summer. This fellowship is intended for non-graduating students who have not already spent significant amounts of time in India. All projects MUST be self-directed research projects and not paid or unpaid internships. A Preliminary Application is due in late January. For specific details on the application process, consult the Center’s website: www.ii.umich.edu/csas/academics/summerinsouthasiafellows

Study Abroad. The Center for Global and Intercultural Study sponsors programs in India in conjunction with the University of Wisconsin’s College Year in India program. These programs offer the opportunity to study in either Madurai or Varanasi, India – each site highlighting India’s ethnic, religious, and linguistic diversity. Both sites feature intensive language study and allow students to learn about their surroundings firsthand by completing an in-depth, year-long fieldwork project.

Center for Southeast Asian Studies (CSEAS)

1080 South University Avenue, Suite 3603
(734) 764-0352 (phone)
(734) 936-0996 (fax)
www.ii.umich.edu/cseas
e-mail: cseas@umich.edu

Not a major. Undergraduates may pursue Southeast Asian Studies through a major or minor in the Department of Asian Language and Cultures.

Southeast Asia is one of the world’s most dynamic and interesting regions, and the University of Michigan is one of the best places to study Southeast Asia in the world.

The Center for Southeast Asian Studies is a U.S. Department of Education National Resource Center, and is a unit of the International Institute within the University of Michigan. The Center is committed to promoting a broader and deeper understanding of Southeast Asia and its peoples, cultures, and histories by providing resources for faculty, students and the community to learn and disseminate knowledge about the region.

The Center for Southeast Asian Studies offers a broad, interdisciplinary approach to the study of Southeast Asia at the Master’s and Graduate Certificate levels. Undergraduates may pursue Southeast Asian Studies through a major or minor in the Department of Asian Language and Cultures. In addition to the courses offered by the Center, students can find courses on Southeast Asia offered by the various disciplinary departments, such as History, Anthropology, Political Science, etc. The Center posts a complete Southeast Asia area course list on its web site each term.

Drawing on over 100 years of engagement with the region, every year Michigan offers a wide range of courses, student clubs and events focusing on Southeast Asia. Whether you want to take a course on the region, travel to the Philippines, Indonesia, Singapore, Thailand or Vietnam with faculty members, or study abroad for a semester, you can discover more about this fascinating part of the world while you’re here at Michigan.

First Year Southeast Asian Language Scholarships. In order to support learning about Southeast Asia, the Center for Southeast Asian Studies offers a set of scholarships for students taking First Year Filipino, Indonesian, Thai or Vietnamese in the coming school year.

CSEAS will offer between 8 and 12 $1000 scholarships on a competitive basis to students enrolling in one of the following sequence of courses:

- First-Year Filipino I and II: ASIANLAN 111.001 (Fall), ASIANLAN 112.001 (Winter)
- First-Year Indonesian I and II: ASIANLAN 121.001 (Fall), ASIANLAN 122.001 (Winter)
- First-Year Thai I and II: ASIANLAN 161.001 (Fall), ASIANLAN 162.001 (Winter)
- First-Year Vietnamese I and II: ASIANLAN 173.001 (Fall), ASIANLAN 176.001 (Winter)

The scholarships are available to both undergraduate and graduate students, but with preference to undergraduates in their first or second years at the University.

Winners of the scholarship competition will be given $500 each academic term, paid out after the drop-add deadline each term, and applied to their Financial Aid package. Students must complete the two-course sequence.

Applying for the First Year Southeast Asian Language Scholarships

A complete application will include:

- A completed application form
- A one-page personal statement
- A language self-report
- A letter of recommendation from a former or current language teacher (if possible) or from another teacher or instructor
- Academic transcripts

Applications are due in mid-March; Language scholars and alternates are named in early April. Consult the Center’s website for specific dates.

For more information, please email us at cseas@umich.edu, or call (734) 764-0352.
Foreign Language and Area Studies (FLAS) Fellowships for Undergraduates. The Center offers a funding opportunity for students who are U.S. citizens or permanent residents, and are able to study a Southeast Asian language (Filipino, Indonesian, Thai, or Vietnamese) at the second year level or beyond. An academic year fellowship covers $10,000 toward tuition and a $5,000 stipend. Contact the Center for details.

Overseas Study. The University of Michigan’s Center for Southeast Asian Studies is a member of several Southeast Asian Language consortia that offer advanced language training abroad in Indonesia, Thailand, the Philippines, and Vietnam. The University of Michigan also belongs to the Consortium for International Educational Exchange (CIEE) that offers possibilities for study abroad in Thailand and Vietnam. It is also a member of the Southeast Asian Summer Studies Institute (SEASSI) held each summer at the University of Wisconsin–Madison. For further information on summer programs, please consult our website: ii.umich.edu/cseas/academics/languageprograms#summerlanguageprograms

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**Statistics**

311 West Hall
1085 South University Avenue
(734) 647-8192 (phone)
(734) 763-4676 (fax)
www.stat.lsa.umich.edu

The field of Statistics offers a variety of exciting career opportunities. Statistics deals with methods for the collection, visualization, modeling and analysis of data. Massive amounts of data are now routinely collected in business, health, environment, engineering and social sciences. Statistics is the science that transforms these data into information that is critical for decision making. Statistics has always played a major role in marketing, public policy, social and health sciences through the design and analysis of surveys. More recently, statistical methods have been an important part of advances in medicine and engineering such as genetics, tomography, speech recognition, computational vision, and so on. Statistics is a vibrant field that is embarking on an even more exciting journey as we move ahead to the data-rich, information era of the 21st century. We invite you to be join us on this journey and share in the excitement!

The Department of Statistics offers an undergraduate major in Statistics that consists of courses in applied and theoretical statistics, mathematics and computer science. Two undergraduate minor programs are also available: Applied Statistics and Statistics minors. The department also is the administrative home of the interdepartmental program in Informatics.

**Informatics**

*May be elected as an interdepartmental major*

Informatics is an interdepartmental program combining study in the College of Literature, Science, and the Arts, the College of Engineering, and the School of Information. Informatics students select one of five tracks relating to information processing and analysis. The Data Mining and Information Analysis track of the Informatics Program focuses on quantitative data analysis using statistical, mathematical, and computational techniques. Other tracks allow students to focus on social aspects of information processing, on computing and systems infrastructure, or on applications of informatics to specific areas.

The Informatics major is administered by the Department of Statistics. Informatics majors may not use any STATS courses toward the LSA Area Distribution requirement. Students interested in the Informatics major should consult the "Informatics" section of the Academic and Requirements website.

**Statistics**

*May be elected as a departmental major*

The 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.

**Prerequisites to the Major.**

- MATH 215 and 217 (MATH 417 may not be substituted for MATH 217)
- EECS 182 (preferred) or EECS 183
- STATS 250 or 412

**Requirements for the Major.** The Statistics major consists of at least 26 credits, and must include the following:

1. **Core Statistics courses:** STATS 425, 426, 500.
2. **Core Computing course:** STATS 406.
3. **Additional Statistics courses:** At least one of STATS 415, 430, 470, or 480.
4. **Capstone Course:** STATS 485.
5. **Elective courses in Statistics, Mathematics, or EECS.** These are advisor approved electives. The approved courses include:
   - STATS 404, 408, 449
   - any 500+ level Statistics courses
   - any additional courses from #3 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.

**Honors Plan.** Any student who has maintained an overall grade point average of at least 3.4 through the sophomore year may apply for admission to the Honors plan program. Such application is made through a Statistics Department undergraduate department advisor. Students in the Honors program must complete the regular major 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 under the direction of a member of the faculty. This additional requirement should be arranged and discussed with a Statistics Department undergraduate department advisor.

**Advising.** Normally, most statistics courses are elected after an introductory mathematics sequence has been completed or after consulting a department undergraduate advisor. See Department website for contact information:

www.lsa.umich.edu/stats/undergraduate/advising

**Statistics Minors**

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:

www.lsa.umich.edu/stats/undergraduate/advising

Computing is central to current statistical practice, both in and beyond universities. Modern statistical techniques often lend themselves to being understood in terms of algorithms and computation. Accordingly, instruc-
1. **Requirements for the Minor:** At least 15 credits of courses, to be chosen and analysis of quantitative studies as part of their professional careers or departments of courses serving statistics minors are increasingly integrating computation and algorithms into their instruction. We expect students to undertake the computing requirement prior to declaring a minor in the department.

**Applied Statistics**

*The Applied Statistics minor is not open to students with a Statistics major or any other minor in Statistics.*

The Applied Statistics minor program is designed to introduce students to applied statistical methodology. The minor will provide 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 applied fields.

**Prerequisites to the Minor**

1. MATH 115
2. One of: EECS 183 or 285, or SI 106, or ENGR 101

**Requirements for the Minor:** At least 15 credits of courses, to be chosen from the following categories as stated:

1. **Core Courses:** STATS 250 (or 350) and 401
2. **Elective Statistics Courses:** At least three of the following courses: STATS 403, 408, 449, 470, 480. Advanced Statistics courses may be included with prior approval of a Statistics Department undergraduate department advisor.

**Constraints:** The following courses may not be used as electives for the Applied Statistics minor: STATS 400, 404, 412, 489, 499.

**Statistics**

*The Statistics minor is not open to students with a Statistics major or any other minor in Statistics.*

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.

**Prerequisites to the Minor**

1. MATH 215
2. One of: EECS 183 or 285, or SI 106, or ENGR 101

**Requirements for the Minor:** At least 15 credits of courses, to be chosen from the following categories as stated:

1. **Core Courses:** STATS 250 (or 350) and 425, or STATS 412 and 425.
2. **Elective Statistics Courses:** At least three additional 400-level STATS courses to bring the credit total to 15, chosen in consultation with, and approved by, a Statistics Department undergraduate department advisor.

**Constraints:** The following courses may not be used as electives for the Statistics minor: STATS 400, 404, 412, 489, 499.

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**Gayle Morris Sweetland Center for Writing**

1310 North Quad
105 South State Street
(734) 764-0429 (phone)
(734) 763-9148 (fax)
www.lsa.umich.edu/sweetland

**Not a major**

At the University of Michigan, writing plays a critical role in students’ thinking and learning, beginning with the first year and continuing into advanced writing in the disciplines. Students’ ability to write prose characterized by analytic complexity, clarity; appropriate organization and development of ideas, effective use of evidence, cogency, and rhetorical awareness is crucial to their success both during their undergraduate years and beyond.

The Sweetland Center for Writing exists to support student writing at all levels and in all forms and modes, including writing from multilingual and international undergraduate student writers. To accomplish this mission, Sweetland:

- helps students choose their first writing course;
- approves courses to satisfy the First-Year Writing Requirement;
- approves courses from other institutions that satisfy the First-Year Writing Requirement for transfer students;
- approves courses to satisfy the Upper-Level Writing Requirement;
- operates a Writing Workshop for both undergraduate and graduate students;
- operates a Writing Workshop for undergraduate international and multilingual students;
- operates four Peer Tutoring Centers, the Synchronous Online Writing Lab (SyncOWL) and the Online Writing Lab (OWL) for undergraduates;
- trains undergraduates to become Peer Tutors in WRITING 300: Seminar in Peer Tutoring and WRITING 301: Directed Peer Tutoring;
- teaches:
  - WRITING 100: Transition to College Writing
  - WRITING 120: College Writing for Multilingual Writers
  - WRITING 200: New Media Writing
  - WRITING 201: New Media Writing Mini Course
  - WRITING 220: Introduction to the Minor in Writing

- WRITING 240: Academic Communication for Multilingual Students
- WRITING 302: Global Communication: Rhetorical Approaches to Multilingual Conversation
- WRITING 340: Disciplinary Writing for Multilingual Students: Vocabulary and Grammar in Context
- WRITING 350: Excelling in Upper-Level Writing
- WRITING 400: Advanced Rhetoric and Research
- WRITING 410: Quantitative Analysis and Writing in the Disciplines
- WRITING 420: Minor in Writing Capstone
- WRITING 430: The Teaching of Writing
- WRITING 630: Advanced Writing for Graduate Students
- WRITING 993: Teaching Writing in the Disciplines
- offers the Minor in Writing
- sponsors first-year and upper-level writing prizes.

**Writing Support for Students, including International and Multilingual Undergraduates**

The Sweetland Center for Writing aims to help writers become more confident, skilled, and knowledgeable about writing and the subjects they write about. Sweetland faculty and peer tutors supplement formal writing instruction with one-to-one consultations in the Writing Workshop, Peer Tutoring Centers, Online Writing Lab (OWL), and Synchronous Online Writing Lab (SyncOWL).

**Writing Workshop.** Writing Workshop, held in 1310 North Quad, offers free half-hour one-to-one consultations with Sweetland writing instructors for students who want feedback on their writing. Make an appointment on our website, www.lsa.umich.edu/sweetland.

**Peer Tutoring.** The Sweetland Center for Writing also operates four Peer Tutoring Centers located in 6219 Angell Hall, 1136 Shapiro Undergraduate Library, 1059 Alice Lloyd Hall, and 2322 Bursley Hall on North Campus where students can get writing help on a walk-in basis from Sweetland-trained undergraduates.

**Synchronous Online Writing Lab (SyncOWL) and Online Writing Lab (OWL).** Peer Tutors also provide feedback on writing online in real-time via SyncOWL and within 72 hours for papers submitted to the OWL. sitemake.umn.edu/sweetlandwritinghelp/home
Minor in Writing

The Minor in Writing is designed for undergraduate students who are interested in developing their disciplinary and professional writing abilities while pursuing majors across the liberal arts and sciences. This minor complements students' primary course of study by promoting discipline-specific writing competence, expertise in new media, and rhetorical awareness across a range of genres and modes. This minor is particularly advantageous for students who may already be completing writing-related coursework (or have an interest in completing such coursework) and wishes to earn a credential that certifies their writing expertise to prospective employers and graduate programs.

Students completing the Minor in Writing develop an electronic portfolio of the writing they produce throughout their undergraduate career. The e-portfolio provides students with the opportunity to reflect on their development as writers, demonstrate their proficiency in visual rhetoric and new media writing, and showcase their writing abilities. Students have the opportunity to create an e-portfolio in WRITING 220 and another one in WRITING 420 that builds on the skills they've acquired.

Students who complete the Minor in Writing will demonstrate the ability to:

- Produce complex and well-supported arguments that matter in academic contexts.
- Use flexible strategies for organizing, revising, and proofreading writing of varying lengths and genres.
- Identify and implement rhetorical choices responsive to the demands of specific genres, audiences, and rhetorical situations, both academic and non-academic.
- Compose in a variety of modes, including a range of new media.
- Identify the expectations that characterize writing in their major, and use this knowledge to write effectively in a range of genres in that discipline.
- Use meta-language regarding writing processes, rhetorical choices, genre expectations, and disciplinary discourse to discuss writing-in-progress and writing development over time.
- Collaborate with other writers to improve writing-in-progress and produce co-authored documents.

Prerequisites to the Minor: Students must have satisfied the First-Year Writing Requirement with a final grade of C or higher, have declared a major by the end of the term they apply to the Minor in Writing, and have at least three full terms remaining in their program. Transfer students who satisfy the FYWR with a transfer course approved by Sweetland will need to show proof of receiving a grade of C or higher.

Students must apply to and be accepted by the Sweetland Center for Writing to be declared in the minor. Students must be able to enroll in WRITING 220 in their first term in the minor.

Requirements for the Minor: At least 15 credits of courses. Students must complete the following courses, with an average minimum GPA of 3.3 for courses applied toward the minor:

1. WRITING 220: Introduction to the Minor in Writing (3), which must be taken in the student’s first full semester after being accepted into the minor.

2. One of the following courses:
   - WRITING 200: New Media Writing (only when taken for 3 credits)
   - ENGLISH 225: Academic Argumentation (4)
   - ENGLISH 229: Professional Writing (4)
   - ENGLISH 325: Art of the Essay (3)

3. One Upper-Level Writing Requirement course in the major, which may also satisfy a requirement for the major (3-4)

4. One additional Upper-Level Writing Requirement course which cannot satisfy a requirement for the major (3-4)

5. WRITING 420: Minor in Writing Capstone (3)

Advising. Students will develop their initial course plans for the minor in Writing within the context of the gateway course (WRITING 220). Ongoing advising regarding course selection for the minor will be handled by Sweetland lecturers. Students will complete their electronic portfolio within the context of the capstone course (WRITING 420). Ongoing advising regarding progress-to-degree will be handled by Sweetland’s student services staff using the student online file and degree audit.

General questions about the minor should be sent to sweetlandwritingminor@umich.edu. To schedule an appointment with an advisor regarding course selection and progress-to-degree, schedule an appointment online by selecting Minor in Writing from the drop down menu in Sweetland’s scheduling system.

Admission Policies and Application Procedures

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 for the application:
- Applicants must have completed their First-Year Writing Requirement with a final grade of C or higher. Transfer students who completed the FYWR with a transfer course approved by Sweetland will need to show proof of receiving a grade of C or higher.
- Applicants must have at least three full terms remaining in their program.
- Applicants must be able to enroll in WRITING 220 in their first semester in the Minor.

Materials for application:
- Completed application form available on Sweetland’s website
- Letter of interest
- Writing sample from any college course
- Unofficial U-M transcript (available through Wolverine Access)

Admissions process and criteria:
- Submit all materials by the posted deadline. The admission process is competitive and space is limited.
- Application materials are reviewed by a committee of Sweetland faculty, who make admissions recommendations based upon the quality of the writing sample, the reasons given for applying to the minor and student’s overall academic performance.
- Students are notified of the decision via email prior to the beginning of registration.

Teacher Education Program

The U-M School of Education offers undergraduate certification programs in elementary and secondary certification. The undergraduate elementary teacher education program prepares you to teach in:
- Grades K-8, in self-contained classrooms with all subjects
- Grades 6-8, in subject-area classrooms corresponding to your teaching major and/or minor

The secondary teacher education program prepares you to teach in:
- Your teaching major and/or minor in grades 6-12
Elementary Program. Students interested in earning an elementary school teaching certificate transfer to the School of Education, usually at the beginning of the junior year, for both a bachelor's degree and certification.

Secondary Program. Students interested in secondary education can choose to remain in their unit (i.e., LSA) for their BA/BS degree and simultaneously complete certification requirements. Alternatively, secondary students can transfer to the School of Education, usually at the beginning of the junior year, and complete requirements for an education degree with a teaching certificate.

All prospective students are encouraged to discuss their degree and certification interests with advisors in both LSA and the School of Education early in their degree program to ensure that they have a thorough understanding of both degree and teacher certification requirements. Program requirements are subject to change.

To schedule an appointment with a School of Education academic advisor, please email soe.advising@umich.edu or call the Teacher Education office at (734) 615-1528. Please provide your name, UMID, phone number, and times you are generally available (for example, Fridays 11 a.m. – 3 p.m.). Advising appointments are available Monday – Friday, 9 a.m. – 5 p.m.

Application. Students in all schools and colleges desiring teacher certification must apply to the Teacher Education program. Students must have junior standing (a minimum of 54 credits) at the time of enrollment in the certification program.

The application deadline for fall term admission is January 15. Scholarships are only available to those applying for fall term admission. All elementary applicants must apply for fall term admission.

For secondary applicants only:
Secondary applicants who are ready to begin the program immediately have the option of applying for winter term admission. The application deadline for winter term admission is October 15. There are no scholarship opportunities for those who apply for winter term admission.

Applications received after the deadline may be considered on a space available basis. All students must obtain the application to the certification program from the Office of Undergraduate Admissions website at: www.admissions.umich.edu/applying

Admission Guidelines
Admission decisions are made on an individual basis and all available information is considered. The criteria are:

A. a minimum 2.5 overall grade point average with particular attention given to required courses* for teacher certification.

*Prior to application it is desirable for students to have taken the following: a course in English composition, an introductory psychology course (PSYCH 111 or equivalent); course work toward the teaching major and minor, and course work toward the distribution requirements (i.e., humanities, natural science, and social science for secondary certification, as well as creative arts and mathematics for elementary certification). Although these courses are required to complete the certification program, they are not required prior to admission.

B. Prior experience with children (e.g., tutor, camp counselor, teacher aide, participation in University of Michigan Project Community or Project Outreach).

C. Three letters of recommendation: one from a college or university instructor who can address your academic abilities and two from individuals capable of assessing your ability and potential to become a successful teacher. The first letter must come from a college or university instructor in your teaching major.

D. a personal statement and, if secondary, a statement related to your proposed major.

E. résumé.

Requirements for Teacher Certification
Grade Point Averages and Total Credits.

A. An overall GPA of 2.0 based on University of Michigan course work only.
B. A GPA of 2.0 in the teaching major and minor based on University of Michigan course work only.
C. A minimum of 130 credits.

Distribution:
A. If secondary education:
At least 8 credits (from at least two departments) from each of the areas of humanities (including an approved freshman composition course), natural science, and social science (including PSYCH 111) as defined on the LSA website. Courses in LSA Course Catalog count as designated (e.g., HU, NS, SS). This requirement is 12 credits (from at least two departments) in each area if the student transfers into the School of Education for their degree.

Note: This is the School of Education certification distribution requirement, which is different from the LSA distribution requirement. The same courses may be used for each, but the distribution requirement for each school must be satisfied.

B. If elementary education:
1. Creative Arts. 9 credits including two of the following 3 courses: EDUC 427 (3) Art Methods, MUSED 408 (3) Music Methods, PHYSED 336 (3) Children’s Rhythms (or PHYSED 255) and 3 credits of electives to meet the requirement.
2. Humanities. 9 credits including English Composition, Philosophy, and one elective.
3. Mathematics. 9 credits including MATH 385, MATH 489, and one elective.
4. Natural Sciences. 9 credits including a minimum of 3 credits in each of the following: biological science, physical science, and earth science.
5. Social Sciences. 9 credits including one course in U.S. history (HISTORY 260 or 261), introductory psychology (PSYCH 111), and one elective designated SS in the LSA Course Catalog.

Teaching Major and Minor Options: Students may begin at any time to fulfill the requirements of their specific teaching major and minor. Courses elected to satisfy LSA degree requirements (distribution and major) may be used to meet the requirements for the teaching major and minor. Please refer to the School of Education website for specific teaching major/minor requirements.

A. Elementary Education: Consult the School of Education website and supplemental materials, such as the school’s major/minor self-advising handouts which are available at: soe.umich.edu/academics/bachelors_degree_programs/ute/

B. Secondary Education: LSA students who are candidates for a secondary teaching certificate must select a teaching major and minor. The teaching major is usually the same as the major for the BA/BS degree although the requirements for each may differ. A teaching minor is associated with the teaching certificate and might not be the same as a minor in LSA. The requirements for the various teaching majors and minors are available online at: soe.umich.edu/academics/bachelors_degree_programs/ute/

The required professional education methods course must be completed in the teaching major. Methods courses must be elected under the education department number.

Either the teaching major or minor must be in an area in which directed teaching is available.

Departmental Secondary-Level Teaching Majors and Minors
Arabic (teaching major only)
Biology
Chemistry
Computer Science (teaching minor only)
Professional Requirements

Because the sequence of teacher certification courses is structured, it is necessary for prospective teacher certification students to carefully plan their course schedules prior to completion of the sophomore year. Students with education courses completed at another institution must consult the School of Education Teacher Education office regarding the professional requirements. Education courses may not be elected on a pass/fail basis.

Elementary Education

1. Required Courses for Fall Term in First Year in Program:
   - EDUC 307 Practicum in Teaching Methods
   - EDUC 391 Educational Psychology and Human Development
   - EDUC 392 Multicultural Society
   - EDUC 401 Developmental Reading and Writing Instruction in the Elementary School
   - EDUC 406 Teaching in the Elementary School
2. Required Courses for Winter Term in First Year in Program:
   - EDUC 392 Education in a Multicultural Society
   - EDUC 403 Individualizing Reading and Writing Instruction in the Elementary Classroom
   - EDUC 406 Teaching in Elementary School
   - EDUC 431 Teaching of the Social Studies in the Elementary School
   - EDUC 307 Practicum in Teaching Methods
3. Required Courses for Fall Term in Second Year in Program:
   - EDUC 421 Teaching of Science in the Elementary School
   - EDUC 411 Teaching Elementary School Mathematics
   - EDUC 490 Special Topics Courses
   - EDUC 307 Practicum in Teaching Methods
4. Required Courses for Winter Term in Second Year in Program:
   - EDUC 301 Directed Teaching in the Elementary Grades
   - EDUC 303 Seminar: Problems and Principles of Elementary Education
   - EDUC 490 Special Topics Courses

Secondary Education

Winter cohort is for those who major in mathematics, the sciences, and world languages.

Eligibility and social studies majors may choose either fall or winter cohort. Eligibility to begin the program in fall or winter will be determined by progress toward completion of the major, minor and distribution courses; by random assignment.

Fall cohort is for those who major in physical education and the other half of those who major in English and social studies.

1. Required Courses for First Semester in Program:
   - EDUC 307 Practicum in Teaching Methods
   - EDUC 392 Education in a Multicultural Society
   - EDUC 402 Reading and Writing in the Content Areas
2. Required Courses for Second Semester in Program:
   - EDUC 307 Practicum 2
   - Methods for major (various course numbers)
   - EDUC 391 Educational Psychology and Human Development
3. Required Courses for Third Semester in Program (Student Teaching):
   - EDUC 302 Student Teaching in the Secondary School
   - EDUC 304 Seminar: Problems and Principles of Secondary Education
   - EDUC 490 Special Topics Courses

For information on the prerequisites to student teaching, students should consult the School of Education website at: www.soe.umich.edu

Full-time student teaching is required.

Other Program Requirements

In addition to the requirements of the Teacher Education program, teaching interns must comply with the following State of Michigan certificate requirements.

CPR and First Aid. Michigan Public Act 18 of 2003 requires all teacher candidates to be certified in CPR (Child and Adult) and First Aid prior to being recommended for teacher certification. The legislation stipulates that this training must be completed through the American Red Cross or American Heart Association.

Criminal Background Check and Fingerprinting. Michigan’s “School Safety” legislation (2005) requires that all potential employees of public schools in the State of Michigan be fingerprinted and subjected to a criminal background check prior to hire. A teacher candidate can be denied initial certification, or certification can be delayed, if his or her background reveals a felony or certain enumerated misdemeanor convictions.

Michigan Test for Teacher Certification (MTTC). The MTTC Basic Skills and Subject Area tests are designed and administered by the Michigan Department of Education and are meant to ensure that each certified teacher has the necessary basic skills and subject area knowledge to serve in Michigan schools.

Basic Skills Test: Interns in our teacher education programs must take and pass all three sections (reading, math, and writing) of the Basic Skills test prior to the end of their first term in their professional program.

Subject Area Tests: Before being recommended to the state for teacher certification, secondary teaching interns must take and pass the subject area tests in their teaching major(s). As a secondary teaching intern, you can expect to take at least three MTTC tests while in our program. Elementary teaching interns must take and pass the elementary content test and subject area tests in their teaching major(s).

For further information, including registration materials, please visit the MTTC website: www.mttc.nesinc.com.

Academic Advising. To schedule an appointment with a School of Education academic advisor, please email soe.advising@umich.edu or call the Teacher Education office at (734) 615-1528. Please provide your name,
UMID, phone number, and times you are generally available (for example, Fridays 11 a.m. – 3 p.m.) Advising appointments are available Monday – Friday, 9 a.m. – 5 p.m.

Prospective Students: All prospective students are encouraged to discuss their degree and certification interests with advisors in both LSA and the School of Education early in their degree program to ensure that they have a thorough understanding of both degree and teacher certification requirements. Program requirements are subject to change.

Current Students: To ensure timely completion of program, teacher certification students are required to complete an audit appointment with a School of Education certification advisor no later than the term of certification completion. The audit appointment will include a complete review of all coursework and other program requirements.

Teacher certification students are also encouraged to meet regularly (at least once a year) with a certification advisor throughout their time in the program.

Certificate Fee. The State of Michigan requires payment of a fee for the provisional teaching certificate. The fee must be paid before the certificate will be granted. For current Michigan Department of Education certificate fees, go to: www.michigan.gov/mde and search under “certification fee.”

The University Courses Division is also the home of courses for Michigan University Courses Division houses several First-Year Seminars each term (taught by emeriti and non-LSA faculty). These unique low enrollment classes (maximum of 20 students) are open to all first-year students. They are intended to facilitate deeper learning through more active participation and increased opportunities for interaction between student and teacher as well as dialogue among students. Students not only experience a stimulating introduction to the intellectual life of the University through engaging subject matter; some may discover a subject they wish to pursue in further courses. It is hoped that students who take a seminar will find in it a sense of intellectual and social community that will ease the transition to a large university. All First-Year Seminars can be used to complete part of the College’s Area Distribution requirements: Humanities (UC 150); Social Sciences (UC 151); Natural Sciences (UC 152); and Interdisciplinary (UC 154).

Sophomore Year Initiative. The Dean’s Office also administers the Sophomore Year Initiative, a set of courses and activities whose goal is to help sophomores map the College curriculum and explore the terrain of the liberal arts. Sophomore Initiative courses focus on the analytical skills and competencies essential to success in any career. They provide discipline-specific and multi-disciplinary investigations of natural science, social science, and humanities approaches to issues, and offer students rich opportunities to discover their intellectual passions while developing mastery in critical thinking and problem solving.

Women’s Studies

Women’s Studies offers students the opportunity to study the systems of gender, politics, and representation that shape women’s lives. As a discipline, Women’s Studies asks:

• How does being a woman affect one’s participation in the family, economy, politics, art, and literature?
• How do language, belief, and visual representation convey meaning about women’s and men’s status in society?
• How has that status changed historically?
• How does the experience of women vary by class, race, nationality, and sexual orientation?

Questions like these have produced an extensive body of scholarship that puts gender at the center of analysis.

The Women’s Studies department is a diverse intellectual community dedicated to excellence through feminist research, teaching, and activism. It seeks to build interdisciplinary collaborations among faculty and students that bridge gender, ethnic, economic, religious, and national divides; create new knowledge about women, gender, race, and sexuality; challenge unequal distributions of power; and improve the lives of all women and men.

Women’s Studies Major

May be elected as a departmental 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.

Prerequisite to the Major. WOMENSTD 240.

Requirements for the Major. 33 credits (at least 25 must be at the 300-level or above) distributed as follows:

1. Courses in Women’s Studies: Majors must complete 27 credits in areas A through E below.

   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:
      WOMENSTD 351. Leading Feminism
      WOMENSTD 404 / HS 404. Gender Based Violence: From Theory to Action
      SOC 389, Project Community: Gender and Sexuality section
   D. Senior Seminar: WOMENSTD 440. Senior Capstone.
   E. Electives: Additional WOMENSTD courses to bring the total credits for the major up to 27 (excluding prerequisites and cognates).

2. Cognates: Two upper-level courses (for a total of six credits), neither in WOMENSTD nor cross-listed, are required. In order to ensure that the interdisciplinary Women’s 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 but should provide supporting skills or contexts for the study of women.

Areas of the Women’s 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 the 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 and 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. Interpersonal 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 analysis 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.

Advising. 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:
www.lsa.umich.edu/women.

The Women’s Studies department advisors invite students to make an appointment to discuss how specific study abroad options would fit into Women’s Studies major and minor requirements.

Honors Plan: Summary. The Women’s Studies Honors Plan provides an opportunity for majors to complete a comprehensive, original independent project under the guidance of a faculty mentor as the culmination of their undergraduate studies. Students should choose topics on which they have already done some academic work. 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 WOMENSTD 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 Plan Advisor in Women’s Studies. Honors applications are due December 1 of the student’s junior year. For more information, please see:
www.lsa.umich.edu/women/undergraduate/honorsprogram

Eligibility. Women’s Studies majors who have maintained an overall GPA of at least 3.4 and a 3.5 GPA in Women’s Studies (including the prerequisite) may apply for an Honors plan. Applicants must have completed or plan to complete WOMENSTD 240 (Introduction to Women’s Studies) and WOMENSTD 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.

Women’s Studies Minors

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:
www.lsa.umich.edu/women.

Gender and Health

This minor allows students to develop a minor major 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. Topics explored in this minor include, for example, the relationship between health and inequality, the gendered impacts of violence on men and women, childbirth in society, mental health, and the global AIDS epidemic. 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, health policy domestically and transnationally, and the meaning of health itself.

Prerequisites to the Minor: None.

Requirements for the Minor: None.

1. Foundational Course: WOMENSTD 220/NURS 220 (Perspectives in Women’s Health)
Gender, Race, and Nation
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.

Prerequisites to the Minor: None.

Requirements for the Minor: Five courses totaling at least 15 credits, to be chosen from the following categories as stated:

1. **Foundational Course.** One course chosen from:
   - WOMENSTD 240. Introduction to Women's Studies
   - WOMENSTD 250. Gender, Race, & Nation

2. **Feminist Theory.** One course chosen from:
   - WOMENSTD 330. Feminist Thought
   - WOMENSTD 422. Feminist Political Theory
   - WOMENSTD 455. Feminist Theory in Anthropology

3. **Electives.** Three electives (9 credits) that focus on gender, race and nation (At least two courses must be upper-level courses, with at least one at the 400-level), chosen from:
   - WOMENSTD 212. The Global HIV/AIDS Epidemic
   - WOMENSTD 233. Genes and Society
   - WOMENSTD 239. Gender, Sexuality, and Health in America
   - WOMENSTD 291. Introduction to the Psychology of Women and Gender
   - WOMENSTD 296. Gender, Sex Differences, and Addiction: Girls Gone Wild
   - WOMENSTD 300. Men's Health
   - WOMENSTD 307. Critical Theory in Medicine and Healing
   - WOMENSTD 320. Gender and Mental Health
   - WOMENSTD 324. Childbirth and Culture
   - WOMENSTD 328. Women, Agency and Sexual Safety
   - WOMENSTD 342. Special Topics in Gender and Health
   - WOMENSTD 350. Women and the Community
   - WOMENSTD 356. Health in America: Patterns, Experiences, Inequalities
   - WOMENSTD 365. Global Perspectives on Gender, Health, and Reproduction
   - WOMENSTD 394. Adolescent Sexuality
   - WOMENSTD 400. Women's Reproductive Health
   - WOMENSTD 402. Gender and Health Policy
   - WOMENSTD 404. Gender Based Violence: From Theory to Action
   - WOMENSTD 405. Pharma, Pills, & Policy
   - WOMENSTD 407. Intersexualities
   - WOMENSTD 410. Reproductive Justice: Legal and Ethical Issues
   - WOMENSTD 412. Reproductive Health Policy in a Global Context
   - WOMENSTD 421. Gender and Sport
   - WOMENSTD 432. Advanced Topics in Gender and Health
   - WOMENSTD 438. Gender, Health, and Well-Being in Africa
   - WOMENSTD 443. Pedagogy of Empowerment: Activism in Race, Gender, and Health
   - WOMENSTD 452. Sexuality and Science
   - WOMENSTD 494. Adolescent Sexuality
   - WOMENSTD 498. Gender and the Individual
   - WOMENSTD 499. Psychology of Women

**Upper-Level Seminars:** WOMENSTD 328, 342, 365, 405, 407, 412, 438, 443, 494.

**Courses with a transnational, global, historical perspective:** WOMENSTD 296, 307, 324, 328, 365, 412, 438.
Lesbian, Gay, Bisexual, Transgender, Queer (LGBTQ) and Sexuality Studies

The minor in Lesbian, Gay, Bisexual, Queer, Transgender 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, the minor acquaints students with the history of sexuality and understanding the formation of sexual identities and sexuality.

Prerequisites to the Minor: None.

Requirements for the Minor: Five courses totaling at least 15 credits, to be chosen from the following categories as stated:

1. Foundational Course: WOMENSTD 245 (Introduction to Lesbian, Gay, Bisexual and Transgender Studies) or WOMENSTD 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.

WOMENSTD 225. Psychology of Human Sexuality
WOMENSTD 239. Gender, Sexuality, and Health in America
WOMENSTD 245. (when not taken as the foundational course)
WOMENSTD 295. (when not taken as the foundational course)
WOMENSTD 308. Law and the Politics of Sexuality
WOMENSTD 327. History of Sexuality
WOMENSTD 341. Topics in LGBTQ Studies
WOMENSTD 348. Sociology of Sexuality
WOMENSTD 352. Gender, Sexuality, and Power in Pre-Modern China
WOMENSTD 366. Sex and Sexuality in U.S. Popular Culture
WOMENSTD 390. Homophobia in the Black World
WOMENSTD 394. Sex, Sexuality, and Public Policy
WOMENSTD 407. Intersexualities
WOMENSTD 411. Rednecks, Queers, and Country Music: Identity and Social Status in Popular Culture
WOMENSTD 428. Sex Panics in the U.S. and UK
WOMENSTD 431. Advanced Topics in LGBTQ Studies
WOMENSTD 446. Sex in the City: Urban Geography and Sexual Locations
WOMENSTD 450. Popular Music, Gender, and Sexuality
WOMENSTD 452. Sexuality and Science
WOMENSTD 465. Sociological Analysis of Deviance
WOMENSTD 470. Gender and Sexuality in India
WOMENSTD 471. Gender and Sexuality in Pre-Modern Islam
WOMENSTD 494. Adolescent Sexuality

Other courses with over half their content devoted to LGBTQ issues may be approved for the minor by the Women’s Studies Undergraduate Committee, and these will be listed on a special section of the Women’s Studies web page.

Writing Center (See Sweetland Center for Writing)