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## Course Numbers and Designators
Course numbers reflect the level of difficulty of a course. Generally, courses numbered 1xxx are for undergraduates in their first year of study, courses numbered 2xxx are for undergraduates in their second year of study, courses numbered 3xxx are for undergraduates in their third year of study, and 4xxx are for undergraduates in their fourth year of study. Some courses require prerequisite coursework or advanced class status for entrance while others do not. Students should plan their programs carefully to complete courses in the proper sequence. Students who have not successfully completed the prerequisite course(s) may be administratively dropped from a course.

The current Class Schedule contains information on course prerequisites, hours and days, and room assignments. In connection with course numbers, disciplines and programs are identified by a two-, three-, or four-letter designator prefix (e.g., Ed for Education, Pol for Political Science, LAAS for Latin American Area Studies).

## Symbols, Abbreviations, and Punctuation
The following symbols, abbreviations, and punctuation are used throughout the course descriptions in lieu of page footnotes:

- **1201-1202-1203**  
  A *hyphen* between course numbers indicates a sequence of courses that must be taken in the order listed. The first course in the sequence is a prerequisite for the second course, and the second course in the sequence is a prerequisite for the third course.

- **1201, 1202, 1203**  
  A *comma* between course numbers indicates a series of courses that may be entered any semester.

- **Honors**  
  “Honors:” at the beginning of a course title indicates an Honors course.

- **Sci-L**  
  Courses that meet specific general education requirements are designated as FYS, CW, FL, M/SR, ArtP, Hist, SS, Hum, FA, Sci, Sci-L, HDiv, Envt, IP, E/Cr. (See page 55 for more information about general education requirements.)

- **cr**  
  Credits per semester.

- **#**  
  Approval of the instructor is required for registration.

- **prereq**  
  Before enrolling in some courses, students must have successfully completed certain other courses, or possess some particular qualification or class standing, known as a “prerequisite” (prereq). Students taking one or more courses as a prerequisite for a second course may register for the second course only after they have successfully completed the prerequisite course(s). If no prerequisites are listed, there are none for the course. A prerequisite listed by number only (e.g., prereq 3105) is in the same discipline as the course being described.

- **coreq**  
  Students must be enrolled in the corequisite (coreq) course(s) at the same time. If no corequisites are listed, there are none for the course. A corequisite course listed by number only (e.g., coreq 3105) is in the same discipline as the course being described.

- **prereq or coreq**  
  Students must either successfully complete the prerequisite course, OR may enroll in the pre/corequisite course concurrently.

- **,**  
  In prerequisite and corequisite listings, a comma means “and.”

- **=**  
  Credit will not be granted if credit has been received for the course listed after this symbol (e.g., =[Soc 3602]).

- **∆**  
  Approval of the discipline offering the course is required for registration.

- **@**  
  Approval at the college level (i.e., a form with appropriate signatures) is required for registration.

- **Same as**  
  “Same as” courses meet three qualifications: 1) have content sufficient in two (or more) identified disciplines to count in each; 2) have identical course descriptions, published in each associated discipline; 3) are taught at the same time, in the same classroom, by the same instructor.

- **Cluster**  
  Some courses are grouped into “clusters” because they have common themes or fulfill common requirements. Most clusters are headed by a paragraph identifying the shared elements of the courses.

Programs and courses listed in this PDF are current as of fall 2009. The most current version of all UMM course descriptions can be found online at [onestop2.umn.edu/courses/mo/designators.jsp](http://onestop2.umn.edu/courses/mo/designators.jsp).
African American Studies (AfAm)

African American Studies (AfAm)

Interdisciplinary Studies—Academic Dean

African American experience and culture are central to American experience and culture. The African American studies minor allows students of all racial and ethnic identities both to concentrate on African American issues and to integrate their understanding of those issues into the broader context of American and African history and culture. The minor offers an interdisciplinary and interdivisional curriculum that enables students to explore a variety of intellectual approaches and to make methodological and thematic connections and comparisons among those several approaches.

Objectives—The objectives of the African American studies minor are to

• familiarize students with the variety, depth, and significance of African Americans’ contributions to American culture;
• enable students to see and appreciate the many African American points of view of history, society, politics, literature, art, and music;
• help students connect the African American experience to the broader context of Africa and the African diaspora;
• develop students’ understanding of the nature of race and the dynamics of race and racism, particularly in the United States; and
• give students a grasp of some of the methodological and intellectual approaches to a broad and multifaceted area of study.

African American Studies Minor

Minor Requirements

Courses for the minor may not be taken S-N unless offered S-N only. No grades below C- are allowed.

A minimum GPA of 2.00 is required in the minor to graduate. The GPA includes all, and only, University of Minnesota coursework. Grades of “F” are included in GPA calculation until they are replaced.

Courses for the Program

Minor Requirements

Students must take a minimum of 24 credits in at least three different disciplines. At least 16 of the 24 credits must be devoted to primarily African American content.

Courses with PRIMARILY African American content

Take 16 or more credit(s) from the following:
ArtH 3241—African American Art, FA (4 cr)
Engl 2041—Introduction to African American Literature, HDiv (4 cr)
Engl 3331—African American Literature, HDiv (4 cr)
Engl 3522—Harlem Renaissance, HDiv (4 cr)
Hist 3356—Civil Rights Movement, 1954–74, Hist (4 cr)
Soc 3251—African Americans, HDiv (4 cr)

Courses with PARTIAL African American content

Take no more than 8 credit(s) from the following:
Engl 3301—U.S. Multicultural Literature, HDiv (4 cr)
Fren 1311—West African Francophone Cinema for Non-Majors, IP (4 cr)
Fren 3041—Francophone Studies: Francophone Worlds, IP (4 cr)
Fren 3042—Francophone Studies: Contes francophones, IP (4 cr)
Fren 3043—Francophone Studies: Littérature migrante, IP (4 cr)
Hist 3301—Red, White, and Black: Race/Culture in Early America, HDiv (4 cr)
Pol 3262—Minorities and Public Policy, HDiv (4 cr)
Soc 2101—Systems of Oppression, HDiv (4 cr)
Soc 3121—Sociology of Gender, HDiv (4 cr)
Soc 3141—Sociology of Deviance, E/CR (4 cr)

African American Studies

Course Descriptions

ArtH 3241. African American Art. (FA; 4 cr; prereq any 1xxx ArtH course or jr status or #; fall, even years)
Survey of African American art from colonial times to the present, focusing on social context and aesthetic and biographical issues.

Engl 2041. Introduction to African American Literature. (HDiv; 4 cr; prereq 1011 or equiv; spring, offered when feasible)
Introduction to issues and themes in African American literature and culture, with emphasis on historical and cultural context.

Engl 3301. U.S. Multicultural Literature. (HDiv; 4 cr; prereq 1131, two from 2201, 2202, 2211, 2212; spring, offered when feasible)
Examination of literatures by African American, American Indian, Asian American, Chicana/o, U.S. Latino/a, and other under-represented peoples.

Engl 3331. African American Literature. (HDiv; 4 cr; prereq 1131, two from 2201, 2202, 2211, 2212; fall, spring, offered when feasible)
Study of African American literature. Particular attention given to issues of gender, class, power, “passing,” and the racialized body.

Engl 3532. Harlem Renaissance. (HDiv; 4 cr; prereq 1131, two from 2201, 2202, 2211, 2212; fall, even years)
During the 1920s, there was a major aesthetic outpouring in the African American community. Listen to jazz, examine African American artwork, and read poetry, short stories, novels and essays from Harlem Renaissance writers.

Fren 1311. West African Francophone Cinema for Non-Majors. (IP; 4 cr; does not count toward the Fren major or minor; fall, spring, offered when feasible)
Introduction to the history of cinema in French-speaking West Africa.

Students learn to read African films, to recognize and analyze political themes in the films, and to become sensitive to issues facing many African nations in the postcolonial world. All films have English subtitles. Taught in English.

Fren 3041. Francophone Studies: Francophone Worlds. (IP; 4 cr; prereq or coreq 3011 or #; fall, spring, offered when feasible)
Readings in a variety of cultural and literary texts from among French-language writers of Africa, the Caribbean, Asia, North America, and Europe; study of issues of national identity, race, gender, and postcolonial consciousness. Meets Francophone Studies (FRS) requirement in French major.

Fren 3042. Francophone Studies: Contes francophones. (IP; 4 cr; prereq or coreq 1011 or #; fall, spring, offered when feasible)
Study of the oral tale in African and Caribbean cultures. Examination of the form of these tales, their thematic structure, and how these tales have been translated into written and/or cinematographic texts. Meets Francophone Studies (FRS) requirement in French major.

Fren 3043. Francophone Studies: Littérature migrante. (IP; 4 cr; prereq or coreq 3011 or #; fall, spring, offered when feasible)

Hist 3301. Red, White, and Black: Race/Culture in Early America. (HDiv; 4 cr; fall, odd years)
History of race in early America. Exploration of the coming together of three groups of peoples—Africans, American Indians, and Europeans—and the roles which they played in the emergence of the “first new nation.”

Hist 3356. Civil Rights Movement, 1954–1974. (Hist; 4 cr; fall, spring, offered when feasible)
Background of the Civil Rights movement, emergence of the theory and practice of nonviolence, various Civil Rights groups, role of women, legislative and other accomplishments of the movement, its aftermath and influence.
American Indian Studies (AmIn)

Interdisciplinary Studies—Academic Dean

This is an interdisciplinary major under the authority of the vice chancellor for academic affairs and dean. The program is administered by the coordinator(s) of American Indian Studies. The American Indian Studies major is designed to introduce students to a range of information about American Indian cultures. Students learn about American Indians’ histories, cultures, and policies, literature, and other creative endeavors through courses that encourage critical thinking and the synthesis and communication of ideas. The curriculum emphasizes the role of the student as an active learner and encourages close relationships between students and faculty.

American Indian Studies Major

Program Requirements

American Indian Studies students are especially encouraged to take an American indigenous language such as Anishinaabe and Dakota.

Up to 4 credits of coursework with a grade of D or D+ may be used to meet the major requirements. Courses may not be taken S-N unless S-N only.

A minimum GPA of 2.00 is required in the major to graduate. The GPA includes all, and only, University of Minnesota coursework. Grades of F are included in GPA calculation until they are replaced.

Courses for the Program

With the approval of the American Indian Studies coordinator(s), Engl 4017—Research Seminar: Tricksters-Conjurers in American Indian and African American Literature or Hist 4110 and 4120—Tutorial in History may be substituted for AmIn 4901.

AmIn 1101—Introduction to American Indian Studies, HDiv (4 cr)
Anh 1111—Introductory Cultural Anthropology, SS (4 cr)
or Soc 1101—Introductory Sociology, SS (4 cr)
Anh 3402—Representations from the Field: American Indian Ethnography, HDiv (4 cr)
Anh 3451—Contemporary American Indians, HDiv (4 cr)
or Soc 3451—Contemporary American Indians, HDiv (4 cr)
Engl 3311—American Indian Literature, HDiv (4 cr)
Hist 3251—American Indians and the United States: A History, HDiv (4 cr)
AmIn 4901—Senior Project in American Indian Studies (4 cr)

Primary American Indian Studies Electives

Up to 8 credits of American indigenous languages may be used to fulfill these electives.

Take 8 or more credit(s) from the following:

AmIn 2311—American Indians of the Great Plains: Victims and Victors, HDiv (4 cr)
Anh 3452—American Indian Women, HDiv (4 cr)
Anh 3455—North American Archaeology, SS (4 cr)
Engl 2411—Representations of American Indians in Popular and Academic Culture, HDiv (4 cr)
Engl 3501—The American West Revisited, Hum (4 cr)
Engl 4017—Research Seminar: Tricksters-Conjurers in American Indian and African American Literature, HDiv (4 cr)
Hist 3301—Red, White, and Black: Race/Culture in Early America, HDiv (4 cr)
Hist 3359—Native Strategies for Survival, 1880-1920, HDiv (4 cr)
Soc 3452—American Indian Women, HDiv (4 cr)

Related American Indian Studies Electives

No more than 3 credits of ceramics (ArtS 1039, ArtS 1050) may be applied to the major.

Take 4 or more credit(s) from the following:

ArtS 1039—Ceramics I, ArtP (3 cr)
ArtS 1050—Beginning Ceramics, ArtP (3 cr)
CMR 3411—Intercultural Communication Theory and Research, HDiv (4 cr)
Engl 3311—American Indian Literature, HDiv (4 cr)
Hist 3301—U.S. Multicultural Literature, HDiv (4 cr)
Hist 3451—Facing West, HDiv (4 cr)
Pol 3262—Minorities and Public Policy, HDiv (4 cr)
Psy 3542—Multicultural Psychology, HDiv (4 cr)
Soc 2101—Systems of Oppression, HDiv (4 cr)
Soc 3121—Sociology of Gender, HDiv (4 cr)

Other Elective Courses

Directed studies and interdisciplinary internships, with appropriate subject matter, may be used to meet the elective requirements.

American Indian Studies Minor

Minor Requirements

American Indian Studies students are especially encouraged to take an American indigenous language, such as Anishinaabe and Dakota.

Up to 4 credits of coursework with a grade of D or D+ may be used to meet the minor requirements. Courses may not be taken S-N unless S-N only.
American Indian Studies (AmIn)

A minimum GPA of 2.00 is required in the minor to graduate. The GPA includes all, and only, University of Minnesota coursework. Grades of “F” are included in GPA calculation until they are replaced.

Courses for the Program

Required Courses

AmIn 1101—Introduction to American Indian Studies, HDiv (4 cr)

Elective Courses

Students must have at least one course from two of the three core disciplines: anthropology, English, and history. Directed studies (1-5 credits) and interdisciplinary internships (1-8 credits), with appropriate subject matter, may be used to meet the elective requirements. Up to 8 credits of an American indigenous language may apply to the minor.

Take 16 or more credits from the following:

AmIn 2311—American Indians of the Great Plains: Victims and Victors, HDiv (4 cr)

AmIn 3402—Representations from the Field: American Indian Anthropology, SS (4 cr)

AmIn 3451. Contemporary American Indians. (HDiv; 4 cr; [Soc 3451]; prereq 1111 or Soc 1101 or #; fall, odd years)

Same as Soc 3451. The cultures of contemporary Indian tribes in the United States. Government policies, gaming, urban populations, education, self-determination, and identity.

AmIn 3452. American Indian Women. (HDiv; 4 cr; [Soc 3452]; prereq 1111 or Soc 1101 or #; fall, every year)

Same as Soc 3452. The role of Indian and mixed-blood women in a variety of North American Indian cultures, both traditional and contemporary, using ethnography, autobiography, life history, biography, and fiction. The interaction of Indian women and their cultures with the colonizing cultures of Western Europe and the United States.

AmIn 3455. North American Archaeology. (SS; 4 cr; prereq 1111 or 2103; spring, every year)

The archaeology of the societies located in the current United States and Canada prior to European colonization. Includes the earliest human colonization of North America (circa 12,000 years ago), early hunting and gathering societies, the development of agriculture, and the formation of complex chiefdoms. Emphasis on the diversity of cultures, languages, economies, and environments found throughout precontact North America.

ArtS 1039. Ceramics I. (ArtP; 3 cr; fall, spring, offered when feasible)

Exploration in personal expression through the medium of clay. Emphasis is on handbuilding and throwing techniques using stoneware and porcelain. Other topics include clay types and their origin, decorating with slips and glazes, basic firing principles, and the role of the potter in society. [Continuing Education course]

ArtS 1050. Beginning Ceramics. (ArtP; 3 cr; max 6 cr; fall, every year)

Personal expression through the medium of clay. Topics include forming methods using stoneware and porcelain (hand building and wheel techniques), glazing, the nature of clay, glaze chemistry, firing, and kilns.

CMR 3411. Intercultural Communication Theory and Research. (HDiv; 4 cr; prereq 1101 or #; fall, offered when feasible)

Study of intercultural communication from an interpersonal and group perspective.

Engl 2411. Representations of American Indians in Popular and Academic Culture. (HDiv; 4 cr; prereq 1101 or equiv; fall, offered when feasible)

Study of representations of American Indians in American popular and academic culture including literature, films, and sports. Particular attention given to how Indian identity, history, and cultures are represented in pop culture by non-Indians and, more recently, Indians themselves.

Engl 3301. U.S. Multicultural Literature. (HDiv; 4 cr; prereq 1131, two from 2201, 2202, 2211, 2212; spring, offered when feasible)

Examination of literatures by African American, American Indian, Asian American, Chicana/o, U.S. Latino/a, and other under-represented peoples.

Engl 3311. American Indian Literature. (HDiv; 4 cr; prereq 1131, two from 2201, 2202, 2211, 2212; fall, spring, offered when feasible)

Study of American Indian literature written in English. Particular attention given to language, identity, land, and sovereignty.

Engl 3331. The American West Revisited. (Hum; 4 cr; prereq 1131, two from 2201, 2202, 2211, 2212; fall, spring, offered when feasible)

A selection of readings that introduces and challenges the concept of the “frontier” as uncivilized land open for acquisition.

Engl 4507. Research Seminar: Tricksters-Conjurers in American Indian and African American Literature. (HDiv; 4 cr; prereq 1131, two from 2201, 2202, 2211, 2212; #; fall, spring, offered when feasible)

Study of tricksters and conjurers in American Indian and African American literature, in particular their ability to maintain traditional practices and subvert the dominant culture and imposed cultural norms. Special attention given to cultural and historical contexts and questions of power, identity, cultural difference, and assimilation.

American Indian Studies Course Descriptions

AmIn 1101. Introduction to American Indian Studies. (HDiv; 4 cr; fall, every year)

An introduction to American Indian histories, literature and other creative endeavors, and cultures. An interdisciplinary course emphasizing sovereignty, effects of government policies, and diversity of American Indian societies.

AmIn 1301. Dakota Language I. (FL; 4 cr; fall, every year)

An introduction to speaking, writing, and reading Dakota language and an overview of Dakota culture. [Continuing Education course]

AmIn 1302. Dakota Language II. (FL; 4 cr; prereq 1301 or #; spring, every year)

A continuation of 1301 with greater emphasis on conversation and culture. [Continuing Education course]

AmIn 2311. American Indians of the Great Plains: Victims and Victoros. (HDiv; 4 cr; credit will not be granted if credit has been received for AmIn 2311 or Engl 2311; summer, offered when feasible)

Familiarizes students with government efforts to “civilize” American Indians and Indians’ resistance to these efforts. Course materials address indigenous opposition to the government’s assimilating forces. Travel to important sites of American Indian resistance on the Great Plains. [Continuing Education course]

AmIn 4901. Senior Project in American Indian Studies. (4 cr; prereq 1101, AmIn major, #; fall, every year)

A culminating research project in American Indian Studies.
Anthropology (Anth)

Programs and Course Descriptions


Hist 3301. Red, White, and Black: Race/Culture in Early America. (HDiv; 4 cr; fall, odd years) History of race in early America. Exploration of the coming together of three groups of peoples—Africans, American Indians, and Europeans—and the roles which they played in the emergence of the “first new nation.”

Hist 3359. Native Strategies for Survival, 1880-1920. (HDiv; 4 cr; fall, odd years) Exploration of the events and policies that sought to eliminate American Indian communities and cultures and the strategies that American Indians developed to survive. Students gain insight into a pivotal time for the “incorporation” of the United States and ongoing tensions between unity and diversity that characterize the nation’s political economy and social structure. Paradoxes under scrutiny include the degree to which policies claiming to emancipate actually imprisoned and prisons became homelands.

Hist 3451. Facing West. (HDiv; 4 cr; fall, spring, offered when feasible) History of the American West. What is the West to the United States? Examination of the meaning of the West as both place and process for U.S. history; exploring the distinctive role that the West has played in the development of the United States from 1790 to the 21st century. Special emphasis on the interplay between different peoples in the vast and varied region.

Pol 3262. Minorities and Public Policy. (HDiv; 4 cr; prereq 1201 or #; fall, even years) Analysis of the ways race, ethnicity, and other factors shape political engagement; their implications for public policy and the policy process.

Psy 3542. Multicultural Psychology. (HDiv; 4 cr; [Psy 3541]; prereq 1051; fall, every year) Theoretical and methodological approaches to multicultural psychology. Multicultural psychology is the systematic study of behavior, cognition, and affect settings where people of different backgrounds interact. Exploration of these interactions both within and outside of the United States. Topics may include worldviews, communication styles, acculturation, prejudice, white privilege, identity development, physical and mental health, and multicultural competencies.

Soc 1101. Introductory Sociology. (SS; 4 cr; fall, spring, every year) Basic concepts, theories, and methods of sociology; survey of some of the institutional areas in which sociologists specialize.

Soc 2101. Systems of Oppression. (HDiv; 4 cr; prereq 1101 or Anth 1111 or #; fall, every year) Patterns of group dominance, exploitation, and hate in the United States and globally. Emphasis on sexism, racism, and classism with some attention to other systems of oppression such as heterosexism, ageism, and ableism.

Soc 3211. Sociology of Gender. (HDiv; 4 cr; prereq 1101 or Anth 1111 or #; fall, every year) An introduction to the sociological study of gender. Focus on gender difference and gender inequality. Analysis of the changing roles, opportunities, and expectations of women and men as societies (and subsequently, gender relations and power) undergo change in today’s world. Theoretical overview and an examination of how gender affects everyday experiences.

Soc 3451. Contemporary American Indians. (HDiv; 4 cr; [Anth 3451]; prereq 1101 or Anth 1111 or #; fall, odd years) Same as Anth 3451. The cultures of contemporary Indian tribes in the United States. Government policies, gaming, urban populations, education, self-determination, and identity.

Soc 3452. American Indian Women. (HDiv; 4 cr; [Anth 3452]; prereq 1101 or Anth 1111 or #; fall, every year) Same as Anth 3452. The role of Indian and mixed-blood women in a variety of North American Indian cultures, both traditional and contemporary, using ethnography, autobiography, life history, biography, and fiction. The interaction of Indian women and their cultures with the colonizing cultures of Western Europe and the United States.

Anthropology (Anth)

Division of the Social Sciences

The anthropology curriculum, with support from sociology courses, focuses on providing a comparative understanding of the range of human cultures and societies throughout the world in both humanistic and social scientific terms. Anthropology applies this understanding to problems faced by different groups of people in the flux of the modern world. Courses meet the needs of liberal arts students and students planning to pursue anthropology at the graduate level.

Objectives—Anthropology courses are designed to provide an understanding of human beings and human society with respect to both biology and culture. Students are exposed to a broad historical and comparative framework within which to view the variety of human cultures. Coursework deals with concepts, techniques, and substantive knowledge of the branches of the field, e.g., physical anthropology, social and cultural anthropology, ethnology, archaeology, linguistics, and applied anthropology. (See Sociology for more information.)

Anthropology Major

Program Requirements

Students develop a coherent program of study in consultation with their major adviser generally no later than the spring semester of their sophomore year. Up to four credits of D+ or D may be used to meet the major requirements if offset by a sufficient number of higher grades to meet the minimum requirement of a cumulative GPA of 2.00 in all courses in the major. Courses may not be taken S-N unless offered S-N only.

The GPA includes all, and only, University of Minnesota coursework. Grades of F are included in GPA calculation until they are replaced.

Courses for the Program

Required Courses


Elective Courses

An additional 16 credits in anthropology and sociology courses, 12 of which must be in courses 3xx or above. No more than 8 credits can be from Soc courses.

Take no more than 4 credit(s) from the following:


Take 12 or more credit(s) from the following:

Anthropology (Anth)

Anth 3455—North American Archaeology, SS (4 cr)
Anth 3601—Social Justice and Human Rights in Latin America, IP (4 cr)
Anth 3602—Women in Latin America, IP (4 cr)
Anth 3603—Latin American Archaeology, SS (4 cr)
Soc 3101—Qualitative Research Methodology (4 cr)
Soc 3102—Quantitative Research Methodology, SS (4 cr)
Soc 3111—Sociology of Modernization, IP (4 cr)
Soc 3121—Sociology of Gender, HDiv (4 cr)
Soc 3122—Sociology of Childhoods, HDiv (4 cr)
Soc 3131—World Population, Envt (4 cr)
Soc 3141—Sociology of Deviance, E/CR (4 cr)
Soc 3201—Culture, Food, and Agriculture, Envt (4 cr)
Soc 3251—African Americans, HDiv (4 cr)
Soc 3252—Women in Muslim Society, IP (4 cr)
Soc 3401—Sociological Theory, SS (4 cr)
Soc 3402—Contemporary Sociological Theory, SS (4 cr)
Soc 3451—Contemporary American Indians, HDiv (4 cr)
Soc 3452—American Indian Women, HDiv (4 cr)
Soc 3601—Social Justice and Human Rights in Latin America, IP (4 cr)
Soc 3602—Women in Latin America, IP (4 cr)
Anth 3xxx, 4xxx
Soc 3xxx, 4xxx

Anthropology Minor

Minor Requirements

Up to four credits of D+ or D may be used to meet the minor requirements if offset by a sufficient number of higher grades to meet the minimum cumulative GPA of 2.00 in all courses included in the minor. Courses may not be taken S-N unless offered S-N only.

The GPA includes all, and only, University of Minnesota course work. Grades of F are included in GPA calculation until they are replaced.

Courses for the Program

Required Courses

Anth 1111—Introductory Cultural Anthropology, SS (4 cr)
Anth 2101—Physical Anthropology, Sci-L (4 cr)
Anth 2103—Archaeology, SS (4 cr)
Anth 3411—Seminar in Anthropological Methodology, E/CR (4 cr)

Elective Courses

An additional 8 credits in anthropology and sociology courses, 4 of which must be in courses 2xxx or above. No more than 4 credits can be from Soc courses.

Take no more than 4 credit(s) from the following:
Soc 1101—Introductory Sociology, SS (4 cr)
Anth 1xxx
Soc 1xxx
Take 4 or more credit(s) from the following:
Anth 2501—Medical Anthropology—An Overview, SS (4 cr)
Anth 3204—Culture, Food, and Agriculture, Envt (4 cr)
Anth 3206—Ecological Anthropology, Envt (4 cr)
Anth 3402—Representations from the Field: American Indian Ethnography, HDiv (4 cr)
Anth 3451—Contemporary American Indians, HDiv (4 cr)
Anth 3452—American Indian Women, HDiv (4 cr)
Anth 3455—North American Archaeology, SS (4 cr)
Anth 3601—Social Justice and Human Rights in Latin America, IP (4 cr)

Anth 3602—Women in Latin America, IP (4 cr)
Anth 3603—Latin American Archaeology, SS (4 cr)
Soc 2101—Systems of Oppression, HDiv (4 cr)
Soc 3101—Qualitative Research Methodology (4 cr)
Soc 3102—Quantitative Research Methodology, SS (4 cr)
Soc 3111—Sociology of Modernization, IP (4 cr)
Soc 3121—Sociology of Gender, HDiv (4 cr)
Soc 3122—Sociology of Childhoods, HDiv (4 cr)
Soc 3131—World Population, Envt (4 cr)
Soc 3141—Sociology of Deviance, E/CR (4 cr)
Soc 3204—Culture, Food, and Agriculture, Envt (4 cr)
Soc 3251—African Americans, HDiv (4 cr)
Soc 3252—Women in Muslim Society, IP (4 cr)
Soc 3401—Classical Sociological Theory, SS (4 cr)
Soc 3402—Contemporary Sociological Theory, SS (4 cr)
Soc 3451—Contemporary American Indians, HDiv (4 cr)
Soc 3452—American Indian Women, HDiv (4 cr)
Soc 3601—Social Justice and Human Rights in Latin America, IP (4 cr)
Soc 3602—Women in Latin America, IP (4 cr)

Teacher Preparation Requirements

Students seeking teaching licensure in social studies 5–12 should refer to the Education, Secondary (SeEd) section of this catalog.

Anthropology Course Descriptions

Note: Anth 3204, 3451, 3452, 3601, and 3602 may also be taken for credit in sociology.

Anth 1111. Introductory Cultural Anthropology, (SS; 4 cr; fall, spring, every year)
Varieties and range of human behavior as revealed through the comparative study of cultures throughout the world. Concepts developed by anthropologists to explain both the unity and diversity of humankind.

Anth 1993. Directed Study, (1-5 cr [max 10 cr]; prereq approved directed study form; fall, spring, every year)
Individualized on- or off-campus research project or other learning activity not covered in the regular Anthropology curriculum. Topic determined by the student and instructor.

Anth 2101. Physical Anthropology, (Sci-L; 4 cr; A-F only; spring, every year)
Prehistoric human life and culture. Processes of human evolution. The fossil record linking anatomically modern humans with our earliest hominoid ancestors. Human and other primate evolution and genetics. Includes a 90-minute lab session to be scheduled.

Anth 2103. Archaeology, (SS; 4 cr; fall, every year)
Survey of prehistoric and early historic cultures from around the world. Covers the development of hunting and gathering societies, origins of agriculture, and growth of urbanization and state-level societies. (two 65-minute lectures, one 120-minute lab session)

Anth 2501. Medical Anthropology—An Overview, (SS; 4 cr; prereq 1111 or Soc 1101 or #; spring, even years)
Examines the effects of cultural and physical adaptation, nutrition, culture contact, and modernization on the health and well being of people.

Anth 2993. Directed Study, (1-5 cr [max 10 cr]; prereq approved directed study form; fall, spring, every year)
Individualized on- or off-campus research project or other learning activity not covered in the regular anthropology curriculum. Topic determined by the student and instructor.
Anth 3204. Culture, Food, and Agriculture. (Envt; 4 cr; = [Soc 3204]; prereq 1111 or Soc 1101 or #; spring, even years)
Same as Soc 3204. Examines the globalization of food systems utilizing the political ecology of food to understand global and local dimensions of production, marketing, and consumption. Emphasis on connections between food production and national identity, relations of power, genetic engineering, environmental destruction, the politics of world hunger, and local efforts to achieve sustainability.

Anth 3206. Ecological Anthropology. (Envt; 4 cr; prereq 1111 or 2101 or 2103; fall, every year)
Exploration of human ecology and the causes and effects of environmental change, using data from archaeology, biological anthropology, and cultural anthropology. Emphasis on understanding the social and economic context of human adaptations to the environment. Examination of cultures worldwide and through time that have (or have failed to) live sustainably.

Anth 3402. Representations from the Field: American Indian Ethnography. (HDIV; 4 cr; prereq 1111 or Soc 1101; fall, offered when feasible)
An analysis of ethnographic and ethnohistoric materials focusing on specific American Indian cultures.

Anth 3411. Seminar in Anthropological Methodology. (E/CR; 4 cr; prereq 1111 or Soc 1101, 4 addtl cr in Anth or Soc; fall, every year)
Exploration and evaluation of methods used in cultural anthropology; qualitative methods; research ethics; and design of qualitative research project.

Anth 3451. Contemporary American Indians. (HDIV; 4 cr; = [Soc 3451]; prereq 1111 or Soc 1101 or #; fall, odd years)
Same as Soc 3451. The cultures of contemporary Indian tribes in the United States. Government policies, gaming, urban populations, education, self-determination, and identity.

Anth 3452. American Indian Women. (HDIV; 4 cr; = [Soc 3452]; prereq 1111 or Soc 1101 or #; fall, every year)
Same as Soc 3452. The role of Indian and mixed-blood women in a variety of North American Indian cultures, both traditional and contemporary, using ethnography, autobiography, life history, biography, and fiction. The interaction of Indian women and their cultures with the colonizing cultures of Western Europe and the United States.

Anth 3455. North American Archaeology. (SS; 4 cr; prereq 1111 or 2103; spring, every year)
The archaeology of the societies located in the current United States and Canada prior to European colonization. Includes the earliest human colonization of North America (circa 12,000 years ago), early hunting and gathering societies, the development of agriculture, and the formation of complex chiefdoms. Emphasis on the diversity of cultures, languages, economies, and environments found throughout precontact North America.

Anth 3601. Social Justice and Human Rights in Latin America. (IP; 4 cr; = [Soc 3601]; prereq 1111 or Soc 1101 or #; spring, every year)
Same as Soc 3601. Examination of social, economic, and political transformations in Latin America with an emphasis on social justice and human rights. Critical approaches to understand U.S.-Latin American relations, labor struggles, rebellions to define alternative development, indigenous resistance to encroachment on resources and ways of life, civil war and genocide, and efforts to create a more environmentally and socially sustainable development.

Anth 3602. Women in Latin America. (IP; 4 cr; = [Soc 3602]; prereq 1111 or Soc 1101 or #; fall, odd years)
Same as Soc 3602. Study of the social statuses of women in Latin American countries and the cultural norms influencing these statuses. Topics include class differences and the varied interests of women of different classes and ethnicities, women’s movements, economic and political conditions, religion and women, etc.

Anth 3603. Latin American Archaeology. (SS; 4 cr; prereq 1111 or 2103; spring, every year)
Latin America from the earliest human colonization to European contact. Includes societies from northern Mexico through Tierra del Fuego, as well as the Caribbean. Covers early hunting gathering societies, origins of agriculture, the rise of powerful states and empires, and their influence on later Colonial-period societies.

Anth 3993. Directed Study. (1-5 cr [max 10 cr]; prereq approved directed study form; fall, spring, every year)
Individualized on- or off-campus research project or other learning activity not covered in the regular anthropology curriculum. Topic determined by the student and instructor.

Art History (ArtH)

Division of the Humanities

Art history involves the study of ways the visual arts reflect and shape the world’s cultures.

Objectives—The purposes of the art history curriculum are to develop students’ understanding of some of the historical traditions in the visual arts, to teach students methods of analysis and interpretation of works of art, and to help students discover the rich and complex relationships of art to other aspects of culture. Students are encouraged to have direct contact with art by means of studio art courses, class field trips, gallery internships, and study abroad experiences.

Art History Major

Program Requirements

No grades below C- are allowed. Courses may not be taken S-N unless offered S-N only.

A minimum GPA of 2.00 is required in the major to graduate. The GPA includes all, and only, University of Minnesota coursework. Grades of F are included in GPA calculation until they are replaced.

Courses for the Program

Required Courses

ArtH 1101—Principles of Art, FA (4 cr)
ArtH 1111—Ancient to Medieval Art, FA (4 cr)
ArtH 1121—Renaissance to Modern Art, FA (4 cr)
ArtH 4901—Capstone Assessment of Student Experience in Art History (1 cr)

Basic Studio Requirement

Basic Studio is preparation for advanced work in studio art. The three related parts must be taken concurrently and in sequence. Two 1xxx-level ArtS courses, in two different media, may substitute for the Basic Studio sequence.

First Term of Basic Studio

ArtS 1101—Basic Studio Drawing I, ArtP (2 cr)
ArtS 1103—Basic Studio 2-D Design, ArtP (2 cr)
ArtS 1105—Basic Studio Discussion I, ArtP (1 cr)

-and- Second Term of Basic Studio

ArtS 1102—Basic Studio Drawing II, ArtP (2 cr)
ArtS 1104—Basic Studio 3-D Design, ArtP (2 cr)
ArtS 1106—Basic Studio Discussion II, ArtP (1 cr)

-or- 1xxx-Level ArtS (in 2 different media)

Take exactly 2 course(s) from the following:
ArtS 1001—Visual Studies for Non-Majors: Drawing, ArtP (3 cr)
ArtS 1003—Visual Studies for Non-Majors: Beginning Painting, ArtP (3 cr)
ArtS 1004—Visual Studies for Non-Majors: Printmaking, ArtP (3 cr)
Art History Minor

Minor Requirements

No grades below C- are allowed. Courses may not be taken S-N unless offered S-N only.

A minimum GPA of 2.00 is required in the minor to graduate. The GPA includes all, and only, University of Minnesota coursework. Grades of F are included in GPA calculation until they are replaced.

Courses for the Program

Required Courses

Arth 1101—Principles of Art, FA (4 cr)
Arth 1111—Ancient to Medieval Art, FA (4 cr)
Arth 1121—Renaissance to Modern Art, FA (4 cr)

Elective Courses

Take 12 or more credits from the following:

Arth 3101—Art and Archaeology of Ancient Greece, FA (4 cr)
Arth 3111—Art and Archaeology of Ancient Rome, FA (4 cr)
Arth 3121—Art and the Byzantine Empire, FA (4 cr)
Arth 3131—Islamic Art and Culture, FA (4 cr)
Arth 3133—Boundaries and Transitions in Medieval Art, FA (4 cr)
Arth 3142—Art of the Italian Renaissance, 1300–1520, FA (4 cr)
Arth 3161—16th-Century Italian Art, FA (4 cr)
Arth 3171—Baroque Art, FA (4 cr)
Arth 3191—American Art to 1900, FA (4 cr)
Arth 3201—19th-Century European Art through Post-Impressionism, FA (4 cr)
Arth 3211—Early Modernist Art: Symbolism to Surrealism, FA (4 cr)
Arth 3221—20th-Century American Art: 1945 to the Present, FA (4 cr)
Arth 3231—History of Photography, FA (4 cr)
Arth 3241—African American Art, FA (4 cr)
Arth 3261—Chinese Art, FA (4 cr)
Arth 3281—Women and Art, FA (4 cr)

Art History Course Descriptions

Arth 101, Principles of Art. (FA; 4 cr; fall, every year)
An introduction to the theories, methods, and vocabulary of art history. Involves development of basic skills of research, analysis, and interpretation of individual works of art. Helps the student to understand the intrinsic as well as the historical-cultural meanings of works of art.

Arth 1111, Ancient to Medieval Art. (FA; 4 cr; fall, every year)
Survey of the major works of art of western Europe from its origins in the Paleolithic period through to the full development of the Gothic era. Includes the monuments of ancient Mesopotamia, Egypt, Greece, and Rome as well as those of the Early Christian and Romanesque periods. Also includes some treatment of non-Western traditions in this era.

Arth 1121, Renaissance to Modern Art. (FA; 4 cr; spring, every year)
Survey of the major works of art of western Europe and the United States from 1400 to the present.

Arth 3101, Art and Archaeology of Ancient Greece. (FA; 4 cr; prerequisite any 1xxx Arth course or jr status or #; fall, odd years)
Beginning with the Bronze Age civilizations of the Aegean (Minoan, Cycladic, and Mycenaean), this course follows the development of the painting, sculpture, and architecture of ancient Greece, concentrating on the classical period in Athens and the Hellenistic period in the Mediterranean.

Arth 3111, Art and Archaeology of Ancient Rome. (FA; 4 cr; prerequisite any 1xxx Arth course or jr status or #; spring, even years)
An in-depth study of Roman art and archaeology beginning with the Villanovans and Etruscans who preceded the Romans and ending with the rise of Early Christian art. Concentration on the public and political art of the various emperors.

Arth 3112, Art and the Byzantine Empire. (FA; 4 cr; prerequisite any 1xxx Arth course or jr status or #; fall, even years)
An investigation of Islamic art and architecture in both the secular and religious realm. Examination of these works in the context of the cultures and historical periods that produced them. Begins with the birth of Islamic art and continues up until today.

Arth 3132, Castles and Cathedrals. (FA; 4 cr; prerequisite any 1xxx Arth course or jr status or #; spring, even years)
An investigation of the two major forms of architectural construction in the Middle Ages. Exploration of the development of the cathedral and castle as architectural forms and examination of the circumstances surrounding their evolution through the medieval period. Examples are drawn from continental Europe, the British Isles, and the Levant.

Arth 3133, Boundaries and Transitions in Medieval Art. (FA; 4 cr; prerequisite any 1xxx Arth course or jr status or #; spring, odd years)
A thematic look at medieval art and architecture beyond the traditional focuses of inquiry such as Constantinople, Rome, and Paris. An examination of the art and architecture of the periods and areas of transition that are typically ignored or glossed over as derivative such as Late Antique, Crusader, and Ottoman.

Arth 3142, Art of the Italian Renaissance, 1300–1520. (FA; 4 cr; prerequisite any 1xxx Arth course or jr status or #; spring, even years)
A variety of methods (including stylistic, gender, and contextual theories) are used to explore the painting and sculpture of such artists as Giotto, Donatello, Leonardo, Raphael, and Michelangelo.

Arth 3161, 16th-Century Italian Art. (FA; 4 cr; prerequisite any 1xxx Arth course or jr status or #; fall, odd years)
The stylistic and theoretical differences evidenced in the fascinating trends of Mannerism and Venetian Renaissance art.

Arth 3171, Baroque Art. (FA; 4 cr; prerequisite any 1xxx Arth course or jr status or #; spring, even years)
A sociohistorical consideration of the stylistic and thematic diversity present in the works of such 17th-century masters as Caravaggio, Bernini, Velazquez, Rembrandt, and Vermeer.
ArtH 3191. American Art to 1900. (FA; 4 cr; prereq any 1xxx ArtH course or jr status or #; fall, odd years)
A thematic exploration of the role of painting, sculpture, and the decorative arts in American society, from colonial times to 1900. Topics include the landscape and Manifest Destiny, American icons, folk art, and the representation of American Indians, African Americans, and women.

ArtH 3201. 19th-Century European Art through Post-Impressionism. (FA; 4 cr; prereq any 1xxx ArtH course or jr status or #; fall, odd years)
Survey of major movements from Neoclassicism through Romanticism, Realism, and Impressionism to Post-Impressionism. Attention is given to iconographical and formal analysis as well as to the social conditions in which artists lived and worked.

ArtH 3211. Early Modernist Art: Symbolism to Surrealism. (FA; 4 cr; prereq any 1xxx ArtH course or jr status or #; spring, even years)
Survey of the major early modernist movements from Symbolism through Cubism, Futurism, Expressionism, Constructivism, De Stijl, and the Bauhaus to Surrealism. Attention is given to theories of modern art as well as to formal and iconographical analyses and to the social conditions in which modern art was created and experienced.

ArtH 3221. 20th-Century American Art: 1945 to the Present. (FA; 4 cr; prereq any 1xxx ArtH course or jr status or #; fall, even years)
An examination of selected artists and movements from the 1940s through the present. Equal emphasis is given to the art and the social context in which it was made and experienced, and to modernist and postmodernist aesthetic and critical thought.

ArtH 3231. History of Photography. (FA; 4 cr; prereq any 1xxx ArtH course or jr status or #; spring, odd years)
Survey of European and American photography from the period of invention to the present. Major artists and movements are examined in the context of a variety of aesthetic, social, and technical issues.

ArtH 3241. African American Art. (FA; 4 cr; prereq any 1xxx ArtH course or jr status or #; fall, even years)
Survey of African American art from colonial times to the present, focusing on social context and aesthetic and biographical issues.

ArtH 3261. Chinese Art. (FA; 4 cr; prereq any 1xxx ArtH course or jr status or #; spring, odd years)
Coursework is based on surveys of Chinese art from the Neolithic times to the 20th century, presented in the context of Chinese culture.

ArtH 3281. Women and Art. (FA; 4 cr; prereq any 1xxx ArtH course or jr status or #; fall, odd years)
A historical survey of women’s roles as creators and patrons of the visual arts in Western European and American societies, from antiquity to the present.

ArtH 3291. Facing the Past: Portraiture and Social History. (FA; 4 cr; prereq any 1xxx ArtH course or jr status or #; fall, spring, offered when feasible)
This seminar examines functions and formats of portraits created primarily in Western Europe between 1400-1800, in order to gain greater insight as to how various social identities (such as that of husband and wife, child, friend, and freak of nature) were visually constructed and verbally interpreted.

ArtH 3311. Italian Renaissance and Baroque Art in Context. (1 cr; spring, offered when feasible)
An opportunity to view and interpret art of the Renaissance and Baroque periods (c. 1400-1700) in its original contexts in Italy and to better comprehend how powerfully art can affect a viewer. [Continuing Education course]

ArtH 3993. Directed Study. (1-5 cr [max 10 cr]; prereq any 1xxx ArtH class or jr status, approved directed study form; fall, spring, every year)
Content and nature of the course to be determined by faculty and student consultation. May include individual research and writing, working in relation to the Art Gallery program, or travel and study.

ArtH 4001. Capstone Assessment of Student Experience in Art History. (1 cr; prereq ArtH major, #; S-N only; fall, spring, every year)
Allows students majoring in art history to reflect on the connections among the different courses and experiences they have had in the discipline by compiling a portfolio of their work, writing a short paper, and discussing their experiences with the faculty and other majors.

ArtH 4993. Directed Study. (1-5 cr [max 10 cr]; prereq any 1xxx ArtH class or jr status, approved directed study form; fall, spring, every year)
Content and nature of the course to be determined by faculty and student consultation. May include individual research and writing, working in relation to the Art Gallery program, or travel and study.

Art, Studio (ArtS)
Division of the Humanities
Studio art includes studies in the traditional areas of the visual arts as well as in contemporary concerns and techniques. Students are introduced to the skills of critical analysis of works of art and to a variety of media and approaches to their use. In addition, the discipline supports co-curricular activities, including the UMM Student Art Club, student exhibitions, and guest speakers.

Objectives—The goal of the studio art curriculum is to introduce students to the technical, conceptual, and communication skills necessary for activities in the visual arts and to help students understand the major traditions and the cultural significance of the visual arts. Studio courses serve the needs of students planning to pursue graduate studies in art, students interested in exploring their own creative potential as part of their general education, and students preparing for secondary school teaching.

Art, Studio Major
Program Requirements
Studio courses are assessed an individual lab fee.
No grades below C- are allowed. Courses may not be taken S-N unless offered S-N only.
A minimum GPA of 2.00 is required in the major to graduate. The GPA includes all, and only, University of Minnesota coursework. Grades of F are included in GPA calculation until they are replaced.

Courses for the Program
Basic studio is preparation for advanced work in studio art. The three related parts must be taken concurrently and in sequence during the first year. One 1xxx art history course is also recommended during the first year.

First Term of Basic Studio
Take all of the following in the same term:
ArtS 1101—Basic Studio Drawing I, ArtP (2 cr)
ArtS 1103—Basic Studio 2-D Design, ArtP (2 cr)
ArtS 1105—Basic Studio Discussion I, ArtP (1 cr)

Second Term of Basic Studio
Take all of the following in the same term:
ArtS 1102—Basic Studio Drawing II, ArtP (2 cr)
ArtS 1104—Basic Studio 3-D Design, ArtP (2 cr)
ArtS 1106—Basic Studio Discussion II, ArtP (1 cr)

Second Year Drawing
ArtS 2101—Drawing From Life I, ArtP (3 cr)
ArtS 2102—Drawing From Life II, ArtP (3 cr)
Second Year Portfolio Review

Senior Thesis Project
ArtS 4902—Senior Thesis Project I (2 cr)
ArtS 4903—Senior Thesis Project II (1 cr)

Concentrated Studio Art Courses—First Medium
Printmaking
Take exactly 12 credit(s) from the following:
ArtS 2201—Beginning Printmaking I, ArtP (3 cr)
ArtS 2202—Beginning Printmaking II, ArtP (3 cr)
ArtS 3200—Advanced Printmaking I, ArtP (3 cr)
ArtS 3210—Advanced Printmaking II, ArtP (3 cr)
Art, Studio (ArtS)

-or- Painting
Take exactly 12 credit(s) from the following:
ArtS 2301—Beginning Painting I, ArtP (3 cr)
ArtS 2302—Beginning Painting II, ArtP (3 cr)
ArtS 3300—Advanced Painting I, ArtP (3 cr)
ArtS 3310—Advanced Painting II, ArtP (3 cr)

-or- Sculpture
Take exactly 12 credit(s) from the following:
ArtS 2401—Beginning Sculpture I, ArtP (3 cr)
ArtS 2402—Beginning Sculpture II, ArtP (3 cr)
ArtS 3400—Advanced Sculpture I, ArtP (3 cr)
ArtS 3410—Advanced Sculpture II, ArtP (3 cr)

-or- Ceramics
Take exactly 12 credit(s) from the following:
ArtS 1050—Beginning Ceramics, ArtP (3 cr)
ArtS 2050—Advanced Ceramics, ArtP (3 cr)

-or- Drawing
Take exactly 12 credit(s) from the following:
ArtS 3100—Advanced Drawing I, ArtP (3 cr)
ArtS 3110—Advanced Drawing II, ArtP (3 cr)

-or- Photography/Digital Imaging
Take exactly 12 credit(s) from the following:
ArtS 2500—Photography, ArtP (3 cr)
ArtS 3005—Media Studies: Digital Imaging, ArtP (3 cr)

Concentrated Studio Art Courses—Second Medium
(The second medium chosen must be different from first medium.)

Printmaking
Take exactly 6 credit(s) from the following:
ArtS 2201—Beginning Printmaking I, ArtP (3 cr)
ArtS 2202—Beginning Printmaking II, ArtP (3 cr)

-or- Painting
Take exactly 6 credit(s) from the following:
ArtS 2301—Beginning Painting I, ArtP (3 cr)
ArtS 2302—Beginning Painting II, ArtP (3 cr)

-or- Sculpture
Take exactly 6 credit(s) from the following:
ArtS 2401—Beginning Sculpture I, ArtP (3 cr)
ArtS 2402—Beginning Sculpture II, ArtP (3 cr)

-or- Ceramics
Take exactly 6 credit(s) from the following:
ArtS 1050—Beginning Ceramics, ArtP (3 cr)
ArtS 2050—Advanced Ceramics, ArtP (3 cr)

-or- Drawing
Take exactly 6 credit(s) from the following:
ArtS 3100—Advanced Drawing I, ArtP (3 cr)
ArtS 3110—Advanced Drawing II, ArtP (3 cr)

-or- Photography/Digital Imaging
Take exactly 6 credit(s) from the following:
ArtS 2500—Photography, ArtP (3 cr)
ArtS 3005—Media Studies: Digital Imaging, ArtP (3 cr)

Elective Courses
An additional 15 credits in art, studio (exclusive of those used to meet required courses) and art history. Art, studio electives can be selected from any medium above or the following:

Art Studio Electives
Take 3 or more credit(s) from the following:
ArtS 3001—Media Studies: Public Space, Installation Art, and New Media, ArtP (3 cr)
ArtS 3002—Media Studies: Artist’s Books, ArtP (3 cr)
ArtS 3003—Media Studies: Tilemaking, ArtP (3 cr)
ArtS 3004—Media Studies: Mural Project and Public Art, ArtP (3 cr)
ArtS 3006—Media Studies: Feminist Art: A Studio Perspective, ArtP (3 cr)
ArtS 3007—Media Studies: Printmaking, ArtP (3 cr)
ArtS 3008—Media Studies: Woodfired Kiln Design and Construction, ArtP (3 cr)
ArtS 3012—Media Studies: Ceramics, ArtP (3 cr)
ArtS 3013—Media Studies: Painting, ArtP (3 cr)
ArtS 2xx, 3xx, 4xxx

Art History Electives
Take 12 or more credit(s) from the following:
ArtH 1101—Principles of Art, FA (4 cr)
ArtH 1111—Ancient to Medieval Art, FA (4 cr)
ArtH 1121—Renaissance to Modern Art, FA (4 cr)
ArtH 3101—Art and Archaeology of Ancient Greece, FA (4 cr)
ArtH 3111—Art and Archaeology of Ancient Rome, FA (4 cr)
ArtH 3112—Art and the Byzantine Empire, FA (4 cr)
ArtH 3113—Islamic Art and Culture, FA (4 cr)
ArtH 3142—Art of the Italian Renaissance, 1300-1520, FA (4 cr)
ArtH 3161—16th-Century Italian Art, FA (4 cr)
ArtH 3171—Baroque Art, FA (4 cr)
ArtH 3191—American Art to 1900, FA (4 cr)
ArtH 3201—19th-Century European Art through Post-Impressionism, FA (4 cr)
ArtH 3211—Early Modernist Art: Symbolism to Surrealism, FA (4 cr)
ArtH 3221—20th-Century American Art: 1945 to the Present, FA (4 cr)
ArtH 3231—History of Photography, FA (4 cr)
ArtH 3241—African American Art, FA (4 cr)
ArtH 3261—Chinese Art, FA (4 cr)
ArtH 3281—Women and Art, FA (4 cr)
ArtH 3291—Facing the Past: Portraiture and Social History, FA (4 cr)
ArtH 3311—Italian Renaissance and Baroque Art in Context (1 cr)
ArtH 1xxx, 3xxx

Art, Studio Minor

Minor Requirements
Studio courses are assessed an individual lab fee.
No grades below C- are allowed. Courses may not be taken S-N unless offered S-N only.
A minimum GPA of 2.00 is required in the minor to graduate.
The GPA includes all, and only, University of Minnesota coursework. Grades of F are included in GPA calculation until they are replaced.

Courses for the Program
Basic studio is preparation for advanced work in studio art. The three related parts must be taken concurrently and in sequence during the first year. One 1xxx art history course is also recommended during the first year.

First Term of Basic Studio
Take all of the following in the same term:
ArtS 1101—Basic Studio Drawing I, ArtP (2 cr)
ArtS 1103—Basic Studio 2-D Design, ArtP (2 cr)
ArtS 1105—Basic Studio Discussion I, ArtP (1 cr)

Second Term of Basic Studio
Take all of the following in the same term:
ArtS 1102—Basic Studio Drawing II, ArtP (2 cr)
ArtS 1104—Basic Studio 3-D Design, ArtP (2 cr)
ArtS 1106—Basic Studio Discussion II, ArtP (1 cr)
Drawing
ArtS 2101—Drawing From Life I, ArtP (3 cr)
ArtS 2102—Drawing From Life II, ArtP (3 cr)

Concentrated Studio Art Courses
Complete one 12-credit sequence in one major medium or two 6-credit sequences in different media.

Single 12-Credit Sequence:
  Printmaking
Take exactly 12 credit(s) from the following:
ArtS 2201—Beginning Printmaking I, ArtP (3 cr)
ArtS 2202—Beginning Printmaking II, ArtP (3 cr)
ArtS 3200—Advanced Printmaking I, ArtP (3 cr)
ArtS 3210—Advanced Printmaking II, ArtP (3 cr)
  -or- Painting
Take exactly 12 credit(s) from the following:
ArtS 2301—Beginning Painting I, ArtP (3 cr)
ArtS 2302—Beginning Painting II, ArtP (3 cr)
ArtS 3300—Advanced Painting I, ArtP (3 cr)
ArtS 3310—Advanced Painting II, ArtP (3 cr)
  -or- Sculpture
Take exactly 12 credit(s) from the following:
ArtS 2401—Beginning Sculpture I, ArtP (3 cr)
ArtS 2402—Beginning Sculpture II, ArtP (3 cr)
ArtS 3400—Advanced Sculpture I, ArtP (3 cr)
ArtS 3410—Advanced Sculpture II, ArtP (3 cr)
  -or- Ceramics
Take exactly 12 credit(s) from the following:
ArtS 1050—Beginning Ceramics, ArtP (3 cr)
ArtS 2050—Advanced Ceramics, ArtP (3 cr)
  -or- Drawing
Take exactly 12 credit(s) from the following:
ArtS 3100—Advanced Drawing I, ArtP (3 cr)
ArtS 3110—Advanced Drawing II, ArtP (3 cr)
  -or- Photography/Digital Imaging
Take exactly 12 credit(s) from the following:
ArtS 2500—Photography, ArtP (3 cr)
ArtS 3005—Media Studies: Digital Imaging, ArtP (3 cr)
  -or- Two 6-Credit Sequences:
  Take 2 or more sub-requirement(s) from the following:
  Printmaking
Take exactly 6 credit(s) from the following:
ArtS 2201—Beginning Printmaking I, ArtP (3 cr)
ArtS 2202—Beginning Printmaking II, ArtP (3 cr)
  -or- Painting
Take exactly 6 credit(s) from the following:
ArtS 2301—Beginning Painting I, ArtP (3 cr)
ArtS 2302—Beginning Painting II, ArtP (3 cr)
  -or- Sculpture
Take exactly 6 credit(s) from the following:
ArtS 2401—Beginning Sculpture I, ArtP (3 cr)
ArtS 2402—Beginning Sculpture II, ArtP (3 cr)
  -or- Ceramics
Take exactly 6 credit(s) from the following:
ArtS 1050—Beginning Ceramics, ArtP (3 cr)
ArtS 2050—Advanced Ceramics, ArtP (3 cr)
  -or- Drawing
Take exactly 6 credit(s) from the following:
ArtS 3100—Advanced Drawing I, ArtP (3 cr)
ArtS 3110—Advanced Drawing II, ArtP (3 cr)

Photography/Digital Imaging
Take exactly 6 credit(s) from the following:
ArtS 2500—Photography, ArtP (3 cr)
ArtS 3005—Media Studies: Digital Imaging, ArtP (3 cr)

Teacher Preparation Requirements
Students seeking teaching licensure in visual arts K–12 should refer to the Education, Secondary (SeEd) section of this catalog.

Art, Studio, Course Descriptions

ArtS 1001. Visual Studies for Non-Majors: Drawing. (ArtP; 3 cr [max 6 cr]; +[ArtS 1070, ArtS 1080]; no elective cr for ArtS majors or minors; fall, spring, offered when feasible)
For nonmajors with little or no experience in drawing. Exploration of observational drawing skills through line work in contour and gesture, continuing with studies in value, texture, and space. Contemporary and traditional modes of drawing explored using a variety of materials.

ArtS 1002. Visual Studies for Non-Majors: Digitally Assisted Design. (ArtP; 3 cr [max 6 cr]; no elective cr for ArtS majors or minors; fall, spring, offered when feasible)
Development of skills necessary to produce digital imagery, including fundamental aesthetic concerns (composition, color theory, mark-making, etc.) and knowledge of digital media with emphasis on the technical, conceptual, aesthetic, and ethical aspects of digital imaging as an artistic medium.

ArtS 1003. Visual Studies for Non-Majors: Beginning Painting. (ArtP; 3 cr [max 6 cr]; no elective cr for ArtS majors or minors; fall, spring, offered when feasible)
The development of painting as a means of artistic expression including basic technical, material, and formal compositional problems. For nonmajors with little or no previous experience in painting.

ArtS 1004. Visual Studies for Non-Majors: Printmaking. (ArtP; 3 cr [max 6 cr]; no elective cr for ArtS majors or minors; fall, spring, offered when feasible)
Development of skills necessary to produce imagery using printmaking as a means of expression, including the development of fundamental aesthetic concerns (composition, color theory, mark-making, etc.). For non-majors with little or no studio experience.

ArtS 1005. Visual Studies for Non-Majors: Photography. (ArtP; 3 cr [max 6 cr]; no elective cr for ArtS majors or minors; fall, spring, offered when feasible)
Development of skills necessary to produce imagery using black and white photography as a means of expression, including an introduction to processes, materials, brief history, and critical skills to evaluate photographs. Students must provide their own 35 mm cameras. For nonmajors with little or no studio experience.

ArtS 1039. Ceramics I. (ArtP; 3 cr; fall, spring, offered when feasible)
Exploration in personal expression through the medium of clay. Emphasis is on handbuilding and throwing techniques using stoneware and porcelain. Other topics include clay types and their origin, decorating with slips and glazes, basic firing principles, and the role of the potter in society. [Continuing Education course]

ArtS 1040. Ceramics II. (ArtP; 3 cr [max 9 cr]; prereq 1039 or 1050; fall, spring, offered when feasible)
Ceramics II is intended for any student who has taken either Ceramics I or has a working knowledge of basic forming and glazing techniques. Students are expected to work toward higher standards of both technique and design. Assigned topics for this course may vary from semester to semester. [Continuing Education course]

ArtS 1050. Beginning Ceramics. (ArtP; 3 cr [max 6 cr]; fall, every year)
Personal expression through the medium of clay. Topics include forming methods using stoneware and porcelain (hand building and wheel techniques), glazing, the nature of clay, glaze chemistry, firing, and kilns.

ArtS 1101. Basic Studio Drawing I. (ArtP; 2 cr; coreq 1103, 1105; one 1xxx ArtH course recommended during the same year; fall, every year)
Preparation for advanced work in studio art. Basic exercises of drawing, use and exploration of materials and methods in line and form development, problems of spatial representation.
Art, Studio (ArtS)

ArtS 1102. Basic Studio Drawing II. (ArtP; 2 cr; prereq 1101, coreq 1104, 1105; one 1xxx ArtH course recommended during the same year; spring, every year)
Preparation for advanced work in studio art. Basic exercises of drawing, use and exploration of materials and methods in line and form development, problems of spatial representation.

ArtS 1103. Basic Studio 2-D Design. (ArtP; 2 cr; coreq 1101, 1105; one 1xxx ArtH course recommended during the same year; fall, every year)
Preparation for advanced work in studio art. Elements of two-dimensional design and color theory, introduction to painting and printmaking.

ArtS 1104. Basic Studio 3-D Design. (ArtP; 2 cr; prereq 1103, coreq 1102, 1104; one 1xxx ArtH course recommended during the same year; spring, every year)
Preparation for advanced work in studio art. Elements of three-dimensional design, introduction to sculpture.

ArtS 1105. Basic Studio Discussion I. (ArtP; 1 cr; coreq 1101, 1103; one 1xxx ArtH course recommended during the same year; fall, every year)
Preparation for advanced work in studio art. Theories, philosophy, history of visual arts, contemporary trends in art, selected readings.

ArtS 1106. Basic Studio Discussion II. (ArtP; 1 cr; prereq 1105, coreq 1102, 1104; one 1xxx ArtH course recommended during the same year; spring, every year)
Preparation for advanced work in studio art. Theories, philosophy, history of visual arts, contemporary trends in art, selected readings.

ArtS 1300. Watercolor Painting. (ArtP; 3 cr; fall, spring, offered when feasible)
An introduction to various painting techniques in watercolor. [Continuing Education course]

ArtS 1500. Beginning Photography. (ArtP; 3 cr [max 6 cr]; fall, spring, every year)
This course is intended for the general student with little or no previous experience in artistic expression. It is an introduction to black and white photography as an art form including processes, materials, brief history, and critical skills to evaluate photographs. Students must provide their own 35 mm cameras. [Continuing Education course]

ArtS 2050. Advanced Ceramics. (ArtP; 3 cr [max 9 cr]; prereq 1050 or #; fall, spring, offered when feasible)
For students who have a working knowledge of basic forming and glazing techniques. Emphasis on advanced hand building and wheel techniques, critiques, glaze experiments, and firing. Assigned projects for the course may vary from semester to semester.

ArtS 2101. Drawing From Life I. (ArtP; 3 cr; prereq major or minor or #; fall, every year)
Via the study of human anatomy, the course increases and improves students' knowledge and skill in drawing as a traditional art form and as a preparation for work in other media.

ArtS 2102. Drawing From Life II. (ArtP; 3 cr; prereq 2101 recommended; spring, every year)
Allows students to use skills previously gained that relate to drawing the human form in a more individual way, integrates those skills with new ideas, and explores experimental drawing directions.

ArtS 2201. Beginning Printmaking I. (ArtP; 3 cr; prereq major or minor or # for nonmajor jrs and srs; fall, every year)
Study of and practice in various methods of printmaking: application of drawing skills, color, composition, and personal expression to printmaking techniques.

ArtS 2202. Beginning Printmaking II. (ArtP; 3 cr; prereq 2201; spring, every year)
Study of and practice in various methods of printmaking: application of drawing skills, color, composition, and personal expression to printmaking techniques.

ArtS 2301. Beginning Painting I. (ArtP; 3 cr; prereq major or minor or # for nonmajor jrs and srs; spring, every year)
The development of painting as a means of artistic expression including basic technical, material, and formal compositional problems.

ArtS 2302. Beginning Painting II. (ArtP; 3 cr; prereq major or minor or # for nonmajor jrs and srs; spring, every year)
The development of painting as a means of artistic expression including basic technical, material, and formal compositional problems.

ArtS 2401. Beginning Sculpture I. (ArtP; 3 cr; prereq major or minor or # for nonmajor jrs and srs; fall, every year)
Exploration of sculpture as a means of artistic expression, including an introduction to the planning and construction of three-dimensional forms using both traditional and contemporary techniques. A two-semester sequence provides experience with a variety of materials.

ArtS 2402. Beginning Sculpture II. (ArtP; 3 cr; prereq 2401; spring, every year)
Exploration of sculpture as a means of artistic expression, including an introduction to the planning and construction of three-dimensional forms using both traditional and contemporary techniques. A two-semester sequence provides experience with a variety of materials.

ArtS 2500. Photography. (ArtP; 3 cr [max 9 cr]; prereq major or minor or #; fall, spring, offered when feasible)
Introduction to photography as an art medium. Composition and artistic expression explored through basic photographic techniques. Must have a 35 mm camera.

Media Studies: Courses numbered 30xx explore areas of special interest or timeliness not covered by the regular curriculum.

ArtS 3001. Media Studies: Public Space, Installation Art, and New Media. (ArtP; 3 cr [max 9 cr]; prereq major or minor or #; fall, spring, offered when feasible)
Discussion and production of installation and public art. Each student completes three large-scale art projects and one final collaborative installation that is exhibited in the HFA Gallery. Includes exploration of interior space, exterior space, video art, and other contemporary media.

ArtS 3002. Media Studies: Artist’s Books. (ArtP; 3 cr [max 9 cr]; prereq major or minor or #; fall, spring, offered when feasible)
Personal expression through artist’s books. Designed for students who have a working knowledge of the basic principles and skills of art such as drawing, 2D and 3D design, composition, and color theory.

ArtS 3003. Media Studies: Tilemaking. (ArtP; 3 cr [max 9 cr]; prereq major or minor or #; fall, spring, offered when feasible)
A hands-on exploration of the rich history of functional and decorative tile, including mosaics. Students design and build their own ceramic tile, which is, after firing, used to construct tabletops and wall-hung murals. A low-fire clay body, as well as stoneware and porcelain, is available for tile construction.

ArtS 3004. Media Studies: Mural Project and Public Art. (ArtP; 3 cr [max 9 cr]; prereq major or minor or #; fall, spring, offered when feasible)
Understanding and exploration of contemporary mural art through reading, writing, and production of art. Collaborative production of a large-scale painted mural in a public setting. Designed for students who have a working knowledge of the basic principles and skills of art such as drawing, 2D and 3D design, composition, and color theory.

ArtS 3005. Media Studies: Digital Imaging. (ArtP; 3 cr [max 9 cr]; prereq major or minor or #; fall, spring, offered when feasible)
Introduction to the technical, conceptual, aesthetic, and ethical aspects of using the computer to make art. Exploration of digital media software, Web research, scanning, color printing, and digital photography; consideration of the issues facing artists and the art world in the area of digital imaging.

ArtS 3006. Media Studies: Feminist Art: A Studio Perspective. (ArtP; 3 cr [max 9 cr]; prereq major or minor or #; fall, spring, offered when feasible)
The impact of the women’s movement of the 1970s on contemporary art. Exploration of the notion of “women’s work” as a studio practice; the materials, methods, and issues that define feminist work.

ArtS 3007. Media Studies: Printmaking. (ArtP; 3 cr [max 9 cr]; prereq major or minor or #; fall, spring, offered when feasible)
Study of and practice in various contemporary methods of printmaking: application of drawing skills, color, composition, and personal expression to alternative printmaking techniques.

ArtS 3008. Media Studies: Woodfired Kiln Design and Construction. (ArtP; 3 cr [max 9 cr]; prereq 1101-1106 [10 cr] or #; fall, spring, offered when feasible)
Design and construction of a woodfired kiln capable of firing stoneware and porcelain. Examination and critique of historical and contemporary woodfired kiln designs.
ArtS 3012. Media Studies: Ceramics. (ArtP; 3 cr [max 9 cr]; prereq major or minor in ArtS; fall, spring, offered when feasible)
Study of and practice in specialized methods and techniques in ceramics not covered under the regular curriculum.

ArtS 3013. Media Studies: Painting. (ArtP; 3 cr [max 9 cr]; prereq ArtS major or minor; fall, spring, offered when feasible)
Study of and practice in various contemporary methods in painting: application of drawing skills, color, composition, and personal expression to alternative painting techniques.

ArtS 3100. Advanced Drawing I. (ArtP; 3 cr [max 9 cr]; prereq 2101, 2102 recommended; fall, every year)
Continued development of the skills and understandings required by traditional problems of drawing.

ArtS 3110. Advanced Drawing II. (ArtP; 3 cr [max 9 cr]; prereq 2101, 2102; 3100 recommended; spring, every year)
Emphasizes self-direction, experimental approaches and materials, and study of contemporary concepts.

ArtS 3200. Advanced Printmaking I. (ArtP; 3 cr [max 9 cr]; prereq 2202; fall, every year)
Further exploration of printmaking techniques and skills as a means of artistic expression. Students may register for either semester; however, a year’s continuous work is recommended.

ArtS 3210. Advanced Printmaking II. (ArtP; 3 cr [max 9 cr]; prereq 2202; spring, every year)
Further exploration of printmaking techniques and skills as a means of artistic expression. Students may register for either semester; however, a year’s continuous work is recommended.

ArtS 3300. Advanced Painting I. (ArtP; 3 cr [max 9 cr]; prereq 2302 or #; fall, every year)
Further development of painting as a means of artistic expression. Students may register for either semester; however, a year’s continuous work is recommended.

ArtS 3310. Advanced Painting II. (ArtP; 3 cr [max 9 cr]; prereq 2302 or #; spring, every year)
Further development of painting as a means of artistic expression. Students may register for either semester; however, a year’s continuous work is recommended.

ArtS 3400. Advanced Sculpture I. (ArtP; 3 cr [max 9 cr]; prereq 2402; fall, every year)
Further development of sculpture as a means of artistic expression. Students may register for either semester; however, a year’s continuous work is recommended.

ArtS 3410. Advanced Sculpture II. (ArtP; 3 cr [max 9 cr]; prereq 2402; spring, every year)
Further development of sculpture as a means of artistic expression. Students may register for either semester; however, a year’s continuous work is recommended.

ArtS 3500. Advanced Exhibit. (3 cr)
A two-semester sequential capstone course for majors, with a focus on the planning and preparation of a senior exhibit and investigation of other professional skills. Students continue to develop and refine the thesis, slide lecture, and install work in the HFA Gallery during the spring semester for the Senior Exhibit.

ArtS 3993. Directed Study. (1-5 cr [max 10 cr]; prereq approved directed study form; fall, spring, every year)
An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum.

Biology (Biol)
Division of Science and Mathematics
The biology curriculum is designed to provide students with biological knowledge and to develop scientific skills as part of their liberal arts education. Included in those skills are the abilities to conduct and interpret scientific research and to successfully communicate scientific information both verbally and in writing. The faculty believe these objectives can best be attained through a balanced core curriculum in biology and a diverse array of elective coursework, both of which include active lab and field experiences. The biology major prepares students for graduate or professional programs and for careers such as secondary biology education, government service, or private sector employment. The biology discipline also offers a variety of 10xx courses that are designed specifically for students seeking to fulfill general education requirements in science.

Biology Major
Program Requirements
Courses may not be taken S-N unless offered S-N only. Up to 5 credits of coursework with a grade of D or D+ may be used to meet the major requirements if offset by an equivalent number of credits of A or B in the major. A minimum GPA of 2.00 is required in the major in order to graduate. The GPA includes all, and only, University of Minnesota coursework. Grades of F are included in GPA calculation until they are replaced.
Biology majors are advised to complete their chemistry and mathematics requirements as early as possible. All majors should have their programs approved by a biology adviser by the beginning of their junior year.

Courses for the Program
Required Courses
Biol 1111—Fundamentals of Genetics, Evolution, and Development, Sci (3 cr)
Biol 2101—Evolution of Biodiversity, Sci-L (4 cr)
Biol 2111—Cell Biology, Sci-L (4 cr)
Biol 3121—Molecular Biology, Sci-L (5 cr)
Biol 3131—Ecology, Sci-L (4 cr)
Biol 3700—Biological Communication I (1 cr)
Biol 3701—Biological Communication II (1 cr)
Biol 4901—Senior Seminar (1 cr)
Chem 1101—General Chemistry I, Sci-L (4 cr)
Biology (Biol)

Chem 1102—General Chemistry II, Sci-L (4 cr)
Chem 2301—Organic Chemistry I, Sci (4 cr)
Chem 2311—Organic Chemistry Lab I (1 cr)
Math 1021—Survey of Calculus, M/SSR (4 cr)
or Math 1101—Calculus I, M/SSR (5 cr)
Stat 1601—Introduction to Statistics, M/SSR (4 cr)
or Stat 2601—Statistical Methods, M/SSR (4 cr)

Elective Courses
Take 16 or more credit(s) from the following:

Organismal Electives
Take 1 or more course(s) from the following:

Biol 4111—Microbiology, Sci-L (4 cr)
Biol 4121—Herpetology, Sci-L (4 cr)
Biol 4131—Vertebrate Natural History, Sci-L (4 cr)
Biol 4151—Entomology, Sci-L (4 cr)
Biol 4161—Evolution, Sci (4 cr)
Biol 4172—Plant Systematics, Sci-L (4 cr)
Biol 4301—Plant Biology, Sci-L (4 cr)

Non-organismal Electives
Take 0 or more course(s) from the following:

Biol 4003—Neurobiology, Sci-L (4 cr)
Biol 4004—Principles of Public Health and Epidemiology, Sci (4 cr)
Biol 4181—Developmental Biology, Sci-L (4 cr)
Biol 4191—Freshwater Biology, Sci-L (4 cr)
Biol 4211—Biochemistry, Sci-L (4 cr)
Biol 4311—Conservation Genetics, Sci-L (4 cr)
Biol 4312—Genetics, Sci-L (4 cr)
Biol 4321—Animal Physiology, Sci-L (4 cr)
Biol 4331—Global Change Ecology, Sci (4 cr)
Biol 4351—Conservation Biology, Sci-L (4 cr)
Biol 4611—Biochemistry Lab (1 cr)

Other Electives
Take 0–1 course(s) from the following:

Psy 3211—Biological Psychology, Sci-L (5 cr)
Psy 3201—Comparative Psychology, Sci-L (4 cr)
Geol 3111—Introduction to Invertebrate Paleontology, Sci-L (4 cr)

Biology Minor

Minor Requirements
Courses required for the minor may not be taken S-N. Up to 5 credits of coursework with a grade of D or D+ may be used to meet the minor requirements if offset by an equivalent number of credits of A or B in the minor. The GPA in these courses must be at least 2.00.

Courses for the Program

Minor Core Curriculum
Biol 1111—Fundamentals of Genetics, Evolution, and Development, Sci (3 cr)
Biol 2101—Evolution of Biodiversity, Sci-L (4 cr)
Biol 2111—Cell Biology, Sci-L (4 cr)
Chem 1101—General Chemistry I, Sci-L (4 cr)
Chem 1102—General Chemistry II, Sci-L (4 cr)

Elective Courses
Take 2 or more course(s) from the following:

Biol 3121—Molecular Biology, Sci-L (5 cr)
Biol 3131—Ecology, Sci-L (4 cr)
Biol 4003—Neurobiology, Sci-L (4 cr)
Biol 4004—Principles of Public Health and Epidemiology, Sci (4 cr)
Biol 4111—Microbiology, Sci-L (4 cr)
Biol 4121—Herpetology, Sci-L (4 cr)
Biol 4131—Vertebrate Natural History, Sci-L (4 cr)
Biol 4151—Entomology, Sci-L (4 cr)
Biol 4161—Evolution, Sci (4 cr)
Biol 4172—Plant Systematics, Sci-L (4 cr)
Biol 4181—Developmental Biology, Sci-L (4 cr)
Biol 4191—Freshwater Biology, Sci-L (4 cr)
Biol 4211—Biochemistry, Sci (4 cr)
Biol 4301—Plant Biology, Sci-L (4 cr)
Biol 4311—Conservation Genetics, Sci-L (4 cr)
Biol 4312—Genetics, Sci-L (4 cr)
Biol 4321—Animal Physiology, Sci-L (4 cr)
Biol 4331—Global Change Ecology, Sci (4 cr)
Biol 4351—Conservation Biology, Sci-L (4 cr)
Biol 4611—Biochemistry Lab (1 cr)
or choose not more than one of the following non-biology electives:

Psy 3211—Biological Psychology, Sci-L (5 cr)
or Psy 3201—Comparative Psychology, Sci-L (4 cr)
or Geol 3111—Introduction to Invertebrate Paleontology, Sci-L (4 cr)

Teacher Preparation Requirements
Students seeking teaching licensure in life science 9–12 should refer to the Education, Secondary (SeEd) section of this catalog.

Biology Course Descriptions

Biol 1001. Biological Rhythms. (Sci-L; 4 cr; no elective cr for biol majors or minors; fall, offered when feasible)

An examination of biological principles through the dimension of time. In particular, short to long cycling behaviors in humans, microorganisms, and chemical systems are studied. (two 65-min lect, one 120-min lab)

Biol 1002. Human Nutrition. (Sci; 3 cr; no elective cr for biol majors or minors; spring, every year)


Biol 1051. Wildlife Biology. (Sci-L; 4 cr; no elective cr for biol majors or minors; fall, even years)

Biological principles and practices illustrated through studies of North American wildlife. Wildlife taxonomy, identification, migration and dispersal, ecological relationships, contemporary problems associated with human activities. (two 65-min lect, one 120- or 180-min lab or field study)

Biol 1052. Introduction to Conservation Biology. (Sci-L; 4 cr; no elective cr for biol majors or minors; spring, offered when feasible)

Survey of topics in conservation biology, with emphasis on topics that have created controversy and debate: loss of biodiversity; endangered species preservation and management, habitat conservation, environmental degradation, and sustainable development. (two 65-min lect, one 120- or 180-min lab or field study)

Biol 1053. Introduction to Insect Biology. (Sci-L; 4 cr; no elective cr for biol majors or minors; summer, even years)

Basic concepts in insect biology including evolutionary history, life-cycles, classification, and ecology; examination of how insects and other arthropods interact with human society including insects as vectors of human disease, forensic entomology, insects in agriculture, beneficial uses of insects in the production of food and fiber, and insect-inspired art and literature. (three 75-min lect, two 165-min labs, one all-day field trip required in addition to labs) [Continuing Education course]

Biol 1071. Plants of Minnesota. (Sci-L; 4 cr; no elective cr for biol majors or minors; summer, offered when feasible)

Introduction to plant structure and function, especially those found in Minnesota: ecology, physiology, evolution, and conservation. Labs emphasize plant identification and anatomy.
Biol 1111. Fundamentals of Genetics, Evolution, and Development. (Sci; 3 cr; prereq Biol major/minor or chem major or any health sciences preprofessional program or EdEd or SeEd major with middle school science specialties or #; fall, spring, even year)
Introduction to scientific methods and the history of biology, with an emphasis on mechanisms of inheritance, development, and descent with modification. Overview of pre-Darwinian scientific thought; the theory of evolution; a qualitative introduction to genetics and molecular biology; and a summary of developmental biology.

Biol 2101. Evolution of Biodiversity. (Sci-L; 4 cr; prereq 1101 or 1111 or #; spring, every year)
Analysis of evolutionary trends using historical and contemporary evidence. Principles of classification and phylogenetic reconstruction. Includes laboratory survey of the major groups of organisms. (two 60-min lect, one 180-min lab)

Biol 2102. Human Anatomy. (3 cr; ([WSSS 2102]; prereq soph; no elective cr for Biol majors or minors; fall, every year)
Same as WSS 2102. Structure of human systems at their organ and cellular level. (two 60-min lect, one 120-min lab)

Biol 2103. Introduction to Human Physiology. (Sci; 4 cr; prereq 2102 or WSS 2102 or #; no elective cr for biology majors or minors; spring, every year)
Function of human systems at organ, cell, and molecular levels. (three 60-min lect)

Biol 2111. Cell Biology. (Sci-L; 4 cr; prereq 1101 or 1111, or prereq or coreq Chem 1102 or #; fall, every year)
Cell structure and function. Includes topics pertaining to the chemistry, physiology, structure, and reproduction of plant and animal cells. (three 60-min lect and one 120-min lab)

Biol 2121. Molecular Biology. (Sci-L; 5 cr; prereq 2111, Chem 2301 or #; spring, every year)
Principles and mechanisms of DNA function, protein synthesis, and gene regulation in prokaryotes and eukaryotes. Genetic engineering and evolution at the molecular level. (two 100-min lect, 180-min lab)

Biol 2131. Ecology. (Sci-L; 4 cr; prereq Biol 2101 or EnSt 2101 or #; fall, every year)
Basic principles and models of population biology, community structure and function, and ecosystem dynamics. Lab exercises emphasize field work, techniques for characterizing local plant and animal communities, and experimental investigation of topics such as competition and behavioral ecology. (two 60-min lect, one 180-min lab and field study; weekend field trip required)

Biol 3700. Biological Communication I. (1 cr; prereq Biol 2101, 2111; fall, spring, every year)
Finding and utilizing sources of biological information. Modern techniques for searching the biological literature, as well as reading and interpreting those sources. Principles and practices of writing in biology.

Biol 3701. Biological Communication II. (1 cr; prereq 3700, #; fall, spring, every year)
Preparation of an extensive literature review paper on a biological topic of the student’s choice.

Biol 4003. Neurobiology. (Sci-L; 4 cr; prereq 2111, fall, odd years)
Survey of general principles of neuronal function and formation. Emphasis on comparative aspects of simple nervous systems.

Biol 4004. Principles of Public Health and Epidemiology. (Sci-L; 4 cr; prereq Stat 1601 or Stat 2601, Jr status or #; spring, odd years)
Public health is the practice of protecting and improving the health of communities. Examination of public health concepts, organizations, and tools and their use in preventing disease, injury, and death. Use of epidemiologic methods and case studies to understand the determinants of health and the effectiveness of public health interventions. (three 60-min lect)

Biol 4111. Microbiology. (Sci-L; 4 cr; prereq 2111, prereq or coreq 3121 or #; spring, every year)
The biology of pathogenesis and the treatment and prevention of infectious disease. Emphasis on prokaryotic microbes and viruses. (two 60-min lect, one 180-min lab)

Biol 4121. Herpetology. (Sci-L; 4 cr; prereq Biol 2101 or EnSt 2101 or #; spring, odd years)
Survey of amphibians and reptiles, including their evolution, systematics, identification, behavior, ecological relationships, and contemporary problems associated with human activities. (two 60-min lect, one 180-min lab and field studies)

Biol 4311. Vertebrate Natural History. (Sci-L; 4 cr; prereq Biol 2101 or EnSt 2101 or #; fall, odd years)
Survey of vertebrates, including their evolution, systematics, and ecological relationships. (two 60-min lect, one 180-min lab or field study)

Biol 4151. Entomology. (Sci-L; 4 cr; prereq Biol 2101 or EnSt 2101 or #; fall, every year)
Structure, life histories, habits, and classification of common families of insects, including their economic significance. (two 60-min lect, 180-min lab)

Biol 4161. Evolution. (Sci; 4 cr; prereq Biol 2101, 3121 or #; spring, odd years)
Survey of the history, evidence, and mechanisms of organic evolution. (two 100-min lect)

Biol 4171. Plant Systematics and Evolution. (Sci-L; 4 cr; prereq 2101, 3121 or #; spring)
Introduction to the identification and phylogenetics of land plants. Survey of the major trends in plant evolution, including morphological and life history variation among major plant taxa. Use of keys for local flora emphasized. (two 60-min lect, one 180-min lab and field study)

Biol 4172. Plant Systematics. (Sci-L; 4 cr; prereq 2101 or EnSt 2101 or #; spring, even years)
Survey of vascular plant taxa, with an emphasis on the flowering plant families and their evolutionary relationships. Lab emphasizes use of keys for identification of Midwestern plant families and genera. (two 60-min lect, 180-min lab)

Biol 4181. Developmental Biology. (Sci-L; 4 cr; prereq 2111, 4312 recommended; fall, even years)
Survey of general concepts in developmental biology, emphasizing molecular mechanisms of positional information, pattern formation, and cellular interactions. Stresses comparative aspects of developmental processes, and the role of development in evolution. (two 60-min lectures, one 180-min lab)

Biol 4191. Freshwater Biology. (Sci-L; 4 cr; prereq Biol 2101 or EnSt 2101, 2111 or #; fall, odd years)
Structure, function, and biota of freshwater ecosystems, including lakes, streams and wetlands. Lab emphasizes independent research and field study in local habitats. (two 60-min lect, one 180-min lab; weekend field trip required)

Biol 4211. Biochemistry. (Sci-L; 4 cr; prereq 3121, Chem 2302 or #; fall, every year)
Structures, functions, and biochemical transformations of proteins, carbohydrates, and lipids. (three 60-min lect) Optional lab offered. See Biol 4611.

Biol 4213. Genomics of Host-Pathogen Interactions. (Sci-L; 4 cr; prereq 3121, 4312 or #; fall, offered when feasible)
Analysis of genome, transcriptome, and proteome for genetic regulation during infection, pathogenesis, and defense, for a variety of taxa. Introduces immunology, RNA interference, hypersensitivity, tolerance, and evasion mechanisms. Includes extensive reading and discussion of primary literature.

Biol 4301. Plant Biology. (Sci-L; 4 cr; prereq Biol 2101, 2111 or #; fall, odd years)
Descriptive and experimental study of plants. Anatomy, development, physiology, secondary compounds, evolution, human uses of plants. (two 60-min lect, one 180-min lab)

Biol 4311. Conservation Genetics. (Sci-L; 4 cr; prereq Biol 2101 or #; Stat 1601 or 2601 recommended; fall, offered when feasible)
Introduction to theory of population differentiation and gene flow; applications to managing and recovering rare species. Adaptive and neutral models, linkage disequilibria, effective population size, inbreeding depression, population genetic structure. Labs use computers to model genetic changes in populations and analyze genetic structure. (two 100-min lect, one 120-min lab)

Biol 4312. Genetics. (Sci-L; 4 cr; Biol 3101; prereq 2111 or #; spring, every year)
Principles and mechanics of inheritance and variation, including cytological, organismal, and population genetics; mechanisms of evolution; and the genetic problems of humans. (two 60-min lect, 180-min lab)

Biol 4321. Animal Physiology. (Sci-L; 4 cr; prereq 2111; spring, odd years)
Functions of animal structures as they relate to coping with different environmental situations. (two 60-min lect, one 120-min lab)
Chemistry (Chem)

Division of Science and Mathematics

Coursework in chemistry spans the four traditional areas of analytical, inorganic, organic, and physical chemistry. Students may also pursue a degree in chemistry with a biochemistry subfield, involving significant coursework in biology. All majors must study beginning physics and calculus. Students may also design an interdisciplinary area of concentration in chemistry-related fields, such as geochemistry or environmental science. Beginning chemistry courses satisfy the physical sciences component of the general education requirements.

Chemistry and biochemistry majors do hands-on work with chemical instrumentation and use computers in both software and hardware applications. The faculty prides itself on working closely with its students on undergraduate research projects, directed studies, and undergraduate teaching assistantships. In addition, chemistry majors are encouraged to complete summer research internships at university and industrial labs or at other research facilities, locally and nationally.

Study in chemistry is the prerequisite for many preprofessional programs at UMM. Students who also do work in the Division of Education can obtain licensure in secondary education. More than sixty percent of UMM’s chemistry/biochemistry majors pursue postgraduate work toward a doctoral degree—most of them in chemistry/biochemistry, many in medicine; but also in other health-related fields, such as veterinary medicine, pharmacy and dentistry; in biological fields related to chemistry; and in a variety of other fields. The others enter careers in secondary education

Objectives—the chemistry discipline is designed to

- serve students from other disciplines requiring knowledge of chemistry
- advance student learning in contemporary chemistry/biochemistry at a level appropriate to undergraduates
- advance student competence in research in chemistry/biochemistry
- advance student skills in writing and speaking about chemistry/biochemistry
- prepare students for postgraduate work in a variety of fields and/or for careers in industrial or clinical settings or for careers in secondary education

Chemistry Major

Program Requirements

Courses may not be taken S-N. Up to 8 credits of coursework with a grade of D or D+ may be used to meet the major requirements if offset by an equivalent number of credits of A or B. A minimum GPA of 2.00 is required in the major to graduate. The GPA includes all, and only, University of Minnesota coursework. Grades of F are included in GPA calculation until they are replaced. Students should consult members of the chemistry faculty to plan programs of study appropriate to their interests and postgraduate goals.

Students may complete a major in chemistry through one of two tracks—the standard chemistry major or the chemistry major with a biochemistry subfield.

Courses for the Program

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chem 101</td>
<td>General Chemistry I</td>
<td>4 cr</td>
</tr>
<tr>
<td>Chem 102</td>
<td>General Chemistry II</td>
<td>4 cr</td>
</tr>
<tr>
<td>Chem 2301</td>
<td>Organic Chemistry I</td>
<td>4 cr</td>
</tr>
<tr>
<td>Chem 2302</td>
<td>Organic Chemistry II</td>
<td>4 cr</td>
</tr>
<tr>
<td>Chem 2311</td>
<td>Organic Chemistry Lab I</td>
<td>1 cr</td>
</tr>
<tr>
<td>Chem 2321</td>
<td>Introduction to Research I</td>
<td>1 cr</td>
</tr>
<tr>
<td>Chem 3101</td>
<td>Analytical Chemistry</td>
<td>4 cr</td>
</tr>
<tr>
<td>Chem 3501</td>
<td>Physical Chemistry I</td>
<td>4 cr</td>
</tr>
<tr>
<td>Chem 3901</td>
<td>Chemistry Seminar I</td>
<td>0.5 cr</td>
</tr>
<tr>
<td>Chem 4901</td>
<td>Chemistry Seminar II</td>
<td>0.5 cr</td>
</tr>
<tr>
<td>Math 1101</td>
<td>Calculus I, M/SR</td>
<td>5 cr</td>
</tr>
<tr>
<td>Math 1102</td>
<td>Calculus II, M/SR</td>
<td>5 cr</td>
</tr>
<tr>
<td>Phys 1101</td>
<td>General Physics I</td>
<td>5 cr</td>
</tr>
<tr>
<td>Phys 1102</td>
<td>General Physics II</td>
<td>5 cr</td>
</tr>
</tbody>
</table>

Program Sub-plans

Students are required to complete one of the following sub-plans. (Note: The honors sub-plan does not meet this requirement. Honors students are required to complete one sub-plan plus the honors sub-plan.)

Chemistry, Standard Sub-plan

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chem 3502</td>
<td>Physical Chemistry II</td>
<td>4 cr</td>
</tr>
<tr>
<td>Chem 3511</td>
<td>Physical Chemistry Lab</td>
<td>1 cr</td>
</tr>
</tbody>
</table>

Standard Chemistry Elective Courses

Take 2 or more course(s) from the following:

- Chem 3111—Instrumental Analysis, Sci-L | 4 cr |
- Chem 3701—Inorganic Chemistry, Sci | 3 cr |
- Chem 3801—History of Chemistry, Sci | 3 cr |
- Chem 3811—Macromolecules, Sci | 3 cr |
Chemistry Minor

Chemistry, Subfield Biochemistry Sub-plan

Biochemistry Required Courses
Biol 111—Fundamentals of Genetics, Evolution, and Development, Sci (3 cr)
Biol 2111—Cell Biology, Sci-L (4 cr)
Biol 3121—Molecular Biology, Sci-L (5 cr)
Biol 4211—Biochemistry, Sci (4 cr)
Biol 4312—Genetics, Sci-L (4 cr)
Chem 3501—Physical Chemistry I, Sci (4 cr)
Chem 3502—Physical Chemistry II, Sci (4 cr)
Chem 3701—Inorganic Chemistry, Sci (3 cr)
Chem 4751—Advanced Inorganic Chemistry, Sci (3 cr)

Biochemistry Electives
Take 1 or more course(s) from the following:
Chem 3111—Instrumental Analysis, Sci-L (4 cr)
Chem 3502—Physical Chemistry II, Sci (4 cr)
Chem 3701—Inorganic Chemistry, Sci (3 cr)
Chem 3811—Macromolecules, Sci (3 cr)
Chem 4351—Bioorganic Chemistry, Sci (3 cr)
Chem 4551—Theoretical Chemistry, Sci (3 cr)
Chem 4552—Molecular Spectroscopy, Sci (3 cr)
Chem 4751—Advanced Inorganic Chemistry, Sci (3 cr)

Chemistry Minor

Minor Requirements
Courses may not be taken S-N except where noted. Up to 8 credits of coursework with a grade of D or D+ may be used to meet the minor requirements if offset by an equivalent number of credits of coursework with a grade of A or B. The GPA in these courses must be at least 2.00.

Courses for the Program

Required Courses
Chem 1101—General Chemistry I, Sci-L (4 cr)
Chem 1102—General Chemistry II, Sci-L (4 cr)
Chem 2301—Organic Chemistry I, Sci (4 cr)
Chem 2311—Organic Chemistry Lab I (1 cr)

Elective Courses
Three elective courses are required. Students must take either Chem 3101 or 3501. Two additional courses are also required. If Chem 3101 is not taken, one of the two courses must include lab or have an additional concurrent lab registration.

If Chem 3101 is taken:
Chem 3101—Analytical Chemistry, Sci-L (4 cr)
Take 2 or more course(s) totaling 6 or more credit(s) from the following:
Chem 2302—Organic Chemistry II, Sci (4 cr)
Chem 3111—Instrumental Analysis, Sci-L (4 cr)
Chem 3501—Physical Chemistry I, Sci (4 cr)
Chem 3502—Physical Chemistry II, Sci (4 cr)
Chem 3701—Inorganic Chemistry, Sci (3 cr)

or if Chem 3101 is not taken:
Chem 3501—Physical Chemistry I, Sci (4 cr)

Chem 4351—Bioorganic Chemistry, Sci (3 cr)
Chem 4751—Advanced Inorganic Chemistry, Sci (3 cr)
Chem 4552—Molecular Spectroscopy, Sci (3 cr)
Chem 4551—Theoretical Chemistry, Sci (3 cr)
Biol 4211—Biochemistry, Sci (4 cr)

Teacher Preparation Requirements
Students seeking teaching licensure in chemistry 9–12 should refer to the Education, Secondary (SeEd) section of this catalog.

Chemistry Course Descriptions

Chem 1101. General Chemistry I, (Sci-L; 4 cr; prereq Math 0901 or placement beyond Math 0901 using ACT/placement exam score; fall, every year)
Scientific method, measurements, nomenclature, stoichiometry, atomic and molecular structure, thermochemistry, chemical periodicity, introduction to chemical bonding, and properties of common elements and ions. Development of scientific reasoning and problem-solving skills. Laboratory exercises concomitant with these topics. (3 hrs lect, 3 hrs lab)

Chem 1102. General Chemistry II, (Sci-L; 4 cr; prereq 1101; spring, every year)
Continuation of Chem 1101. Chemical bonding, states of matter, solutions, acid-base chemistry, chemical equilibrium, oxidation-reduction reactions, kinetics, thermodynamics, quantum theory, nuclear chemistry, organic chemistry, and biochemistry. Lab exercises concomitant with these topics. (3 hrs lect, 3 hrs lab)

Chem 1993. Directed Study, (1-5 cr [max 10 cr]; prereq approved directed study form; fall, spring, every year)
An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum.
Chem 2301. Organic Chemistry I. (Sci; 4 cr; prereq 1102, coreq 2311; fall, every year) Introduction to the structure and reactivity of organic molecules; nomenclature and functional groups; stereochemistry; mechanisms of substitution and elimination pathways; physical organic chemistry; introduction to synthetic strategy; fundamentals of spectroscopic techniques. (4 hrs lect)

Chem 2302. Organic Chemistry II. (Sci; 4 cr; prereq 2301, coreq 2321 or # for chem majors; spring, every year) Continuation of topics from Chem 2301; spectroscopy; chemistry of polyaromatic systems, and amines; enol and enolate chemistry; free-radical chemistry; retrosynthetic analysis; special topics. (4 hrs lect)

Chem 2311. Organic Chemistry Lab I. (1 cr; coreq 2301 or #; fall, every year) Development of lab techniques in organic chemistry; experimental problem-solving. (3 hrs lab)

Chem 2312. Organic Chemistry Lab II. (1 cr; prereq 2311, coreq 2302 or #; spring, every year) Laboratory work in organic synthesis, experimental design, and spectroscopic analysis with an emphasis on reactions of biological interest. (3 hrs lab)

Chem 2321. Introduction to Research I. (1 cr; prereq 2311, coreq 2302 or #; spring, every year) Interdisciplinary approach to experimental design and analysis of data. Synthesis of organic, organometallic, or inorganic compounds, with emphasis on purification and characterization using advanced techniques and instrumental methods. Instruction in the use of the scientific literature and scientific communication. Begin research project with faculty mentor. (6 hrs lab)

Chem 2322. Introduction to Research II. (1 cr; prereq 2321, coreq 2302, 2321, or #; spring, every year) Continue research with faculty mentor. Experiment design and analysis of data. Instruction in the use of the scientific literature and oral and written scientific communication. (6 hrs lab)

Chem 2993. Directed Study. (1-5 cr [max 10 cr]; prereq approved directed study form; fall, spring, every year) An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum.

Chem 3101. Analytical Chemistry. (Sci-L; 4 cr; prereq 1102; fall, every year) The application of chemical equilibria to chemical analysis with emphasis on the fundamental quantitative aspects of analytical chemistry. Acid-base, oxidation-reduction, and complexometric titrations, introduction to electrochemical and spectrophotometric analyses and separations. (3 hrs lect, 3 hrs lab)

Chem 3111. Instrumental Analysis. (Sci-L; 4 cr; prereq 3101; spring, even years) Principles of chemical instrumentation and instrumental methods of analysis; extensive lab work using chromatographic, spectrophotometric, and electrochemical methods of analysis. (2 hrs lect, 4 hrs lab)


Chem 3502. Physical Chemistry II. (Sci; 4 cr; prereq 3501, coreq 3511 or # for chem majors; spring, every year) Introduction to quantum theory. Atomic and molecular structure. Group Theory. Introduction to statistical mechanics. Chemical dynamics. Topics drawn from the liquid and solid states, advanced kinetics, electrochemistry, and surfaces. (4 hrs lect)

Chem 3511. Physical Chemistry Lab. (1 cr; coreq 3502; spring, every year) Lab experiments to illustrate physico-chemical principles and to develop skills in data collection, analysis and interpretation, and in report writing. (3 hrs lab)

Chem 3701. Inorganic Chemistry. (Sci; 3 cr; prereq 3501 or #; spring, every year) The periodic table; models of structure and bonding of main group elements and transition metals, nomenclature, symmetry, and bonding theory of coordination compounds. (3 hrs lect)

Chem 3711. Inorganic Chemistry Lab. (1 cr; coreq 3701 or #; spring, even years) Lab experiments in inorganic/organometallic chemistry illustrating synthetic and spectroscopic techniques. (3 hrs lect)


Chem 3901. Chemistry Seminar I. (Sci; 3 cr; prereq 2311; required of all chem majors; may not count toward chem minor; spring, every year) Presentations by faculty, guest speakers, and students on topics of current research interest. Students are required to present one seminar for the Chem 3901-4901 sequence.

Chem 3993. Directed Study. (1-5 cr [max 10 cr]; prereq approved directed study form; fall, spring, every year) An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum.

Chem 4351. Bioorganic Chemistry. (Sci; 3 cr; prereq 2302, Biol 4211; spring, odd years) Discussion of the theory of enzyme catalysis and catalytic antibodies, experimental determination of catalytic mechanisms for a variety of organic reactions in biological systems, and elucidation of biosynthetic pathways. Involves extensive reading in the primary literature. (3 hrs lect)

Chem 4352. Synthesis. (Sci; 3 cr; prereq 2302; fall, odd years) Study of the preparation of biologically active molecules, emphasizing the application of transition metal chemistry to modern synthetic methods. (3 hrs lect)

Chem 4353. Synthesis Laboratory. (1 cr; prereq 4352 or #; fall, spring, offered when feasible) Modern organometallic synthetic methods applied to the preparation of small organic molecules. Preparation, purification, analysis, and identification of synthetic products. Scientific record-keeping and literature searching. (3 hrs lab)

Chem 4511. Theoretical Chemistry. (Sci; 3 cr; prereq 3502 or #; fall, offered when feasible) Quantum theory of molecules. Statistical thermodynamics; Gibbsian ensembles; applications. (3 hrs lect)

Chem 4512. Molecular Spectroscopy. (Sci; 3 cr; prereq 2311, 3101 or #; spring, odd years) Interaction of molecules and electromagnetic radiation. Spectroscopic determination of molecular structure. Operation of spectrometers and spectrophotometers. (3 hrs lect)

Chem 4751. Advanced Inorganic Chemistry. (Sci; 3 cr; prereq 3701 or #; fall, spring, offered when feasible) Structure and reactions of coordination compounds, inorganic cages and clusters, lanthanide and actinide series. (3 hrs lect)

Chem 4901. Chemistry Seminar II. (Sci; 3 cr; prereq 3901; required of all chem majors; may not count toward chem minor; fall, spring, every year) Continuation of Chemistry Seminar I.

Chem 4993. Directed Study. (1-5 cr [max 10 cr]; prereq approved directed study form; fall, spring, every year) An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum.
Chinese (Chn)

Division of the Humanities

The Chinese discipline introduces students to the study of the language, literature and culture of China. The courses satisfy foreign language and other general education requirements.

Objectives—The curriculum is designed to ensure that students:

- develop a historical and theoretical understanding of the three areas of Communication, Media, and Rhetoric
- use a variety of assigned theoretical approaches appropriate to these three areas to describe and evaluate assigned or chosen discourse
- demonstrate advanced mastery of a variety of ways to construct and send messages.

Study Abroad

In light of today’s increasingly interdependent world, the UMM Chinese discipline endorses study abroad as the most effective means by which to

- improve language abilities
- broaden academic horizons
- globalize one’s world view
- expand career opportunities
- advance cross-cultural and problem-solving skills
- gain confidence in oneself personally and professionally

Chinese Course Descriptions

Chn 1001. Beginning Modern Chinese I. (FL; 4 cr; fall, every year)
First semester of a two-semester sequence in first-year modern standard Chinese (Mandarin) for students who have no previous exposure to the Chinese language. Introduction to the sounds of Mandarin, basic grammar, vocabulary, and the Chinese writing system. [Continuing Education course]

Chn 1002. Beginning Modern Chinese II. (FL; 4 cr; prereq 1001 or #; spring, every year)
Second semester of the two-semester sequence in first-year Modern Chinese. Designed for those who have completed first-semester Chinese or who have equivalent preparation. Introduction to additional modern standard Chinese (Mandarin) grammar, vocabulary, and sentence structures. By the end of the semester, students should be able to recognize some of the Chinese characters, write about part of them from memory, conduct simple conversations, and read simple Chinese texts on general topics. [Continuing Education course]

Communication, Media, and Rhetoric (CMR)

Division of the Humanities

The mission of the communication, media, and rhetoric (CMR) discipline is to provide an introduction to the breadth of scholarship in communication history, communication theory, and communication contexts. UMM students in the CMR major study the multidimensional nature of various types of communication processes, the activities of message production, and the analysis and evaluation of personal, public, and mass communication. Students develop skills for lifelong learning and refine capabilities for active involvement in a participatory democracy.

Objectives—The curriculum is designed to ensure that students:

- develop a historical and theoretical understanding of the three areas of Communication, Media, and Rhetoric
- use a variety of assigned theoretical approaches appropriate to these three areas to describe and evaluate assigned or chosen discourse
- demonstrate advanced mastery of a variety of ways to construct and send messages.

Communication, Media, and Rhetoric Major

Program Requirements

Up to 4 credits of coursework with a grade of D or D+ may be used to meet the major requirements if offset by an equivalent number of credits of A or B. Courses may not be taken S-N unless offered S-N only.

A minimum GPA of 2.00 is required in the major to graduate. The GPA includes all, and only, University of Minnesota coursework. Grades of F are included in GPA calculation until they are replaced.

Courses for the Program

Required Courses

CMR 1052—Introduction to Public Speaking, E/CR (2 cr)
CMR 1062—Introduction to Interpersonal and Group Communication, Hum (4 cr)
CMR 1101—Introduction to Theories of Communication, Media, and Rhetoric, Hum (4 cr)
CMR 4152—Advanced Public Speaking, Hum (4 cr)
CMR 4900—Communication, Media, and Rhetoric Seminar I (1 cr)
CMR 4901—Communication, Media, and Rhetoric Seminar II, Hum (3 cr)

Communication Electives

Take 8 or more credit(s) from the following:
CMR 2411—Health Communication, Hum (4 cr)
CMR 2421—Business and Professional Communication, E/CR (4 cr)
CMR 3401—Communication Theory, SS (4 cr)
CMR 3411—Intercultural Communication Theory and Research, HDiv (4 cr)
CMR 3421—Organizational Communication Theory and Research, SS (4 cr)
CMR 3432—Communication Research Methods, Hum (4 cr)
CMR 4411—Advanced Interpersonal Communication, Hum (4 cr)

Media Electives

Take 8 or more credit(s) from the following:
CMR 1388—College Newspaper Experience (1 cr)
CMR 1389—College Radio Experience (1 cr)
CMR 2311—Media History and Society, SS (4 cr)
CMR 2321—Digital Media Production, Hum (4 cr)
CMR 3301—Media Theory, Criticism, and Problems, SS (4 cr)
CMR 3312—Media Literacy, Hum (4 cr)
CMR 4341—New Media Technologies, Hum (2 cr)

Rhetoric Electives

Take 8 or more credit(s) from the following:
CMR 2052—Legal Advocacy: Speaking in Appellate Forensic Situations, E/CR (4 cr)
CMR 3101—Rhetorical History and Theories: Pre-Socratic to Modern Periods, IP (4 cr)
CMR 3111—Rhetorical Theory and Criticism in the 20th Century, Hum (4 cr)
Communication, Media, and Rhetoric (CMR)

CMR 3121—Rhetorical Criticism and Hollywood Cinema, Hum (4 cr)
CMR 3251—Rhetorical Criticism and Free Speech Discourse, ECR (4 cr)
CMR 4201—Rhetoric and Persuasion: Receiver Analysis, Hum (4 cr)

Communication, Media, and Rhetoric Minor

Minor Requirements

Up to 4 credits of coursework with a grade of D or D+ may be used to meet the minor requirements if offset by an equivalent number of credits of A or B. Courses may not be taken S-N unless offered S-N only.

A minimum GPA of 2.00 is required in the minor to graduate. The GPA includes all, and only, University of Minnesota coursework. Grades of F are included in GPA calculation until they are replaced.

Courses for the Program

Required Courses

CMR 1052—Introduction to Public Speaking, E/CR (2 cr)
CMR 1062—Introduction to Interpersonal and Group Communication, Hum (4 cr)
CMR 1101—Introduction to Theories of Communication, Media, and Rhetoric, Hum (4 cr)
CMR 1388—College Newspaper Experience (1 cr)
CMR 1389—College Radio Experience (1 cr)
CMR 2052—Legal Advocacy: Speaking in Appellate Forensic Situations, E/CR (4 cr)
CMR 2311—Media History and Society, SS (4 cr)
CMR 2411—Health Communication, Hum (4 cr)
CMR 2421—Business and Professional Communication, E/CR (4 cr)
CMR 3101—Rhetorical History and Theories: Pre-Socratic to Modern Periods, IP (4 cr)
CMR 3111—Rhetorical Theory and Criticism in the 20th Century, Hum (4 cr)
CMR 3121—Rhetorical Criticism and Hollywood Cinema, Hum (4 cr)
CMR 3251—Rhetorical Criticism and Free Speech Discourse, ECR (4 cr)
CMR 3301—Media Theory, Criticism, and Problems, SS (4 cr)
CMR 3312—Media Literacy, Hum (4 cr)
CMR 3401—Communication Theory, SS (4 cr)
CMR 3411—Intercultural Communication Theory and Research, HDiv (4 cr)
CMR 3421—Organizational Communication Theory and Research, SS (4 cr)
CMR 3432—Communication Research Methods, Hum (4 cr)
CMR 4152—Advanced Public Speaking, Hum (4 cr)
CMR 4201—Rhetoric and Persuasion: Receiver Analysis, Hum (4 cr)
CMR 4341—New Media Technologies, Hum (2 cr)
CMR 4411—Advanced Interpersonal Communication, Hum (4 cr)

Elective Courses

Take 10 or more credit(s) from the following:
CMR 1388—College Newspaper Experience (1 cr)
CMR 1389—College Radio Experience (1 cr)
CMR 2052—Legal Advocacy: Speaking in Appellate Forensic Situations, E/CR (4 cr)
CMR 2311—Media History and Society, SS (4 cr)
CMR 2411—Health Communication, Hum (4 cr)
CMR 2421—Business and Professional Communication, E/CR (4 cr)
CMR 3101—Rhetorical History and Theories: Pre-Socratic to Modern Periods, IP (4 cr)
CMR 3111—Rhetorical Theory and Criticism in the 20th Century, Hum (4 cr)
CMR 3121—Rhetorical Criticism and Hollywood Cinema, Hum (4 cr)
CMR 3251—Rhetorical Criticism and Free Speech Discourse, ECR (4 cr)
CMR 3301—Media Theory, Criticism, and Problems, SS (4 cr)
CMR 3312—Media Literacy, Hum (4 cr)
CMR 3401—Communication Theory, SS (4 cr)
CMR 3411—Intercultural Communication Theory and Research, HDiv (4 cr)
CMR 3421—Organizational Communication Theory and Research, SS (4 cr)
CMR 3432—Communication Research Methods, Hum (4 cr)
CMR 4152—Advanced Public Speaking, Hum (4 cr)
CMR 4201—Rhetoric and Persuasion: Receiver Analysis, Hum (4 cr)
CMR 4341—New Media Technologies, Hum (2 cr)
CMR 4411—Advanced Interpersonal Communication, Hum (4 cr)

Communication, Media, and Rhetoric Course Descriptions

CMR 1042. Public Speaking and Analysis. (E/CR; 4 cr; summer, offered when feasible)
Public address theories, practices, and analysis.

CMR 1052. Introduction to Public Speaking. (E/CR; 2 cr; fall, spring, every year)
Activities, assignments, and exercises related to public address/public speaking in a variety of speech settings.

CMR 1062. Introduction to Interpersonal and Group Communication. (Hum; 4 cr; fall, every year)
Activities, assignments, and exercises related to interpersonal and group communication in private and public settings including dating, family, and work.

CMR 1101. Introduction to Theories of Communication, Media, and Rhetoric. (Hum; 4 cr; spring, every year)
A survey of the field of study. Students learn the history, theories, and contexts of communication study that prepare them for upper-division courses.

CMR 1388. College Newspaper Experience. (1 cr [max 2 cr]; prereq #; fall, spring, every year)
Supervised experience of selected learning activities to be done in conjunction with an appointment working at the campus newspaper.

CMR 1389. College Radio Experience. (1 cr [max 2 cr]; prereq #; fall, spring, every year)
Supervised experience of selected learning activities to be done in conjunction with an appointment working at the campus radio station.

CMR 2052. Legal Advocacy: Speaking in Appellate Forensic Situations. (E/CR; 4 cr; spring, offered when feasible)
Detailed study of the theory and practice of speaking in legal settings. Students prepare and present appellate argument. The final presentation is before a mock Supreme Court.

CMR 1381. Media History and Society. (SS; 4 cr; fall, spring, offered when feasible)
Examines the historical and on-going development of the relationship of media, culture, and the public. Traces and explores the developments of various communication technologies, their impacts and consequences, and their relationships to notions of “the public.”

CMR 2421. Business and Professional Communication. (Hum; 4 cr; fall, spring, offered when feasible)
Basic theories and practice: equipment, procedures, and skills associated with planning, writing for, and producing mediated messages. Lectures, studio projects, class critiques.

CMR 2411. Health Communication. (Hum; 4 cr; fall, offered when feasible)
A survey of the critical role communication plays in health promotion, specifically in the area of doctor-patient interaction and health campaigns. Communicative issues include the social construction of health, the role of culture in health and healing, and social support.

CMR 2421. Business and Professional Communication. (E/CR; 4 cr; prereq 1052, 1062 or #; spring, offered when feasible)
Developing proficiency in communication skills in business and professional contexts. Preparing, selecting, organizing, designing, and delivering messages in business situations. Analyzing meeting/group facilitation, interviewing, and professional presentations.

CMR 3101. Rhetorical History and Theories: Pre-Socratic to Modern Periods. (IP; 4 cr; prereq 1101 or #; fall, every year)
Rhetoric from the classical theories of the older Sophists, Aristotle, and Cicero to the modern theories of Blair, Campbell, and Whately.

CMR 3111. Rhetorical Theory and Criticism in the 20th Century. (Hum; 4 cr; prereq 1101 or #; fall, spring, offered when feasible)
Detailed study of the development of contemporary rhetorical theory, with particular emphasis placed on the use of those theories in the development of rhetorical criticism.

CMR 3121. Rhetorical Criticism and Hollywood Cinema. (Hum; 4 cr; prereq 1101 or #; fall, spring, offered when feasible)
Investigation of the film genres of the Hollywood studio system era. Learn how films make meaning with their audiences.
Applying a variety of approaches to understanding interpersonal
relationships between media and society. Students attempt to provide
systematic, empirical, and theoretical assessments of how people
interact with media and the medias impact on the audience.

Study form; fall, spring, every year)

Examine and explain the reflexive relationships between media and society.

Study form; fall, spring, every year)

CMR 3341. Intercultural Communication Theory and Research. (SS; 4 cr; prereq 1101 or #; fall, offered when feasible)

Study of intercultural communication from an interpersonal and group
perspective. Students analyze specific cultural practices and beliefs, as well as the
role that these play in communication.

Study of organizational communication, including small group perspectives.

CMR 3342. Communication Research Methods. (Hum; 4 cr; prereq 1101 or #; fall, offered when feasible)

Elements/methods of communication research. Use of quantitative/
qualitative research methodologies, basic research design, and data
collection methods to inform decision making.

CMR 3393. Directed Study. (1-5 cr [max 10 cr]; prereq approved directed study form; fall, spring, every year)

An on- or off-campus learning experience individually arranged between a
student and a faculty member for academic credit in areas not covered in the
regular curriculum.

CMR 4152. Advanced Public Speaking. (Hum; 4 cr; prereq 1052, 1101 or #; fall, every year)

A study of rhetorical argument design and evaluation. Students analyze and
critique arguments, as well as plan and present formal speeches.

CMR 4201. Rhetoric and Persuasion: Receiver Analysis. (Hum; 4 cr; prereq 1101 or #; spring, offered when feasible)

Investigation of persuasion theory and research from rhetorical and social
science perspectives. Students analyze particular instances of persuasive
attempts.

CMR 4341. New Media Technologies. (Hum; 2 cr; prereq 1101 or #; spring, offered when feasible)

Examination of the impact of “new media” on current/future cultures; the
structure/processes of media and global society in a comparative context;
ways new media change how people communicate, distribute, and process
information.

CMR 4411. Advanced Interpersonal Communication. (Hum; 4 cr; prereq 1101 or #; spring, offered when feasible)

Applying a variety of approaches to understanding interpersonal
communication.

CMR 4800. Directed Experience in Teaching Communication, Media, and Rhetoric. (1-4 cr [max 6 cr]; prereq #; S-N only; fall, spring, every year)

Practice as facilitators in the introductory-level communication, media,
rhetoric courses; weekly seminar sessions focus on method, planning, and
problems in communication, media, and rhetoric instruction.

CMR 4900. Communication, Media, and Rhetoric Seminar I. (1 cr; prereq 1052, 1062, 1101 or sr status with #; A-F only; every year)

Familiarizes students with the literature of the field, including ethical and
social implications of communication studies. Students analyze various
articles and similarly published works, synthesize contents, and construct
a research proposal for a project to be completed as a senior capstone
experience.

CMR 4901. Communication, Media, and Rhetoric Seminar II. (Hum; 3 cr; prereq 4900, or sr status in the major, #; A-F only; spring, every year)

Completion of capstone experience for majors. Students conduct a project of
original study and present their findings in written and oral form.

CMR 4993. Directed Study. (1-5 cr [max 10 cr]; prereq approved directed study form; fall, spring, every year)

An on- or off-campus learning experience individually arranged between a
student and a faculty member for academic credit in areas not covered in the
regular curriculum.

Computer Science (CSci)

Division of Science and Mathematics

Objectives—The computer science curriculum is designed
to provide students with a strong foundation in the diverse and
rapidly changing field of computing. The science of computing is emphasized with a focus on fundamental principles and the
formal underpinnings of the field. Students are encouraged to
use and supplement their formal education through a variety of
research opportunities, participation in discipline colloquia
and student/professional organizations, and pursuit of
internship experiences or international studies opportunities.
Students who successfully complete the major are qualified
to enter the computing field as professionals or to pursue
graduate studies.

Computer Science Major

Program Requirements

No more than two courses with a grade of D or D+, offset
by an equivalent number of credits of A or B grades, may be
used to meet the requirements for a computer science major.
Non-elective courses taken S-N may not be counted towards
the major except for courses where S-N is the only option.
A minimum GPA of 2.00 is required in the major to graduate.
The GPA includes all, and only, University of Minnesota
coursework. Grades of F are included in GPA calculation until
they are replaced.

Elective courses: Computer science major electives are
divided into three areas: systems courses (CSci 44xx), theory
courses (CSci 45xx), and programming and languages courses
(CSci 46xx). The discipline offers an array of courses in each
area. The courses listed are representative of the courses
offered. New courses are continually developed and added to
keep up with changes in the field.

Courses for the Program

Required Courses

CSci 1302—Foundations of Computer Science, M/SR (4 cr)
CSci 2101—Data Structures, M/SR (5 cr)
CSci 2901—Seminar 1 (1 cr)
CSci 3401—Models of Computing Systems, M/SR (5 cr)
CSci 3501—Algorithms and Computability, M/SR (5 cr)
CSci 3601—Software Design and Development, M/SR (5 cr)
CSci 4901—Seminar II (1 cr)
Computer Science (CSci)

Take one of the following:
CSci 1201—Introduction to Digital Media Computation, M/SR (4 cr)
or CSci 1301—Problem Solving and Algorithm Development, M/SR (4 cr)

Elective Courses
Take 10 or more credit(s) including exactly 3 sub-requirement(s) from the following:

Computing Systems Courses (44xx):
Take 2–4 credit(s) from the following:
CSci 4403—Systems: Data Mining, M/SR (2 cr)
CSci 4406—Systems: Wireless Data Networks, M/SR (2 cr)
CSci 4408—Systems: Computer Forensics, M/SR (2 cr)
CSci 4451—Systems: Distributed Systems, M/SR (4 cr)
CSci 4452—Systems: Computer Networks, M/SR (4 cr)
CSci 4453—Systems: Database Systems, M/SR (4 cr)
CSci 4454—Systems: Robotics, M/SR (4 cr)

Math 2501—Probability and Stochastic Processes, M/SR (4 cr)
Math 2401—Differential Equations, M/SR (4 cr)
Math 2202—Mathematical Perspectives, M/SR (4 cr)
Math 2101—Calculus III, M/SR (4 cr)
Math 1102—Calculus II, M/SR (5 cr)
Math 1101—Calculus I, M/SR (5 cr)

Math 1021—Survey of Calculus, M/SR (4 cr)
Math 1101—Calculus I, M/SR (5 cr)
Math 1102—Calculus II, M/SR (5 cr)
Math 2101—Calculus III, M/SR (4 cr)
Math 2111—Linear Algebra, M/SR (4 cr)
Math 2202—Mathematical Perspectives, M/SR (4 cr)
Math 2401—Differential Equations, M/SR (4 cr)
Math 2501—Probability and Stochastic Processes, M/SR (4 cr)
Math 3xx, 4xxx

Stat 1xxx, 2xxx, 3xxx, 4xxx

Minor Elective Courses
Take 4 or more credit(s) from the following:
CSci 1301—Problem Solving and Algorithm Development, M/SR (4 cr)
CSci 2101—Data Structures, M/SR (5 cr)

Take 2 or more course(s) from the following:
CSci 3401—Models of Computing Systems, M/SR (5 cr)
CSci 3501—Algorithms and Computability, M/SR (5 cr)
CSci 3601—Software Design and Development, M/SR (5 cr)

Minor Required Courses
Take 2 or more course(s) from the following:
CSci 1001. Introduction to the Computing World, M/SR (2 cr)
M/SR (2 cr)
CSci 1021. Introduction to Data Visualization, M/SR (2 cr)
M/SR (2 cr)

Math and Statistics Electives
Math 1101 and above, excluding Math 2211, or Stat 2xxx and above.

Take 12 or more credit(s) from the following:
Math 1101—Calculus I, M/SR (5 cr)
Math 1102—Calculus II, M/SR (5 cr)
Math 2101—Calculus III, M/SR (4 cr)
Math 2111—Linear Algebra, M/SR (4 cr)
Math 2202—Mathematical Perspectives, M/SR (4 cr)
Math 2401—Differential Equations, M/SR (4 cr)
Math 2501—Probability and Stochastic Processes, M/SR (4 cr)
Math 3xx, 4xxx
Stat 2xxx, 3xxx, 4xxx

Computer Science Course Descriptions
CSci 1001. Introduction to the Computing World, M/SR (2 cr)
M/SR (2 cr)
CSci 1021. Introduction to Data Visualization, M/SR (2 cr)
M/SR (2 cr)

Math and Statistics Electives
Math 1101 and above, excluding Math 2211, or Stat 2xxx and above.

Take 12 or more credit(s) from the following:
Math 1101—Calculus I, M/SR (5 cr)
Math 1102—Calculus II, M/SR (5 cr)
Math 2101—Calculus III, M/SR (4 cr)
Math 2111—Linear Algebra, M/SR (4 cr)
Math 2202—Mathematical Perspectives, M/SR (4 cr)
Math 2401—Differential Equations, M/SR (4 cr)
Math 2501—Probability and Stochastic Processes, M/SR (4 cr)
Math 3xx, 4xxx
Stat 2xxx, 3xxx, 4xxx

Computer Science Minor
Minor Requirements
No more than two courses with a grade of D or D+, offset by an equivalent number of credits of A or B grades, may be used to meet the requirements for a computer science minor.
Non-elective courses taken S-N may not be counted towards the minor. A minimum GPA of 2.00 is required in the minor in order to graduate. The GPA includes all, and only, University of Minnesota coursework. Grades of F are included in GPA calculation until they are replaced.

Courses for the Program
Minor Required Courses
CSci 1201—Introduction to Digital Media Computation, M/SR (4 cr)
or CSci 1301—Problem Solving and Algorithm Development, M/SR (4 cr)

Take 2 or more course(s) from the following:
CSci 3401—Models of Computing Systems, M/SR (5 cr)
CSci 3501—Algorithms and Computability, M/SR (5 cr)
CSci 3601—Software Design and Development, M/SR (5 cr)

Minor Elective Courses
Take 4 or more credit(s) from the following:
Math 1021—Survey of Calculus, M/SR (4 cr)
Math 1101—Calculus I, M/SR (5 cr)
Math 1102—Calculus II, M/SR (5 cr)
Math 2101—Calculus III, M/SR (4 cr)
Math 2111—Linear Algebra, M/SR (4 cr)
Math 2202—Mathematical Perspectives, M/SR (4 cr)
Math 2401—Differential Equations, M/SR (4 cr)
Math 2501—Probability and Stochastic Processes, M/SR (4 cr)
Math 3xx, 4xxx
Stat 1xxx, 2xxx, 3xxx, 4xxx

Computer Science Course Descriptions
CSci 1001. Introduction to the Computing World, M/SR (2 cr)
M/SR (2 cr)
CSci 1021. Introduction to Data Visualization, M/SR (2 cr)
M/SR (2 cr)

Basic hardware and software concepts, elementary data representation, problem solving techniques, algorithm development, introduction to web development, and methods for separation of content and presentation (such as HTML and CSS).
Principles and methods for visualizing data from measurements and calculations in the physical, life, and social sciences. Emphasis on 3D computer-graphics providing insight into multi-dimensional datasets. Common data visualization techniques, various data formats, visualization tools, and common techniques in information visualization.

CSci 1101. Dynamic Web Programming, M/SR (2 cr)
M/SR (2 cr)

Principles of dynamic Web design; programming and problem solving using Web languages, such as PHP and HTML, and languages for data storage and manipulation, such as SQL and XML; introduction to client/server model; aspects of online privacy and security. Hands-on experience with creating and maintaining interactive Web pages.

CSci 1201. Introduction to Digital Media Computation, M/SR (4 cr)
M/SR (4 cr)

Using images, sounds, and movies to introduce problem solving, data representation, data manipulation, and programming principles including recursion. Introduction to basic ideas in hardware, software, and computing.
CSci 1251. Computational Data Management and Manipulation. (M/SR; 4 cr; no elective credit for CSci majors or minors; spring, every year) Introduction to principles and practices of computational data management such as using advanced spreadsheet operations, designing and implementing algorithms to summarize and transform data sets, understanding organization of databases, writing and executing simple database queries, and creating effective data visualizations. Topics include basic issues of information security and introduction to modern technologies that support collaboration.

CSci 1301. Problem Solving and Algorithm Development. (M/SR; 4 cr; fall, every year) Introduction to different problem solving approaches, major programming paradigms, hardware, software, and data representations. Study of the functional programming paradigm, concentrating on recursion and inductively-defined data structures. Simple searching and sorting algorithms.

CSci 1302. Foundations of Computer Science. (M/SR; 4 cr; spring, every year) Basic proof techniques, propositional and predicate logic, induction and invariants, program correctness proofs, simple Big-Oh analysis of algorithms, set theory, introductory graph theory, and basic summations.

CSci 1993. Directed Study. (1-5 cr [max 10 cr]; prereq approved directed study form; fall, spring, every year) An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum.

CSci 2101. Data Structures. (M/SR; 5 cr; prereq 1201 or 1301 or #; fall, spring, every year) Introduction to data structures, including stacks, queues, trees, and graphs; implementation of abstract data types and introduction to software testing, using object-oriented techniques and reusable libraries. (4 hrs lect, 2 hrs lab)

CSci 2601. Interactive Computer Graphics. (M/SR; 4 cr; prereq 2101; no elective credit for CSci majors or minors; fall, spring, offered when feasible) Introduction to interactive graphics programming. Display hardware, graphics processing pipeline, geometric modeling, image formats, and color theories. Graphics programming using graphics hardware and display technology.

CSci 2901. Seminar I. (1 cr; prereq 1201 or 1301 or #; S-N only; fall, every year) Familiarizes students with literature in the field, focusing on ethical issues in computing. Discussion and group work. Students analyze various articles or similarly published works, synthesize their contents, make formal presentations, and attend and evaluate the presentations of their peers. Requires attending the CSci 4901 conference near the end of the semester in addition to regular class meetings.

CSci 2993. Directed Study. (1-5 cr [max 10 cr]; prereq approved directed study form; fall, spring, every year) An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum.

CSci 3401. Models of Computing Systems. (M/SR; 5 cr; prereq 1302. 2101 or #; fall, every year) Basics of computing systems, models of networks and operating systems. Discussion of deadlock, scheduling, protection and security, data management, inter-computer communication, the OSI network model, and how the three lower layers are instantiated in TCP/IP. (4 hrs lect, 2 hrs lab)

CSci 3501. Algorithms and Computability. (M/SR; 5 cr; prereq 1302. 2101 or #; fall, every year) Models of computation (such as Turing machines, deterministic and non-deterministic machines); approaches to the design of algorithms, determining correctness and efficiency of algorithms; complexity classes, NP-completeness, approximation algorithms. (4 hrs lect, 2 hrs lab)

CSci 3601. Software Design and Development. (M/SR; 5 cr; prereq 1302, 2101 or #; spring, every year) Design and implementation of medium- and large-scale software systems. Principles of organizing and managing such designs and implementations throughout their lifetime. Designing for modularity and software reuse; use of libraries. Dynamics of working in groups. Group work on a substantial software project. (4 hrs lect, 2 hrs lab)

CSci 3993. Directed Study. (1-5 cr [max 10 cr]; prereq approved directed study form; fall, spring, every year) An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum.

CSci 4403. Systems: Data Mining. (M/SR; 2 cr; prereq 2101 or #; fall, spring, offered when feasible) An introduction to a new field which tries to solve the problem of how to store (warehouse) and how to extract (mine) valid, useful, and previously unknown data from a source (database or web) which contains an overwhelming amount of information. Algorithms applied include searching for patterns in the data, using machine learning, and applying artificial intelligence techniques.


CSci 4408. Systems: Computer Forensics. (M/SR; 2 cr; prereq 3401 or #; spring, offered when feasible) The study of tools and procedures to identify and prosecute computer crime. Topics include electronic discovery, preserving computer evidence, data hiding methods, current forensic and security tools, guidelines for searching and seizing computer equipment.

CSci 4451. Systems: Distributed Systems. (M/SR; 4 cr; prereq 3401 or #; fall, spring, offered when feasible) An introduction to distributed systems/computation. Topics include processes and threads, physical vs. logical clocks, interprocess communication and coordination, election algorithms, synchronization, distributed task scheduling, distributed shared memory, distributed file systems, and replicated data management.


CSci 4453. Systems: Database Systems. (M/SR; 4 cr; prereq 2101 or #; fall, spring, offered when feasible) Introduction to relational, object-relational, and object database systems. Topics include the relational model, SQL and related query languages, JDBC and database applications programming, database design, query processing and optimization, indexing techniques, and transaction management.

CSci 4454. Systems: Robotics. (M/SR; 4 cr; prereq 2101 or #; fall, spring, offered when feasible) An introduction to robotic systems including robot mechanics, algorithms in robotics, and sensor interfaces for autonomous mobile and arm robots. Concepts of kinematics and coordinate systems, real-time programming, embedded systems, pattern recognition algorithms, simulation environments, and subsumption architecture within the context of robotics applications are explored.

CSci 4456. Systems: Advanced Operating Systems. (M/SR; 4 cr; prereq 3401 or #; fall, spring, offered when feasible) Broad exposure to advanced operating systems topics such as process communication, protection, security, memory management, operating system kernels, network operating systems, synchronization, naming, and distributed systems.

CSci 4457. Systems: Ubiquitous Computing. (M/SR; 4 cr; prereq 3401 or #; fall, spring, offered when feasible) Study of the mechanisms and environments of ubiquitous computing. Topics may include computer and network architectures for ubiquitous computing, mobile computing mechanisms, multimodal interaction, pervasive software systems, location mechanisms, techniques for security and user-authentication, and experimental ubiquitous computing systems.

CSci 4458. Systems: Bioinformatic Systems. (M/SR; 4 cr; prereq 3401 or #; fall, spring, offered when feasible) Introduction to bioinformatics with an emphasis on computer systems. Possible topics include: utilizing software for genetic sequencing, large-scale data management using databases, algorithms for construction of phylogenetic trees, bioinformatic scripting, and other tools for bioinformatics.

CSci 4506. Theory: Fuzzy Logic and Fuzzy Sets. (M/SR; 2 cr; prereq 3501 or #; fall, spring, offered when feasible) Fuzzy logic and fuzzy sets are used in expert systems, controllers, pattern recognition, databases, decision making, robotics, and economics. The basic theory of fuzzy sets and fuzzy logic along with a brief survey of some of the current research. May include presentations and/or a project.
**CSci 4507. Theory: Data Compression.** (M/SR; 2 cr; prereq 3501 or #; fall, spring, offered when feasible)

Introduction to data compression (including lossy and lossless compression techniques), wavelets, differential encoding techniques (including pulse code and delta modulation), and subband coding with applications to speech, audio, and images. Compression standards such as the CCITT international standard and MPEG audio compression standard.

**CSci 4508. Theory: Algorithm Design.** (M/SR; 2 cr; prereq 3501 or #; fall, spring, offered when feasible)

Approaches to the design of efficient algorithms for solving a variety of practical problems such as string matching or those that can be modeled on a tree or graph. Techniques studied include dynamic programming, divide and conquer, greedy methods, backtracking, and approximation algorithms.

**CSci 4552. Theory: Advanced Algorithms.** (M/SR; 4 cr; prereq 3501 or #; fall, spring, offered when feasible)

Techniques for designing and analyzing efficient algorithms to solve a variety of practical problems. Some algorithmic techniques include dynamic programming, greedy methods, and amortized analysis. Other topics include graph algorithms, string matching, approximation algorithms, and NP-Completeness.

**CSci 4553. Theory: Evolutionary Computation and Artificial Intelligence.**

(M/SR; 4 cr; prereq 3501 or #; fall, spring, offered when feasible)

Introduction to Evolutionary Computation as an Artificial Intelligence tool for developing solutions to problems that are difficult to describe precisely or solve formally, as well as comparisons with other AI techniques. Includes discussions of theoretical background and tools, implementation issues, and applications.

**CSci 4554. Theory: Cryptography.** (M/SR; 4 cr; prereq 3502, 2101 or #; fall, spring, offered when feasible)

Theory and applications of cryptography. Overview of necessary mathematical concepts. Discussion of algorithms and protocols including public and private key encryption, authentication, and zero knowledge proofs.

**CSci 4555. Theory: Neural Networks and Machine Learning.** (M/SR; 4 cr; prereq 3502, 2101 or #; fall, spring, offered when feasible)

Study of the underlying theory, structure, and behavior of neural networks and of how neural networks compare to and can be used to supplement other methods of machine learning. Methods such as decision tree learning, reinforcement learning, supervised learning, and explanation-based learning are examined. Analysis of the strengths and weaknesses of various approaches to machine learning. Includes an implementation project.

**CSci 4556. Theory: Computer Graphics.** (M/SR; 4 cr; prereq 3502, 2101 or #; fall, spring, offered when feasible)

Introduction to basic concepts and algorithms in computer graphics, including three-dimensional geometry and various approaches to modeling three-dimensional scenes. An introduction to transformation and viewing, lighting, shading, texture, and color. Advanced topics may include ray tracing, radiosity, and animation. Students complete several significant projects.

**CSci 4604. Programming and Languages: Graphical User Interfaces.** (M/SR; 2 cr; prereq 3601 or #; fall, spring, offered when feasible)

An exploration into designing Graphical User Interfaces. Aspects of human-computer interaction are discussed along with how to design good user interfaces. Students complete a project using Java’s Swing.

**CSci 4605. Programming and Languages: Refactoring.** (M/SR; 2 cr; prereq 3601 or #; fall, spring, offered when feasible)

Introduction to methodologies for the long-term development and maintenance of software systems. Discussion of methods of fixing errors and extending functionality in a controlled manner that builds on and improves the underlying system design, as well as tools for regression testing to help catch introduced errors. There is a significant programming component as well as change documentation and classroom presentations.

**CSci 4651. Programming and Languages: Programming Languages.** (M/SR; 4 cr; prereq 2101 or #; fall, spring, offered when feasible)

History of programming languages, formal specification of syntax and semantics of programming languages from a variety of paradigms (procedural functional, logic-programming, object-oriented, and parallel paradigms), modern language features.

**CSci 4652. Programming and Languages: Compilers.** (M/SR; 4 cr; prereq 3501, 3601 or #; fall, spring, offered when feasible)

Program translations from a variety of paradigms. Lexical analysis and parsing techniques, intermediate representations, type checking, code generation, error detection and recovery, optimization.

**CSci 4653. Programming and Languages: Software Engineering.** (M/SR; 4 cr; prereq 3601 or #; fall, spring, offered when feasible)

Examination of software engineering techniques and methodologies. Topics include software life cycle models, analytical and software tools used in software engineering, software metrics, testing techniques, design techniques, planning and estimation methodologies, and issues related to the reusability, portability, and interoperability of software systems. Emphasis on the application of these techniques and methodologies to real world problems. Includes a team-based software development project.

**CSci 4654. Programming and Languages: Modern Functional Programming.** (M/SR; 4 cr; prereq 1302, 2101 or #; fall, spring, offered when feasible)

Survey of concepts, tools, and techniques from the realm of functional programming. Topics include higher order functions, currying, type systems, concurrency models, mechanisms for managing state, and methods of compilation and evaluation such as graph reduction and term rewriting.

**CSci 4655. Programming and Languages: Software Design and Development II.** (M/SR; 4 cr; prereq 3601 or #; summer, offered when feasible)

Design and implementation of a medium-scale software system in an intensive, full-time lab setting where teams use object-oriented tools and agile development processes. Emphasis on the creation, evolution, and maintenance of system design.

**CSci 4656. Programming and Languages: Human-Computer Interaction and Interface Design.** (M/SR; 4 cr; prereq 2101 or #; fall, spring, offered when feasible)

Introduction to the design, evaluation, and implementation of interactive computing systems for human use with a particular emphasis on user interfaces. Possible domains include usability issues for desktop applications, embedded systems, and Web design. Student projects include evaluative studies and sample implementations.

**CSci 4657. Programming and Languages: Programming Languages for Client/Server Systems.** (M/SR; 4 cr; prereq 3601 or #; fall, spring, offered when feasible)


**CSci 4901. Seminar II.** (1-5 cr [max 10 cr]; prereq approved directed study form; fall, spring, every year)

In-depth survey of literature in a specific computer-related field of the student’s choice. Students analyze various articles or similarly published works, synthesize their contents, and present their work formally in a conference setting. Multiple writing and speaking experiences reviewed by faculty and classmates. Requires attendance and presentation at a student conference near the end of the semester in addition to regular class meetings.

**CSci 4993. Directed Study.** (1-5 cr [max 10 cr]; prereq approved directed study form; fall, spring, every year)

An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum.

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**Dance (Dnce)**

Division of the Humanities

The program explores dance as a performance art form and cultural expression of various societies throughout the world. It is enhanced by performance opportunities, guest choreographers, conference participation, and other activities sponsored by the UMM Dance Ensemble student organization.

**Objectives**

The dance program helps students develop a working knowledge and a conceptual understanding of dance as an art form. Students are introduced to the cultural roots of dance, the traditions of training for dance performance, and the skills necessary for dance performance. Students interested in pursuing dance may create an area of concentration or emphasis by combining these courses with courses from other disciplines.
Dance Course Descriptions

Dnce 1321. Introduction to Modern Dance and Ballet. (ArtP; 1 cr [max 2 cr]; S-N only; fall, every year)
Practice in the fundamental movement vocabulary and steps of dance with an emphasis on traditional ballet techniques and modern dance interpretations. Exploration of body awareness through improvisational exercises and compositional studies. Discussion of the cultural origins of style in dance and the role of dance in contemporary life.

Dnce 1322. Introduction to Jazz and Modern Dance. (ArtP; 1 cr [max 2 cr]; S-N only; spring, every year)
Fundamental movement vocabulary and steps of dance from the unique perspective of American Jazz combined with modern dance. Explores body awareness through improvisational exercises and composed studies. Discussion of dance in contemporary life, individual style, and the cultural origins of jazz music and movement.

Dnce 1331. Ballet I. (ArtP; 1 cr [max 2 cr]; prerequisite Dnce 1321 or #; fall, spring, every year)
A basic study of ballet including its vocabulary, technique, and history. Appropriate for beginning-level students or students who have completed Dnce 1321 or 1322.

Dnce 1332. Jazz Dance I. (ArtP; 1 cr [max 2 cr]; prerequisite Dnce 1322 or #; fall, every year)
A basic study of jazz dance including its technique, history, and applications. Appropriate for beginning-level students or students who have completed Dnce 1321 or 1322.

Dnce 1333. Modern Dance I. (ArtP; 1 cr [max 2 cr]; prerequisite Dnce 1321 or 1322 or #; spring, every year)
A basic study of modern dance including alignment, technique, and history. Appropriate for beginning-level students or students who have completed Dnce 1321 or 1322.

Dnce 1334. Tap Dance I. (ArtP; 1 cr [max 2 cr]; prerequisite Dnce 1323 or #; Tap shoes required; spring, every year)
Practice in footwork and introduction to vocabulary that forms the basis of the percussive dance form. Discussion of origins of the dance form, different styles, and relationship to musical structures. Practice in improvisational Tap skills.

Dnce 2311. Ballet II. (ArtP; 1 cr [max 2 cr]; prerequisite Dnce 1321 or #; fall, spring, every year)
Builds upon basic dance vocabulary with movement exercises drawn from traditional schools of modern dance technique (Wigman/Holm, Graham, Humphrey/Limon, Horton, Cunningham). Emphasis is on advancing technical skills through conditioning, improvisation, and movement combinations. Includes a performance experience.

Dnce 2331. Modern Dance II. (ArtP; 1 cr [max 2 cr]; prerequisite Dnce 1333 or #; fall, every year)
Builds upon basic dance vocabulary with movement exercises drawn from traditional schools of modern dance technique (Wigman/Holm, Graham, Humphrey/Limon, Horton, Cunningham). Emphasis is on advancing technical skills through conditioning, improvisation, and movement combinations. Includes a performance experience.

Program and Course Descriptions

Economics (Econ)

Economics Major

Program Requirements

Grades of D or D+ in Econ 1111-1112, Math 1101, and Stat 1601 may not be used to meet the major requirements.
Up to 4 credits of other economics coursework with a grade of D or D+ may be used to meet the major requirements if offset by an equivalent number of credits of A or B.
A minimum GPA of 2.00 is required in the major to graduate. The GPA includes all, and only, University of Minnesota coursework. Grades of F are included in GPA calculation until they are replaced.
Courses for the Program

**Required Courses**

These courses may not be taken S-N unless offered S-N only.

*Students should complete the following during their first two years:*

Econ 1111—Principles of Microeconomics, SS (4 cr)
Econ 1112—Principles of Macroeconomics, SS (4 cr)
Math 1101—Calculus I, M/SR (5 cr)
Stat 1601—Introduction to Statistics, M/SR (4 cr)
or Stat 2601—Statistical Methods, M/SR (4 cr)

*Students should complete the following before their senior year:*

Econ 3201—Microeconomic Theory, SS (4 cr)
Econ 3202—Macroeconomic Theory, SS (4 cr)
Econ 3501—Introduction to Econometrics, M/SR (4 cr)

*Students should complete the following their senior year:*

Econ 4501—Senior Research Seminar in Economics and Management, SS (2 cr)

**Elective Courses**

No more than 4 credits from each of the following can be applied to the major:

- Econ x993—Directed Study
- Econ 4501—Senior Research Seminar in Economics and Management

*Take 14 or more credit(s) from the following:*

- Econ 3003—Political Economy I, SS (2 cr)
- Econ 3004—Political Economy II, SS (2 cr)
- Econ 3005—Experimental and Behavioral Economics I, SS (2 cr)
- Econ 3006—Experimental and Behavioral Economics II, SS (2 cr)
- Econ 3007—Environmental and Natural Resource Economics I, Envt (2 cr)
- Econ 3008—Environmental and Natural Resource Economics II, Envt (2 cr)
- Econ 3014—Game Theory: The Theory of Strategic Behavior I, SS (2 cr)
- Econ 3015—Game Theory: The Theory of Strategic Behavior II, SS (2 cr)
- Econ 3113—Money, Banking, and Financial Markets, SS (4 cr)
- Econ 3121—Public Economics I, SS (2 cr)
- Econ 3122—Public Economics II, SS (2 cr)
- Econ 3131—Comparative Economic Systems, IP (2 cr)
- Econ 3141—Economic Development and Growth I, IP (2 cr)
- Econ 3142—Economic Development and Growth II, IP (2 cr)
- Econ 3211—History of Economic Thought I, Hist (2 cr)
- Econ 3212—History of Economic Thought II, Hist (2 cr)
- Econ 3351—Globalization: Examining India’s Social and Economic Development, IP (4 cr)
- Econ 3993—Directed Study (1–5 cr)
- Econ 4101—Labor Economics I, HDiv (2 cr)
- Econ 4102—Labor Economics II, SS (2 cr)
- Econ 4111—Mathematical Economics I, M/SR (2 cr)
- Econ 4112—Mathematical Economics II, M/SR (2 cr)
- Econ 4121—International Trade Theory, SS (2 cr)
- Econ 4131—International Finance, SS (2 cr)
- Econ 4993—Directed Study (1–5 cr)
- Econ 3xxx, 4xxx

**Elective Courses**

No more than 4 credits from each of the following can be applied to the major:

- Econ x993—Directed Study
- Econ 4501—Senior Research Seminar in Economics and Management

*Take 6 or more credit(s) from the following:*

- Econ 3003—Political Economy I, SS (2 cr)
- Econ 3004—Political Economy II, SS (2 cr)
- Econ 3005—Experimental and Behavioral Economics I, SS (2 cr)
- Econ 3006—Experimental and Behavioral Economics II, SS (2 cr)
- Econ 3007—Environmental and Natural Resource Economics I, Envt (2 cr)
- Econ 3008—Environmental and Natural Resource Economics II, Envt (2 cr)
- Econ 3014—Game Theory: The Theory of Strategic Behavior I, SS (2 cr)
- Econ 3015—Game Theory: The Theory of Strategic Behavior II, SS (2 cr)
- Econ 3113—Money, Banking, and Financial Markets, SS (4 cr)
- Econ 3121—Public Economics I, SS (2 cr)
- Econ 3122—Public Economics II, SS (2 cr)
- Econ 3131—Comparative Economic Systems, IP (2 cr)
- Econ 3141—Economic Development and Growth I, IP (2 cr)
- Econ 3142—Economic Development and Growth II, IP (2 cr)
- Econ 3211—History of Economic Thought I, Hist (2 cr)
- Econ 3212—History of Economic Thought II, Hist (2 cr)
- Econ 3351—Globalization: Examining India’s Social and Economic Development, IP (4 cr)
- Econ 3501—Introduction to Econometrics, M/SR (4 cr)
- Econ 3993—Directed Study (1–5 cr)
- Econ 4101—Labor Economics I, HDiv (2 cr)
- Econ 4102—Labor Economics II, SS (2 cr)
- Econ 4111—Mathematical Economics I, M/SR (2 cr)
- Econ 4112—Mathematical Economics II, M/SR (2 cr)
- Econ 4121—International Trade Theory, SS (2 cr)
- Econ 4131—International Finance, SS (2 cr)
- Econ 4501—Senior Research Seminar in Economics and Management, SS (2 cr)
- Econ 4993—Directed Study (1–5 cr)
- Econ 3xxx, 4xxx

**Teacher Preparation Requirements**

Students seeking teaching licensure in social studies 5–12 should refer to the *Education, Secondary (SeEd)* section of this catalog.
Economics Course Descriptions

**Econ 1111. Principles of Microeconomics. (SS; 4 cr; prereq high school algebra or #; fall, spring, every year)**


**Econ 1112. Principles of Macroeconomics. (SS; 4 cr; prereq high school algebra or #; fall, spring, every year)**

Introduction to basic economic problems, concepts, and theoretical models. U.S. economic institutions and the economic organization of society. The role of markets in the production and distribution of societal resources. Measurement of economic performance; national income, inflation, and unemployment; competing macroeconomic theories and stabilization policies.

**Econ 1951. Seminar for Social Science Majors. (1 cr; prereq 1112; no cr for students who are concurrently enrolled in or have received cr for 3xxx Econ courses; S-N only; fall, spring, every year)**

Familiarization with various journals, periodicals, and sources of statistical information that deal with current developments in economics.

**Econ 2993. Directed Study. (1-5 cr [max 10 cr]; prereq approved directed study form; fall, spring, summer, every year)**

An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum.

**Econ 2999. Directed Study. (1-5 cr [max 10 cr]; prereq approved directed study form; fall, spring, summer, every year)**

An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum.

**Econ 3003. Political Economy I. (SS; 2 cr; prereq 1111, 1112 or #; spring, offered when feasible)**

The methodology, basic structure, and historical evolution of the modern economy, including the nature and mode of regulation of capitalist economics.

**Econ 3004. Political Economy II. (SS; 2 cr; prereq 3003 or #; spring, offered when feasible)**

The dynamics and transformation of contemporary capitalism, including the introductory study of the nature of accumulation process, economic crisis, and hegemonic tendency of the economy over all other aspects of social life in contemporary society.

**Econ 3005. Experimental and Behavioral Economics I. (SS; 2 cr; prereq 1111, 1112, Math 1101 or #; fall, spring, offered when feasible)**

Introduction to economic experiments as controlled tests of microeconomic and game-theoretic behavioral predictions. In-class economic experiments, elements of non-cooperative game theory, results of market and social preference experiments, and empirical applications.

**Econ 3006. Experimental and Behavioral Economics II. (SS; 2 cr; prereq 3005 or #; fall, spring, offered when feasible)**

Advanced concepts and applications in experimental and behavioral economics.

**Econ 3007. Environmental and Natural Resource Economics I. (Envt; 2 cr; prereq 1111 or #; fall, spring, offered when feasible)**

An overview of “brown” pollution and “green” sustainability issues in environmental and natural resource economics. Emphasis on the role of market failures in causing environmental problems and on the design of market mechanisms and incentive regulations to solve those problems. Analysis of current federal policy in the areas of water and air pollution.

**Econ 3008. Environmental and Natural Resource Economics II. (Envt; 2 cr; prereq 3007 or #; fall, spring, offered when feasible)**

The economic analysis of sustainability, focusing on market design to discourage over-exploitation of both renewable and exhaustible natural resources. Topics include markets for water, fisheries, and energy.

**Econ 3014. Game Theory: The Theory of Strategic Behavior I. (SS; 2 cr; [IS 3208H]; prereq 1111 or #; spring, odd years)**

The analytic approach to strategic interaction. Strategic interaction takes place among people when the payoffs to each person depend on the choices of all the others, and each person knows this fact in choosing their behavior. Development of the basic concepts of the theory of strategic interaction, including the definition of a strategy, extensive form and strategic form representations of the same game, and the solution concepts of Nash equilibrium and rollback equilibrium. A selection of applications of economic interest are covered, such as market entry deterrence and social dilemma games.

**Econ 3015. Game Theory: The Theory of Strategic Behavior II. (SS; 2 cr; prereq 3014 or #; spring, odd years)**

Extensions to the basic analytic theory of strategic interaction that widen its applicability, including topics such as repeated games, asymmetric information, and refinements to basic solution concepts. A selection of applications of economic interest, such as screening, signaling, and brinkmanship.

**Econ 3113. Money, Banking, and Financial Markets. (SS; 4 cr; prereq 1111, 1112 or #; fall, every year)**

Nature and function of money; role of commercial banks and other financial institutions; structure and function of Federal Reserve system; monetary policies for stabilization and growth; and a survey and synthesis of major theories on the value of money.

**Econ 3121. Public Economics I. (SS; 2 cr; prereq 1111, 1112 or #; spring, offered when feasible)**

Analysis of the economics of public expenditures.

**Econ 3122. Public Economics II. (SS; 2 cr; prereq 1111, 1112 or #; spring, offered when feasible)**

Analysis of the economics of taxation.

**Econ 3131. Comparative Economic Systems. (IP; 2 cr; prereq 1111, 1112 or #; fall, spring, offered when feasible)**

Comparison of the theory and functioning of the major economic systems of the world; economic reform in capitalist and socialist economies.

**Econ 3141. Economic Development and Growth I. (IP; 2 cr; prereq 1111, 1112 or #; fall, every year)**

Nature and meaning of economic development. Theories of economic growth and the historical experience of now developed countries. General development problems facing developing countries.

**Econ 3142. Economic Development and Growth II. (IP; 2 cr; prereq 3141 or #; fall, every year)**

Current development problems and policies in developing countries; the possibilities and prospects for future development. Case studies examining the development progress of these countries.

**Econ 3153. Contemporary Global Economic Issues. (IP; 2 cr; prereq 1111, 1112, Stat 1601, or #; spring, offered when feasible)**

Many of the most important global issues are economic in nature. Questions of population growth and aging, economic and political stability, security, terrorism, trade policy, poverty, development, the environment, energy, technology transfer, and even public health and education, in a global context can only be properly understood with some knowledge of economic principles. Gain knowledge of economic ideas necessary to understand and to criticize professional economic advice about global affairs. Strong emphasis on argumentation, rhetoric, and ability to debate economic ideas in a given framework.

**Econ 3201. Microeconomic Theory. (SS; 4 cr; prereq 1111, Math 1101 or #; fall, every year)**

Analytical approach to decision making by individual economic units in the output and input markets, under perfect and imperfect market conditions. Externalities and role of government.

**Econ 3202. Macroeconomic Theory. (SS; 4 cr; prereq 1112, Math 1101 or #; spring, every year)**

The theory of national income determination; inflation, unemployment, and economic growth in alternative models of the national economy.

**Econ 3311. History of Economic Thought I. (Hist; 2 cr; prereq 1111, 1112, fall, every year)**

The origin and development of economic thought from Mercantilism through the classical school. Among others, Adam Smith and Karl Marx are featured. Nature of economics as a social science through the study of its historical development.

**Econ 3312. History of Economic Thought II. (Hist; 2 cr; prereq 3311 or #; fall, every year)**

The development of economic thought from Marx and the end of the classical school, through the development of more modern approaches. In addition to the demise of classical thought, a selection from the thinkers who contributed to the foundations of modern microeconomics and/or macroeconomics is covered. Nature of economics as a social science, through the study of its historical development.

**Econ 3351. Globalization: Examining India’s Social and Economic Development. (IP; 4 cr; [Mgmt 3351]; prereq 1111 or 1112 or #; spring, offered when feasible)**

Same as Mgmt 3351. Observe and study the impact of globalization on the Indian economy. Examine the growing class divide between the middle and upper middle class and the lower class. Study the problem of mass poverty in India and its various ramifications such as child labor, lack of education.
and basic health care, and the inherent gender bias. Examine sustainable grass roots efforts to combat some of these problems. [Continuing Education course]

Econ 3501. Introduction to Econometrics. (M/SR; 4 cr; prereq 3201 or 3202, Stat 1601; spring, every year)
Designing empirical models in economics. Simple and multiple regression analysis. Violations of classical assumptions in regression analysis. Logit and probit models; simultaneous equation models and lag models. Emphasis on application techniques to economic issues.

Econ 3993. Directed Study. (1-5 cr [max 10 cr]; prereq approved directed study form; fall, spring, every year)
An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum.

Econ 4101. Labor Economics I. (HDiv; 2 cr; prereq 3201 or #; fall, every year)
Wage and employment determination. Distribution of earnings and earnings inequality by race and sex. Labor supply applications.

Econ 4102. Labor Economics II. (SS; 2 cr; prereq 3201 or #; fall, every year)
Functioning and performance of the labor market. Heterodox explanations of labor market behavior. Labor demand applications.

Econ 4111. Mathematical Economics I. (M/SR; 2 cr; prereq 3201, 3202 or #; fall, spring, offered when feasible)
Application of mathematical methods to economic analysis. Mathematical formulations and solution of optimizing models pertaining to households and firms and of adjustments to disturbances.

Econ 4112. Mathematical Economics II. (M/SR; 2 cr; prereq 3201, 3202 or #; fall, spring, offered when feasible)
Topics include linear modeling, input-output analysis and linear programming, efficiency and exchange, comparative static analysis, and dynamic microeconomic and macroeconomic models.

Econ 4121. International Trade Theory. (SS; 2 cr; prereq 3201 or #; spring, every year)
Overview of why trade occurs, pattern of trade and international factor movement. Effect of trade and trade policy on the economy. Current topics in trade theory.

Econ 4131. International Finance. (SS; 2 cr; prereq 3202 or #; spring, every year)
Foreign exchange markets; theories of exchange rate determination; fixed vs. flexible rate systems; theories of balance of payments adjustments; international quantity of money theory; international reserves; international monetary system (past, present, and future); internal and external balance, international economic policy coordination, international debt problem; effect of international sector on domestic growth and stability.

Econ 4501. Senior Research Seminar in Economics and Management. (SS; 2 cr; [max 4 cr]; prereq Sr or 3501 or #; full year course begins in fall sem; fall, every year)
Seminar on selected topics in economics and management. Guided research sessions familiarize students with literature in the field. Students are required to make a formal presentation on their research topic and attend presentations by their peers.

Econ 4993. Directed Study. (1-5 cr [max 10 cr]; prereq approved directed study form; fall, spring, every year)
An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum.

Education Programs

Division of Education
(See Education [Ed]; Education, Elementary [EEd]; Education, Secondary [SeEd]; and Wellness and Sport Science [WSS].)
UMM offers all students the opportunity to study education and its role in society. Courses with the “Ed” designator meet general education requirements, and enrollment in these courses is open and not limited to students pursuing teaching licensure.

The Division of Education offers a major and teaching licensure in elementary education (K–6) with specialty licensures in preprimary (age 3–grade 3); and middle level (grades 5–8) communication arts and literature, mathematics, science, and social studies; and K–8 world languages. (Fulfillment of these requirements leads to K–12 licensure in French or Spanish.) Licensure of secondary school teachers is offered in chemistry (9–12), communication arts and literature (5–12), earth and space science (9–12), French (K–12), general science (5–8), instrumental music (K–12), life science (9–12), mathematics (5–12), physics (9–12), social studies (5–12), Spanish (K–12), visual arts (K–12), and vocal music (K–12). Students may elect to complete coursework leading to endorsement for head varsity coaches in Minnesota. See Wellness and Sport Science (WSS) discipline for course listings.

Teacher education at UMM is part of the lifelong development of an effective teacher and includes the study of liberal arts disciplines and pedagogy, teaching, and other life experiences. UMM’s teacher education program is based on a belief that a successful teacher is one who reflects on teaching and makes instructional decisions that ensure student learning.

Teacher education at UMM uses personalized instruction and offers opportunities for regional and international student teaching. Teacher candidates are prepared to employ human, technological, and other resources in the effective instruction of diverse populations of learners. The program introduces prospective teachers to the teaching profession and prepares them to demonstrate:

1. Knowledge of themselves and of learners; liberal arts disciplines; diverse cultures, social organizations, and societies; human growth and development; communication and language; problem solving; and effective teaching and learning;
2. Skill in all aspects of teaching including setting goals and objectives; selecting appropriate content, activities, and materials; implementing effective lessons; assessing student learning; and evaluating oneself with the goal of continuous improvement;
3. Dispositions associated with effective teaching, including collaboration; ethics and integrity; equity and respect; efficacy and commitment to learning; responsibility; and enthusiasm and openness;
4. Leadership when addressing educational issues developed and demonstrated through issue-oriented readings and research; topic presentations; expert groups; peer teaching; senior presentations; and participation in University clubs, organizations, committees, and research programs with UMM faculty.

Admission requirements must be met and admission granted before students can enroll in courses in either the elementary or secondary teacher education programs. These admission requirements are set by UMM and the state of Minnesota. They are described under Admission to the Major in the Education, Elementary (EEd) section and Admission to the Program in the Education, Secondary (SeEd) section of this catalog.
Education (Ed)

Education (Ed)  
Division of Education

This discipline is designed to meet general education requirements and is not limited to students pursuing teaching licensure.

Objectives—These courses are designed to offer students the opportunity to study education and its role in society.

Education Course Descriptions

Ed 1011. Beginning Sign Language I. (FL; 3 cr; prereq #; fall, every year)  
Students develop a working vocabulary of conceptually based signs. Emphasis is on receptive abilities. Students develop an awareness of the history of sign language and explore various signing systems and their most common uses. [Continuing Education course]

Ed 1012. Beginning Sign Language II. (FL; 3 cr; prereq 1011; spring, every year)  
Students develop a working vocabulary of conceptually based signs. Emphasis is on receptive as well as expressive abilities. Students develop an awareness of the history of sign language and deaf culture and explore various signing systems and their most common uses. A performance of the student’s signing skills is evaluated. [Continuing Education course]

Ed 1020. English in the American University. (2 cr [max 4 cr]; intended for all international or non-native English speaking students currently attending the University of Minnesota, Morris; S-N only; fall, every year)  
Supports international/non-native English speaking students new to academic requirements of American universities. Focuses on reading, discussions, and writing. Students use reading/writing requirements of other courses to satisfy reading/writing requirements for this course. Includes one-on-one work with instructor. [Continuing Education course]

Ed 1022. Pronunciation of English. (1 cr [max 2 cr]; prereq non-native speaker of English; S-N only; spring, every year)  
Intended for non-native speakers of English who want to improve the clarity of their English oral production. Includes topics such as consonant and vowel sound production; stress, rhythm, and intonation; word stress; phrasing, pausing, and linking. [Continuing Education course]

Ed 1111. Introduction to Deaf Education. (Hum; 2 cr; fall, spring, offered when feasible)  
Designed to give students a basic understanding of how to educate the deaf. Emphasis is on learning about their language and culture and how to use that knowledge in working with the deaf in the classroom setting. [Continuing Education course]

Ed 1112. Reading With Deaf Learners. (2 cr; fall, spring, offered when feasible)  
Methods and strategies used to teach deaf learners to read. Understanding how deaf learners achieve reading success. Assessment of reading problems in deaf children and selection of appropriate reading materials for deaf learners. [Continuing Education course]

Ed 1113. Global Deaf Perspectives. (1 cr; summer, offered when feasible)  
Examination of deaf cultures and their portrayal in the United States and other countries in Europe, Africa, and Central America. Emphasis on varying global perspectives of the deaf in families, educational systems, the media, and society. [Continuing Education course]

Ed 1993. Directed Study. (1-5 cr [max 10 cr]; prereq approved directed study form; fall, spring, every year)  
An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum.

Ed 2011. Intermediate Sign Language I. (FL; 3 cr; prereq 1012 or #; fall, spring, offered when feasible)  
Students develop a working vocabulary of conceptually based signs. Emphasis is on receptive as well as expressive abilities. Students continue to develop an awareness of the history of sign language and deaf culture and explore various signing systems and their most common uses. A performance of the student’s signing skills will be evaluated. [Continuing Education course]

Ed 2012. Intermediate Sign Language II. (FL; 3 cr; prereq 2011; fall, spring, offered when feasible)  
Students develop a working vocabulary of conceptually based signs. Students interact with members of the deaf community and participate in field trips. Students help educate the campus and surrounding communities about deaf people and their culture by presenting a performance at the end of the semester. [Continuing Education course]

Ed 2101. Foundations and Issues in Education. (1 cr; coreq 2111; fall, spring, summer, every year)  
History, philosophy, and purposes of American education; teaching as a profession; issues and trends in education today; career opportunity and certification requirements in education.

Ed 2102. Introduction to Education in a Global Context. (IP; 2 cr; fall, spring, summer, every year)  
Introduction to the teaching profession through application of a global perspective to the study of issues in education. It is recommended that this course be completed in combination with a preprofessional field experience in another country. [Continuing Education course]

Ed 2111. Tutor-Aide Practicum. (1 cr; coreq 2101; S-N only; fall, spring, summer, every year)  
Students complete 30 hours of preprofessional field experience in the schools.

Ed 2112. International Practicum in Elementary Education. (IP; 1-3 cr [max 3 cr]; IP [if taken for 2 or more cr]; S-N only; fall, spring, summer, every year)  
Students complete 80 to 120 hours of preprofessional field experience in a school in another country. [Continuing Education course]

Ed 2113. International Practicum in Secondary Education. (IP; 1-3 cr [max 3 cr]; IP [if taken for 2 or more cr]; S-N only; fall, spring, summer, every year)  
Students complete 80 to 120 hours of preprofessional field experience in a school in another country. [Continuing Education course]

Ed 2201. Perspectives on Young Adult Literature: Schooling, Society, and Culture. (Hum; 4 cr; summer, offered when feasible)  
Exposure to multiple genres of young adult literature and brief introduction to various types of response to literature. Special emphasis on multicultural literature, the role of literature in forming moral and cultural values, using literature in the grade 5–12 classroom, and reader response theory and pedagogy. Students read, respond to, select, and evaluate young adult literature.

Ed 2211. Issues and Current Trends in Literacy and Language Education. (Hum; 4 cr; no cr for students who have received cr for Ed 4101; summer, every year)  
Study of themes, issues, and current trends surrounding literacy education including historical foundations of current reading practices, changing definitions of literacy, ideologies that influence understanding and implementation of reading practices, and consideration of complexities of addressing societal literacy concerns.

Ed 2301. Environmental Science and Place-Based Education. (Envt; 4 cr; A-F only; summer, every year)  
Study of the topics, issues, and concepts of environmental science and place-based education while working with environmental specialists and interacting with elementary students at a wetland learning center.

Ed 2993. Directed Study. (1-5 cr [max 10 cr]; prereq approved directed study form; fall, spring, every year)  
An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum.

Ed 3993. Directed Study. (1-5 cr [max 10 cr]; prereq approved directed study form; fall, spring, every year)  
An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum.

Ed 4993. Directed Study. (1-5 cr [max 10 cr]; prereq approved directed study form; fall, spring, every year)  
An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum.
Education, Elementary (ElEd)

Program Requirements

Major Requirements—Program Year One

ElEd 3101—Teaching and Learning Strategies (4 cr)
ElEd 3102—Reading Methods: Literacy and Language Instruction in the Elementary School (4 cr)
ElEd 3103—Mathematics in the Elementary School (3 cr)
ElEd 3111—Practicum I: Field Experience in the Elementary Classroom (1 cr)
Choose Specialty Area:

Preprimary
EIEd 3201—Preprimary Theory and Pedagogy (3 cr)
and EIEd 3211—Practicum II: Field Experience in a Preprimary Setting (1 cr)

-or- Middle Level
EIEd 3202—Middle Level Theory (2 cr)
and EIEd 3212—Practicum II: Field Experience in a Middle Level Setting (1 cr)
EngE 4122—Methods of Teaching Communication Arts and Literature in the Middle School (1 cr)
or LanE 4123—Methods of Teaching Foreign Language K–12 (4 cr)
or MthE 4122—Methods of Teaching Mathematics in the Middle School (1 cr)
or SciE 4122—Methods of Teaching Science in the Middle School (1 cr)
or SScE 4122—Methods of Teaching Social Science in the Middle School (1 cr)

Major Requirements—Program Year Two
EIEd 4101—Strategies for Inclusive Schooling (2 cr)
EIEd 4102—Social Studies in the Elementary School (2 cr)
EIEd 4103—Science in the Elementary School (2 cr)
EIEd 4104—Language Arts and Literature in the Elementary School (3 cr)
EIEd 4107—Health and Physical Education in the Elementary School (1 cr)
EIEd 4111—Practicum III: Beginning Student Teaching (2 cr)
EIEd 4112—Practicum IV: Experience in the Elementary School (1 cr)
EIEd 4901—The Teacher and Professional Development (2 cr)
EIEd 4201—Directed Student Teaching in Primary and Intermediate Grades, HDiv (10 cr)
or EIEd 4204—Directed Student Teaching in International School at the Primary and Intermediate Level, IP (10 cr)

Student Teaching Requirements
1. Completion of the following courses:
   EIEd 3101, 3102, 3103, 3111, 4101, 4102, 4103, 4104, 4107, 4111, and 4112
   Students must also complete either:
   EIEd 3201 and 3211
   or EIEd 3202, 3212, and Middle Level Methods course in area of specialty
2. GPA and grade requirements
   Minimum GPA of 2.50 overall, licensure, and Ed/EIEd courses. No grade below C- will be accepted.
3. Satisfactory completion of tutor-aide and practicum experiences
4. Approval of elementary education faculty

Elementary Licensure Requirements
Students planning to teach in Minnesota elementary schools must meet the licensure requirements of the Minnesota Board of Teaching (BOT). The following program is designed to meet these requirements, which are subject to change when the BOT implements new licensure rules.

Note: Students must complete licensure requirements and apply for licensure within seven years from time of admission to the program. After seven years, all education courses previously taken are void and must be retaken.

1. All requirements for an elementary education major

2. Communication arts and literature
   General education requirements for college writing and foreign language
   Engl 11xx or above (Engl 1131 or 3021 recommended)
   and Engl 1131—Introduction to Literature, Hum (4 cr)
   or Engl 3021—Grammar and Language, Hum (4 cr)
   or Engl 11xx or above
   and CMR 1052—Introduction to Public Speaking, E/CR (2 cr)
   or CMR 1042—Public Speaking and Analysis, E/CR (4 cr)

3. Mathematics and Statistics
   Math 1001—Survey of Math, M/SR (4 cr)
   and Stat 1601—Introduction to Statistics, M/SR (4 cr)
   or Stat 2601—Statistical Methods, M/SR (4 cr)
   or Stat 2611—Mathematical Statistics, M/SR (4 cr)

4. Visual and performing arts (two courses representing two different disciplines)
   In the listing below, 1xxx is equivalent to 1xxxx or above.
   Take 2 or more course(s) from the following:
   Th 2111—Creative Drama with Children, ArtP (4 cr)
   or Th 1101—The Theatre Experience: An Introduction, FA (4 cr)
   or Th 1xxxx
   Mus 1041—Introduction to Music, FA (4 cr)
   or Mus 1042—Fundamentals of Music, FA (4 cr)
   or Mus 1xxxx
   ArtS 1050—Beginning Ceramics, ArtP (3 cr)
   or ArtH 1101—Principles of Art, FA (4 cr)
   or ArtS 1xxx
   or ArtH 1xxx
   or Dnce 1xxx

5. Social studies (two courses representing two different disciplines)
   In the listing below, 1xxx is equivalent to 1xxxx or above.
   Take 2 or more course(s) from the following:
   Hist 1301—Introduction to U.S. History, Hist (4 cr)
   or Hist 1xxx
   Soc 1101—Introductory Sociology, SS (4 cr)
   or Soc 3122—Sociology of Childhoods, HDiv (4 cr)
   or Soc 1xxxx
   Econ 1111—Principles of Microeconomics, SS (4 cr)
   or Econ 1112—Principles of Macroeconomics, SS (4 cr)
   or Econ 1xxx
   Pol 1201—American Government and Politics, E/CR (4 cr)
   or Pol 1xxx
   Geog 2003—Problems in Geography, Envt (4 cr)
   or Geog 1xxx
   Anth 1111—Introductory Cultural Anthropology, SS (4 cr)
   or Anth 1xxx
Education, Elementary (EIEd)

6. Science (two courses representing two different disciplines, at least one with lab)
   In the listing below, 1xxx is equivalent to 1xx or above.
   Take 2 or more course(s) from the following:
   Geol 1001—Environmental Geology: Geology in Daily Life, Sci (4 cr)
   or Geol 1101—Physical Geology, Sci-L (4 cr)
   or Geol 1xxx
   Phys 1052—The Solar System, Sci-L (5 cr)
   or Phys 1xxx
   Chem 1xxx
   Biol 1xxx

7. Psychology
   Psy 1081—Drugs and Human Behavior, SS (2 cr)

8. Successful completion of a cross-cultural field experience

9. Minimum GPA of 2.50
   Overall, in licensure area(s) and in EIEd major; no grade below C- will be accepted in these courses

10. A positive recommendation from the discipline and Division of Education

11. Passing scores on Praxis I and Praxis II and any other state mandated exams for new teachers

General Education Requirements
Students should choose courses for EIEd Licensure that also meet the following General Education Requirements:
Mathematical/Symbolical Reasoning (M/SR), Artistic Performance (ArtP), Historical Perspectives (Hist), Human Behavior, Social Processes, and Institutions (SS), Communication, Language, Literature, and Philosophy (Hum), Physical and Biological Sciences (Sci-without lab; Sci-L-with lab), Human Diversity (HDiv) or International Perspective (IP), and Ethical and Civic Responsibility (E/CR)

IS 1001—First-Year Seminar: Human Diversity, FYS (2 cr)
Engl 1011—College Writing, CW (4 cr)
Foreign Language I
Foreign Language II

Program Sub-plans
Students seeking K–6 licensure must also obtain a specialty area license. Each specialty area requires a minimum of 28 credits. The six areas and their requirements are listed below. Students are required to complete one of the following sub-plans. (Note: The honors sub-plan does not meet this requirement. Honors students are required to complete one sub-plan plus the honors sub-plan.)

Preprimary Education Sub-plan (age 3 to grade 3)

   Required Courses
   This specialty area requires a minimum of 28 credits. In addition to the required courses listed below, a minor in psychology is strongly recommended.
   Psy 1051—Introduction to Psychology, SS (4 cr)
   Psy 3401—Developmental Psychology I: Child Psychology, SS (4 cr)
   Th 2111 (meets both EIEd Licensure and ArtP GenEd requirements)
   Soc 3122 (meets both EIEd Licensure and HDiv GenEd requirements)

   Additional Courses
   Take 2 or more course(s) from the following:
   Psy 3112—Cognition, SS (4 cr)
   Psy 3302—Personality, SS (4 cr)
   Psy 3501—Social Psychology, SS (4 cr)
   Psy 3521—Health Psychology, SS (4 cr)
   Psy 3701—Organizational Behavior, SS (4 cr)
   Psy 4101—Helping Relationships, SS (4 cr)

Middle Level Education—Communication Arts and Literature Sub-plan (grades 5–8)

   Required Courses
   This specialty area requires a minimum of 28 credits. In addition to the required courses listed below, a minor in English is strongly recommended.
   CMR 1052 or 1042 (meet both EIEd Licensure and Hum GenEd requirements)

   Additional Courses (Engl 3021 recommended)
   In the listing below, 2xxx is equivalent to 2xx or above.
   Take 4 or more course(s) from the following:
   Ed 2201—Perspectives on Young Adult Literature: Schooling, Society, and Culture, Hum (4 cr)
   Engl 3021—Grammar and Language, Hum (4 cr)
   Engl 2xxx

Middle Level Education—Mathematics Sub-plan (grades 5–8)

   Required Courses
   This specialty area requires a minimum of 28 credits. In addition to the required courses listed below, a minor in mathematics is strongly recommended.
   Math 1101—Calculus I, M/SR (5 cr)
   Math 1102—Calculus II, M/SR (5 cr)
   Stat 1601 or 2601 or 2611 (meet both EIEd Licensure and M/SR GenEd requirements)

   Additional Math Courses (Math 2111 recommended)
   In the listing below, 2xxx is equivalent to 2xx or above.
   Take 3 or more course(s) from the following:
   Math 2111—Linear Algebra, M/SR (4 cr)
   Math 2xxx

Middle Level Education—Social Studies Sub-plan (grades 5–8)

   Required Courses
   This specialty area requires a minimum of 28 credits. In addition to the required courses listed below, a minor in anthropology, economics, history, political science, or sociology is strongly recommended.
   Anth 1111—Introductory Cultural Anthropology, SS (4 cr)
   Hist 1301 (meets both EIEd Licensure and Hist GenEd requirements)
   Econ 1112 (meets both EIEd Licensure and SS GenEd requirements)
   Econ 2112 (meets both EIEd Licensure and M/SR GenEd requirements)
   Pol 1201—American Government and Politics, E/CR (4 cr)
   or Pol 1xxx or above
   Soc 1101—Introductory Sociology, SS (4 cr)
   or Soc 1xxx or above

   Additional Course (Geog 2001 recommended)
   In the listing below, 1xxx is equivalent to 1xx or above.
   Take 1 or more course(s) from the following:
   Geog 2001—Problems in Geography, Envt (4 cr)
   Anth 1xxx
   Econ 1xxx
Middle Level Education—Science Sub-plan (grades 5–8)

Required Courses

This specialty area requires a minimum of 28 credits. In addition to the required courses listed below, students are strongly encouraged to fulfill the General Science 5–8 licensure standards (see SeEd Licensure Area Requirements).

- Biol 2101—Evolution of Biodiversity, Sci-L (4 cr)
- Chem 1101—General Chemistry I, Sci-L (4 cr)
- Phys 1052 (meets both ElEd Licensure and Sci-L GenEd requirements)
- Geol 1101 (meets both ElEd Licensure and Sci-L GenEd requirements)
- Chem 1102—General Chemistry II, Sci-L (4 cr)
- Geol 1xxx
- Phys 1091—Principles of Physics I, Sci-L (5 cr)
- or Phys 1101—General Physics I, Sci-L (5 cr)
- or
- Hist 1xxx
- Pol 1xxx
- Soc 1xxx

Additional Courses

In the listing below, 1xxx is equivalent to 1xxx or above. Take 1 or more course(s) from the following:

- Ed 2301—Environmental Science and Place-Based Education, Envt (4 cr)
- Biol 2111—Cell Biology, Sci-L (4 cr)
- Biol 1xxx
- Chem 1102—General Chemistry II, Sci-L (4 cr)
- Chem 1xxx
- Geol 1xxx
- Phys 1091—Principles of Physics I, Sci-L (5 cr)
- Phys 1102—General Physics II, Sci-L (5 cr)
- Phys 1xxx

World Languages K–8 Sub-plan

Required Courses for the Sub-plan

Complete the language content requirements for French K–12 or Spanish K–12; ElEd 3202—Middle Level Theory; ElEd 3212—Practicum II: Field Experience in a Middle Level Setting; LanE 4123—Methods of Teaching Foreign Language K–12; and SeEd 4202—Directed Student Teaching in the Middle and Secondary School. Fulfillment of these requirements also leads to K–12 licensure in French or Spanish.

SeEd 4202—Directed Student Teaching in the Middle and Secondary School (1–16 cr)

Choose one of the following:

Students are required to complete one of the following course groups.

French K–12

- Fren 2001—Intermediate French I, IP (4 cr)
- Fren 2002—Intermediate French II, IP (4 cr)
- Fren 3001—Conversation and Composition, IP (4 cr)
- Fren 3011—Reading and Analysis of Texts, Hum (4 cr)
- Fren 2011—Introduction to French Phonetics, Hum (4 cr)
- or Fren 2012—French for Professions, IP (4 cr)
- Fren 4011—Advanced Language Studies: Thème et Version, Hum (4 cr)
- or Fren 4012—Advanced Language Studies: Advanced French Grammar, Hum (4 cr)

One course from Early Modern Studies Cluster:

- Fren 3022—Early Modern Studies: Pre-Enlightenment Culture in France, Hist (4 cr)
- or Fren 3023—Early Modern Studies: Orature and Literature in Pre-Enlightenment France, Hum (4 cr)
- or Fren 3026—Early Modern Studies: History of the French Language, Hum (4 cr)
- or Fren 3027—Early Modern Studies: Real to Reel: The Middle Ages and Renaissance in Film, Hum (4 cr)
- or Fren 3028—Early Modern Studies: Female Authorship and Medieval Canon Fodder, Hum (4 cr)

One course from Modern Studies Cluster:

- Fren 3034—Modern Studies: French Poetry and Music, Hum (4 cr)
- or Fren 3035—Modern Studies: French Women Authors, IP (4 cr)
- or Fren 3036—Modern Studies: French Cinema, IP (4 cr)
- or Fren 3037—Modern Studies: La France du 19e siècle, Hum (4 cr)
- or Fren 3038—Modern Studies: La France du 20e siècle, Hum (4 cr)

One course from Francophone Studies Cluster:

- Fren 3041—Francophone Studies: Francophone Worlds, IP (4 cr)
- or Fren 3042—Francophone Studies: Contes francophones, IP (4 cr)
- or Fren 3043—Francophone Studies: Littérature francophone, IP (4 cr)
- or Fren 3044—Francophone Studies: L’Amérique francophone, Hum (4 cr)
- or Fren 3045—Francophone Studies: West African Francophone Cinema, IP (4 cr)
- or Fren 3046—Francophone Studies: Morocco: History, Story, Myth, IP (4 cr)

Study abroad is strongly encouraged.

Spanish K–12

- Span 2001—Intermediate Spanish I, IP (4 cr)
- Span 2002—Intermediate Spanish II, IP (4 cr)
- Span 3001—Spanish Composition and Conversation I, IP (4 cr)
- Span 3002—Spanish Composition and Conversation II, IP (4 cr)
- Span 3101—Introduction to Hispanic Literature, Hum (4 cr)
- Span 3211—Literature and Culture of Latin America, Hum (4 cr)
- Span 3212—Literature and Culture of Spain, Hum (4 cr)

Study abroad is strongly encouraged.

Education, Elementary Course Descriptions

ElEd 3101. Teaching and Learning Strategies. (4 cr; prereq admission to the elementary teacher education program; A-F only; fall, every year)

Elementary school teaching and learning. Planning for instruction, learning theory, multicultural education, classroom management, use of technology in the classroom.

ElEd 3102. Reading Methods: Literacy and Language Instruction in the Elementary School. (4 cr; prereq admission to elementary teacher education program; A-F only; fall, every year)

Beginning and advanced reading instruction in the elementary grades. Includes study of theory, issues, literacy frameworks, assessment, materials, organization, and instructional strategies to scaffold children’s literacy development.

ElEd 3103. Mathematics in the Elementary School. (5 cr; prereq admission to the elementary teacher education program; A-F only; fall, every year)

Standards, curriculum, assessment, and methodology for teaching mathematics in the elementary school. Includes the theoretical basis of methodology in mathematics and its application, measurement and evaluation, selection and use of instructional media and computer software, and meeting the needs of culturally diverse and special needs students.

ElEd 3111. Practicum I: Field Experience in the Elementary Classroom. (1 cr; prereq admission to the elementary teacher education program; S-N only; fall, every year)

Field experience in the elementary classroom.
ElEd 3201. Preprimary Theory and Pedagogy. (3 cr; prereq 3101, 3102, 3103, 3111; A-F only; spring, every year)
Developmental characteristics, organizational and instructional needs of preprimary and early elementary classrooms. Characteristics of effective preprimary and early elementary teachers. Required for student pursuing an elementary preprimary specialty.

ElEd 3202. Middle Level Theory. (2 cr; prereq 3101, 3102, 3103, 3111; A-F only; spring, every year)
Developmental characteristics, organizational and instructional needs of pre-adolescent and adolescent level classrooms. Characteristics of effective middle level teachers. Required for student pursuing an elementary middle level specialty.

ElEd 3211. Practicum II: Field Experience in a Preprimary Setting. (1 cr; prereq 3101, 3102, 3103, 3111; S-N only; spring, every year)
Field experience in preprimary or kindergarten setting.

ElEd 3212. Practicum II: Field Experience in a Middle Level Setting. (1 cr; prereq 3101, 3102, 3103, 3111; S-N only; spring, every year)
Field experience in the middle level classroom.

ElEd 3993. Directed Study. (1-5 cr [max 10 cr]; prereq approved directed study form; fall, spring, every year)
An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum.

ElEd 4101. Strategies for Inclusive Schooling. (2 cr; prereq 3101, 3102, 3103, 3111; A-F only; fall, every year)
Strategies and techniques for developing inclusive learning environments. Emphasizes adaptations to accommodate students with mild, moderate, and severe disabilities. Overviews historically-situated legal, philosophical and programmatic changes leading toward inclusive models of education.

ElEd 4102. Social Studies in the Elementary School. (2 cr; prereq 3101, 3102, 3103, 3111; A-F only; fall, every year)
Outcomes, content, integration strategies, and assessment of social studies instruction in the elementary curriculum.

ElEd 4103. Science in the Elementary School. (2 cr; prereq 3101, 3102, 3103, 3111; A-F only; fall, every year)
Objectives, curricula, special methods, materials, and evaluation appropriate for teaching science in the middle school.

ElEd 4104. Language Arts and Literature in the Elementary School. (3 cr; prereq 3101, 3102, 3103, 3111; A-F only; fall, every year)
Objectives, curricula, special methods, materials, and evaluation appropriate for teaching the various subject matter areas in the middle school. Students are required to complete methods course(s) in their licensure area(s). Methods courses must be successfully completed before student teaching in a specific field.

ElEd 4107. Health and Physical Education in the Elementary School. (1 cr; prereq 3101, 3102, 3103, 3111; A-F only; fall, every year)
Scope, sequence, and related activities in elementary health and physical education.

ElEd 4111. Practicum III: Beginning Student Teaching. (2 cr; prereq 3101, 3102, 3103, 3111; S-N only; fall, every year)
Participation in in-service, teaching, and teaching-related activities in preparation for student teaching.

ElEd 4112. Practicum IV: Experience in the Elementary School. (1 cr [max 2 cr]; prereq 3101, 3102, 3103, 3111; S-N only; fall, every year)
Field experience in the elementary classroom.

ElEd 4201. Directed Student Teaching in Primary and Intermediate Grades. (HDIV; 10 cr; prereq 4101, 4102, 4103, 4104, 4111, 4112; S-N only; spring, every year)
Students teach for a period of 11 weeks demonstrating application of approaches to teaching and learning in primary and intermediate grades under the guidance of a cooperating teacher and University supervisor.

ElEd 4202. Directed Student Teaching in Primary and Intermediate Grades. (1-16 cr [max 16 cr]; prereq 4, S-N only; fall, spring, every year)
For students who need alternative or additional student teaching experience. Students demonstrate application of approaches to teaching and learning in primary and intermediate grades under guidance of a cooperating teacher and University supervisor.

ElEd 4204. Directed Student Teaching in International School at the Primary and Intermediate Level. (IP; 10 cr; prereq 4101, 4102, 4103, 4104, 4111, 4112; S-N only; spring, every year)
Students teach for a period of 11 weeks demonstrating application of approaches to teaching and learning in primary and intermediate grades under the guidance of a cooperating teacher and University supervisor.

ElEd 4205. Directed Student Teaching in the Elementary School. (1-16 cr [max 16 cr]; prereq 4; A-F only; fall, spring, summer, every year)
For students from colleges that require A-F grading for student teaching through the Global Student Teaching Program. [Continuing Education course]

ElEd 4901. The Teacher and Professional Development. (2 cr; prereq 4201 or 4204 or #; A-F only; spring, every year)
Capstone experience. Professional development issues and philosophy of education, including portfolio assessment.

ElEd 4993. Directed Study. (1-5 cr [max 10 cr]; prereq approved directed study form; fall, spring, every year)
An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum.

**Education, Middle Methods Course Descriptions**

These courses focus on the objectives, curricula, special methods, materials, and evaluation appropriate for teaching the various subject matter areas in the middle school. Students are required to complete methods course(s) in their licensure area(s). Methods courses must be successfully completed before student teaching in a specific field.

EngE 4122. Methods of Teaching Communication Arts and Literature in the Middle School. (1 cr; A-F only; spring, every year)
Objectives, curricula, special methods, materials, and evaluation appropriate for teaching communication arts and literature in the middle and secondary school.

LanE 4122. Methods of Teaching Foreign Language K-12. (4 cr; prereq admission to the SeEd or ElEd teacher education program; coreq SeEd 4102, SeEd 4103, SeEd 4104, SeEd 4105 or prereq ElEd 3202, ElEd 3212; A-F only; fall, every year)
Objectives, curricula, special methods, materials, and evaluation appropriate for teaching foreign language in K–12.

MthE 4122. Methods of Teaching Mathematics in the Middle School. (1 cr; A-F only; spring, every year)
Objectives, curricula, special methods, materials, and evaluation appropriate for teaching mathematics in the middle school.

ScE 4122. Methods of Teaching Science in the Middle School. (1 cr; A-F only; spring, every year)
Objectives, curricula, special methods, materials, and evaluation appropriate for teaching science in the middle school.

SscE 4122. Methods of Teaching Social Science in the Middle School. (1 cr; A-F only; spring, every year)
Objectives, curricula, special methods, materials, and evaluation appropriate for teaching social science in the middle school.

**Education, Secondary (SeEd)**

Division of Education

A separate admissions process must be completed and admission granted before students can enroll in this program. The secondary education program leads to Minnesota licensure as a teacher in specified liberal arts disciplines.

Objectives—Coursework in secondary education is designed to meet standards of effective practice required for licensure and provide prospective teachers with opportunities to:

- understand central concepts, tools of inquiry, and structures of disciplines taught in the middle and secondary school...
• understand adolescent development theory, individual and group motivation, and diversity among learners
• create instructional opportunities adapted to learners from diverse cultural backgrounds and with exceptionalities
• use instructional strategies that reflect personal knowledge of effective verbal and nonverbal communication techniques
• encourage development of critical thinking, problem solving, and performance skills
• understand and use formal and informal methods of student assessment
• plan and manage instruction
• engage in reflection and self-assessment
• collaborate with parents/guardians, families, school colleagues, and the community in an ethical manner.

To obtain a teaching license, an individual must have completed a major, a bachelor’s degree, and licensure requirements in the area(s) in which licensure is sought. UMM is approved to recommend teaching licensure in the following fields: chemistry (9–12), communication arts and literature (5–12), earth and space science (9–12), French (K–12), general science (5–8), instrumental music (K–12), life science (9–12), mathematics (5–12), physics (9–12), social studies (5–12), Spanish (K–12), visual arts (K–12), and vocal music (K–12).

Coursework required for licensure, in most cases, is not equivalent to a major. Consult an adviser in the discipline to determine major requirements.

Students planning to seek Minnesota teaching licensure at the secondary school level must complete licensure requirements in the discipline(s) of the subject(s) they intend to teach, the secondary teacher education program, and state and federally mandated examinations for new teachers. A minimum GPA of 2.50 is required overall, in required licensure area(s), and in education courses. No grade below C- will be accepted in these courses.

1. Successful completion of
   SeEd 4102—Teaching and Learning Strategies (4 cr)
   SeEd 4103—Practicum Experience in the Middle and Secondary School (4 cr)
   SeEd 4104—Teaching Diverse Learners, HDiv (2 cr)
   SeEd 4105—Reading and Literacy in the Content Areas (2 cr)

2. Successful completion of licensure area methods course(s). These courses focus on the objectives, curricula, special methods, materials, and evaluation appropriate for teaching the various subject matter areas in the middle and secondary school. Students must complete methods course(s) in their licensure area(s).
   ArtE 4123—Methods of Teaching Art K–12 (4 cr)
   or EngE 4121—Methods of Teaching Communication Arts and Literature in the Middle and Secondary School (4 cr)
   or LanE 4123—Methods of Teaching Foreign Language K–12 (4 cr)
   or MthE 4121—Methods of Teaching Mathematics in the Middle and Secondary School (4 cr)
   or MusE 4123—Methods of Teaching Music K–12 (3 cr)
   and MusE 4124—Multicultural Music for the K–12 Music Educator (1 cr)
   or SciE 4121—Methods of Teaching Science in the Middle and Secondary School (4 cr)
   or SScE 4121—Methods of Teaching Social Science in the Middle and Secondary School (4 cr)

For admission to the one-year program, which begins each fall, students must apply in the fall of the preceding year. Admissions decisions are made the following spring.

Requirements
1. Completion of Praxis I: Pre-Professional Skills Test (PPST).
2. Minimum GPA of 2.50 overall, in required licensure area(s), and education courses. No grade below C- will be accepted in these courses.
3. Approximately 90 credits completed by the end of the junior year including demonstration of satisfactory progress in each licensure area.
4. Approval of the faculty based on an interview, recommendations, assessment of prior experience (especially with young people and other cultures), and progress toward a degree.
5. Admission to UMM

For information about University of Minnesota admission requirements, visit the Office of Admissions Web site.
Education, Secondary (SeEd)

3. Satisfactory completion of tutor-aide and practicum experiences.
4. CMR 1052—Introduction to Public Speaking, E/CR (2 cr) or CMR 1042—Public Speaking and Analysis (Please note that this course is actually offered in the summer.).
5. GPA and grade requirements
   Minimum GPA of 2.50 overall, licensure, and Ed/SeEd courses. No grade below C- will be accepted.
6. Approval of SeEd faculty based on recommendations from faculty in the student’s discipline.

Middle and Secondary School Licensure Requirements

Students planning to teach in Minnesota middle and secondary schools must meet the licensure requirements of the Minnesota Board of Teaching (BOT).

The following program is designed to meet these requirements and they are subject to change when the BOT implements new rules.

Note: Students must complete licensure requirements and apply for licensure within seven years from time of admission to the program. After seven years, all education courses previously taken are void and must be retaken.

1. Professional education courses:
   - Ed 2101—Foundations and Issues in Education and Ed 2111—Tutor-Aide Practicum
   - SeEd 4102, 4103, 4104, 4105
   - Student Teaching
   - SeEd 4201—Directed Student Teaching in the Middle and Secondary School, HDiv (10 cr) or SeEd 4204—Directed Student Teaching in International School at the Middle and Secondary Level, IP (10 cr)
   - SeEd 4901—The Teacher and Professional Development (2 cr)
2. Successful completion of licensure area methods course(s).
3. Psy 1061—Introduction to the Development of the Child and Adolescent and Psy 1081—Drugs and Human Behavior, SS (2 cr)
4. CMR 1052—Introduction to Public Speaking or CMR 1042—Public Speaking and Analysis.
5. GPA and grade requirements: Minimum GPA of 2.50 overall, licensure, and Ed/SeEd courses. No grade below C- will be accepted.
6. Approval of SeEd faculty based on recommendations from faculty in the student’s discipline.
7. Passing scores on Praxis I and Praxis II and any other state mandated exams for new teachers.

Program Sub-plans

Students are required to complete one of the following sub-plans. (Note: The honors sub-plan does not meet this requirement. Honors students are required to complete one sub-plan plus the honors sub-plan.)

Chemistry 9–12 Sub-plan

Required Courses for the Sub-plan
- Chem 1101—General Chemistry I, Sci-L (4 cr)
- Chem 1102—General Chemistry II, Sci-L (4 cr)
- Chem 2301—Organic Chemistry I, Sci (4 cr)
- Chem 2302—Organic Chemistry II, Sci (4 cr)
- Chem 2311—Organic Chemistry Lab I (1 cr)
- Chem 2321—Introduction to Research I (1 cr)
- Chem 2322—Introduction to Research II (1 cr)
- Chem 3101—Analytical Chemistry, Sci-L (4 cr)
- Chem 3501—Physical Chemistry I, Sci (4 cr)
- Biol 2111—Cell Biology, Sci-L (4 cr)
- Math 1101—Calculus I, M/SR (5 cr)
- Phys 1101—General Physics I, Sci-L (5 cr)

Communication Arts and Literature 5–12 Sub-plan

Required Courses for the Sub-plan
- Engl 1131—Introduction to Literature, Hum (4 cr)
- Engl 3021—Grammar and Language, Hum (4 cr)
- CMR 1062—Introduction to Interpersonal and Group Communication, Hum (4 cr)
- CMR 1101—Introduction to Theories of Communication, Media, and Rhetoric, Hum (4 cr)
- CMR 4152—Advanced Public Speaking, Hum (4 cr)
- Engl 3005—Understanding Writing: Theories and Practices, Hum (4 cr) or Engl 3032—Creative Nonfiction Writing, ArtP (4 cr)
- Engl 3159—Shakespeare is not required but is strongly recommended.
- Engl 3301—U.S. Multicultural Literature, HDiv (4 cr) or Ed 2201—Perspectives on Young Adult Literature: Schooling, Society, and Culture, Hum (4 cr)
- Th 2211—Oral Interpretation, ArtP (4 cr) or Th 2211—Creative Drama with Children, ArtP (4 cr) or Th 2221—Readers’ Theatre, ArtP (4 cr)

Earth and Space Science 9–12 Sub-plan

Required Courses for the Sub-plan
- Geol 1001—Environmental Geology: Geology in Daily Life, Sci (4 cr)
- Geol 1011—Physical Geology, Sci-L (4 cr)
- Geol 2101—Mineralogy and Crystallography, Sci-L (4 cr)
- Geol 2111—Igneous and Metamorphic Petrology, Sci-L (4 cr)
- Geol 2121—Sedimentology and Stratigraphy, Sci-L (4 cr)
- Geol 2141—Glacial and Quaternary Geology, Sci (4 cr)
- Geol 2151—Historical Geology: Earth History and Changing Scientific Perspectives, Sci-L (4 cr)
- Geol 3101—Structural Geology, Sci-L (4 cr)
- Geol 3401—Geophysics, Sci (4 cr)
- Geol 4901—Geology Senior Seminar (1 cr)
- Geol 4902—Geology Senior Seminar Presentations (1 cr)
- Math 1101—Calculus I, M/SR (5 cr)
- Phys 1052—The Solar System, Sci-L (5 cr)
- Phys 1053—Introduction to Stars, Galaxies, and Cosmology, Sci (4 cr)

French K–12 Sub-plan

Required Courses for the Sub-plan
- Fren 1001—Introduction to French I, IP (4 cr)
- Fren 2001—Intermediate French I, IP (4 cr)
- Fren 2002—Intermediate French II, IP (4 cr)
- Fren 3001—Conversation and Composition, IP (4 cr)
- Fren 3011—Reading and Analysis of Texts, Hum (4 cr)
- Fren 2011—Introduction to French Phonetics, Hum (4 cr) or Fren 2012—French for Professions, IP (4 cr)
General Science 5–8 Sub-plan

One course from Early Modern Studies Cluster:
Fren 3026—Early Modern Studies: History of the French Language, Hum (4 cr)
Fren 3027—Early Modern Studies: Real to Reel: The Middle Ages and Renaissance in Film, Hum (4 cr)
Fren 3028—Early Modern Studies: Female Authorship and Medieval Canon fodder, Hum (4 cr)

One course from Modern Studies Cluster:
Fren 3036—Modern Studies: French Poetry and Music, Hum (4 cr)
Fren 3035—Modern Studies: French Women Authors, IP
Fren 3032—Modern Studies: French Cinema, IP (4 cr)
Fren 3037—Modern Studies: La France du 19e siècle, Hum (4 cr)
Fren 3038—Modern Studies: La France du 20e siècle, Hum (4 cr)

One course from Francophone Studies Cluster:
Fren 3041—Francophone Studies: Francophone Worlds, IP (4 cr)
Fren 3042—Francophone Studies: Contes francophones, IP (4 cr)
Fren 3043—Francophone Studies: Littérature migrante, IP (4 cr)
Fren 3044—Francophone Studies: L’Amérique francophone, Hum (4 cr)
Fren 3045—Francophone Studies: West African Francophone Cinema, IP (4 cr)
Fren 3046—Francophone Studies: Morocco: History, Story, Myth, IP (4 cr)

Study abroad is strongly encouraged.

General Science 5–8 Sub-plan

Required Courses for the Sub-plan

Biol 1111—Fundamentals of Genetics, Evolution, and Development, Sci (3 cr)
Biol 2101—Evolution of Biodiversity, Sci-L (4 cr)
Biol 2102—Cell Biology, Sci-L (4 cr)
Biol 3121—Molecular Biology, Sci-L (5 cr)
Biol 3131—Ecology, Sci-L (4 cr)
Biol 3701—Biological Communication II (1 cr)
Biol 4312—Genetics, Sci-L (4 cr)

Math 1101—Calculus I, M/SR (5 cr)
Math 1102—Calculus II, M/SR (5 cr)
Math 2101—Calculus III, M/SR (4 cr)
Math 2111—Linear Algebra, M/SR (4 cr)
Math 2202—Mathematical Perspectives, M/SR (4 cr)
Math 2211—History of Mathematics (4 cr)
Math 3211—Geometry, M/SR (4 cr)
Math 3231—Abstract Algebra I, M/SR (4 cr)
Math 3411—Discrete and Combinatorial Mathematics, M/SR (4 cr)

Physics 1101—General Physics I, Sci-L (5 cr)
Physics 1102—General Physics II, Sci-L (5 cr)

Life Science 9–12 Sub-plan

Required Courses for the Sub-plan

Biol 1111—Fundamentals of Genetics, Evolution, and Development, Sci (3 cr)
Biol 2101—Evolution of Biodiversity, Sci-L (4 cr)
Biol 2111—Cell Biology, Sci-L (4 cr)
Biol 3121—Molecular Biology, Sci-L (5 cr)
Biol 3131—Ecology, Sci-L (4 cr)
Biol 3701—Biological Communication II (1 cr)
Biol 4312—Genetics, Sci-L (4 cr)

Mathematics 5–12 Sub-plan

Required Courses for the Sub-plan

Math 1101—Calculus I, M/SR (5 cr)
Math 1102—Calculus II, M/SR (5 cr)
Math 2101—Calculus III, M/SR (4 cr)
Math 2111—Linear Algebra, M/SR (4 cr)
Math 2202—Mathematical Perspectives, M/SR (4 cr)
Math 2211—History of Mathematics (4 cr)
Math 3211—Geometry, M/SR (4 cr)
Math 3231—Abstract Algebra I, M/SR (4 cr)
Math 3411—Discrete and Combinatorial Mathematics, M/SR (4 cr)

Physics 1101—General Physics I, Sci-L (5 cr)
Physics 1102—General Physics II, Sci-L (5 cr)

Instrumental Music K–12 Sub-plan

Required Courses for the Sub-plan

Mus 1101—Core Studies I: Music Theory I, M/SR (4 cr)
Mus 1102—Core Studies I: Music Theory II, M/SR (4 cr)
Mus 1300—UMM Symphonic Winds, Artp (1 cr)
Mus 2101—Core Studies II: Music Theory III, Hum (4 cr)
Mus 2102—Core Studies II: Music Theory IV, Hum (4 cr)
Mus 3101—Core Studies III: Medieval, Renaissance, and Baroque Music, Hist (4 cr)
Mus 3102—Core Studies III: Classical, Romantic, and 20th-Century Music, FA (4 cr)
Mus 3200–3223—Advanced Individual Performance Studies in wind, string, percussion, or keyboard *
Mus 3301—Instrumental Techniques—Woodwind (1 cr)
Mus 3302—Instrumental Techniques—Brass and Percussion (1 cr)
Mus 3303—Instrumental Techniques—Strings (1 cr)
Mus 3304—Vocal Techniques (1 cr)
Mus 3311—Conducting Techniques (2 cr)
Mus 3321—Instrumental Conducting and Materials (2 cr)
Mus 3351—Instrumental Arranging, ArtP (2 cr)
Mus 4901—Senior Project (1 cr)
Instrument Repair Clinic
*Consult with music faculty to determine performance studies requirements.

Programs and Course Descriptions
Education, Secondary (SeEd)

Social Studies 5-12 Sub-plan

Required Courses for the Sub-plan
(Fulfills requirements for a social science major)
Anth 1111—Introduction to Cultural Anthropology, SS (4 cr)
Econ 1112—Principles of Macroeconomics, SS (4 cr)
Econ 1951—Seminar for Social Science Majors (1 cr)
Geog 2001—Problems in Geography, Envt (4 cr)
Hist 1301—Introduction to U.S. History, Hist (4 cr)
Pol 1201—American Government and Politics, E/CR (4 cr)
Psy 1051—Introduction to Psychology, SS (4 cr)
Soc 1101—Introduction to Sociology, SS (4 cr)
Stat 1601—Introduction to Statistics, M/SR (4 cr)
or Stat 2601—Statistical Methods, M/SR (4 cr)
or Equivalent proficiency in statistics approved by the divisional committee for the social science major.

Area of Focus:
Students work closely with their advisers to plan a program that satisfies the required competencies in a chosen sub-plan and in the social science disciplines. The sub-plan most often is demonstrated by completing the minor in that discipline. Program plans must be on file with the Social Sciences Division Office by the completion of a student’s junior year.

Students are required to complete one of the following course groups.

Anthropology Focus

Required Courses
Anth 2101—Physical Anthropology, Sci-L (4 cr)
Anth 2103—Archaeology, SS (4 cr)
Anth 3411—Seminar in Anthropological Methodology, ECR (4 cr)

Elective Courses
An additional 8 credits (exclusive of those used to complete required courses) in anthropology and sociology; 4 of which must be in courses above 1xxx. No more than 4 credits can be from Soc courses.

Elective Courses—1xxx level
Take no more than 4 credit(s) from the following:
Anth 1xxx
Soc 1xxx

Elective Courses—2xxx level or above
Take 4 or more credit(s) from the following:

Anthropology Electives
Take 4 or more credit(s) from the following:
Anth 2501—Medical Anthropology-An Overview, SS (4 cr)
Anth 3204—Culture, Food, and Agriculture, Envt (4 cr)
Anth 3206—Ecological Anthropology, Envt (4 cr)
Anth 3402—Representations from the Field: American Indian Ethnography, HDiv (4 cr)
Anth 3451—Contemporary American Indians, HDiv (4 cr)
Anth 3452—American Indian Women, HDiv (4 cr)
Anth 3455—North American Archaeology, SS (4 cr)
Anth 3601—Social Justice and Human Rights in Latin America, IP (4 cr)
Anth 3602—Women in Latin America, IP (4 cr)
Anth 3xxx
Anth 4xxx

Sociology Electives
Take no more than 4 credit(s) from the following:
Soc 2101—Systems of Oppression, HDiv (4 cr)
Soc 3011—Qualitative Research Methodology (4 cr)
Soc 3022—Quantitative Research Methodology, SS (4 cr)
Soc 3111—Sociology of Modernization, IP (4 cr)
Soc 3121—Sociology of Gender, HDiv (4 cr)
Soc 3122—Sociology of Childhoods, HDiv (4 cr)
Soc 3131—World Population, Envt (4 cr)
Soc 3141—Sociology of Deviance, E/CR (4 cr)
Soc 3204—Culture, Food, and Agriculture, Envt (4 cr)
Soc 3251—African Americans, HDiv (4 cr)
Soc 3252—Women in Muslim Society, IP (4 cr)
Soc 3401—Classical Sociological Theory, SS (4 cr)
Soc 3402—Contemporary Sociological Theory, SS (4 cr)
Soc 3451—Contemporary American Indians, HDiv (4 cr)
Soc 3452—American Indian Women, HDiv (4 cr)
Soc 3601—Social Justice and Human Rights in Latin America, IP (4 cr)
Soc 3602—Women in Latin America, IP (4 cr)
Soc 2xxx
Soc 3xxx
Soc 4xxx

-or- Economics Focus

Required Courses
Econ 1111—Principles of Microeconomics, SS (4 cr)
Econ 3201—Microeconomic Theory, SS (4 cr)
Econ 3202—Macroeconomic Theory, SS (4 cr)
Math 1101—Calculus I, M/SR (5 cr)

Elective Courses
No more than 4 credits from each of the following can be applied to the sub-plan: Econ x993—Directed Study Econ 4501—Senior Research Seminar in Economics and Management

Economics Electives
Take 6 or more credit(s) from the following
Econ 3003—Political Economy I, SS (2 cr)
Econ 3004—Political Economy II, SS (2 cr)
Econ 3005—Experimental and Behavioral Economics I, SS (2 cr)
Econ 3006—Experimental and Behavioral Economics II, SS (2 cr)
Econ 3007—Environmental and Natural Resource Economics I, Envt (2 cr)
Econ 3008—Environmental and Natural Resource Economics II, Envt (2 cr)
Econ 3014—Game Theory: The Theory of Strategic Behavior I, SS (2 cr)
Econ 3015—Game Theory: The Theory of Strategic Behavior II, SS (2 cr)
Econ 3113—Money, Banking, and Financial Markets, SS (4 cr)
Econ 3121—Public Economics I, SS (2 cr)
Econ 3122—Public Economics II, SS (2 cr)
Econ 3131—Comparative Economic Systems, IP (2 cr)
Econ 3141—Economic Development and Growth I, IP (2 cr)
Econ 3142—Economic Development and Growth II, IP (2 cr)
Econ 3211—History of Economic Thought I, Hist (2 cr)
Econ 3212—History of Economic Thought II, Hist (2 cr)
Econ 3351—Globalization: Examining India’s Social and Economic Development, IP (4 cr)
Econ 3501—Introduction to Econometrics, M/SR (4 cr)
Econ 3993—Directed Study (1-5 cr)
Econ 4101—Labor Economics I, HDiv (2 cr)
Econ 4102—Labor Economics II, SS (2 cr)
Econ 4111—Mathematical Economics I, M/SR (2 cr)
Econ 4112—Mathematical Economics II, M/SR (2 cr)
Econ 4121—International Trade Theory, SS (2 cr)
Econ 4131—International Finance, SS (2 cr)
Econ 4501—Senior Research Seminar in Economics and Management, SS (2 cr)
Econ 4993—Directed Study (1-5 cr)
Econ 3xxx
Econ 4xxx
-or- History Focus

**Required Courses**
- Hist 1101—Introduction to World History to 1500, Hist (4 cr)
- Hist 1102—Introduction to World History Since 1500, Hist (4 cr)

**Elective Courses**
An additional 16 credits in history of which 12 credits are at 2xxx or higher. There should be evidence of work in at least two geographic areas, with at least one of these in a non-Western area.

**Elective Courses—1xxx level**
Take no more than 4 credit(s) from the following:
- Hist 1402—Women in U.S. History, Hist (4 cr)
- Hist 1501—Introduction to East Asian History: China, Japan, and Korea before 1800., IP (4 cr)
- Hist 1601—Latin American History: A Basic Introduction, IP(4 cr)
- Hist 1xxx

**Elective Courses—2xxx level or above**
Take 12 or more credit(s) from the following:
- Hist 2001—The Study of History: Schools, Rules, and Tools, Hist (4 cr)
- Hist 3001—Families Through the Prism of Memory, Genealogy, and History, Hist (4 cr)
- Hist 3008—The Making of the Islamic World, HDiv (4 cr)
- Hist 3009—Microhistory, Hist (4 cr)
- Hist 3012—History of Ancient Greece and Rome, Hist (4 cr)
- Hist 3101—Renaissance and Reformation, Hist (4 cr)
- Hist 3102—Early Modern Europe, Hist (4 cr)
- Hist 3103—Medieval Europe, Hist (4 cr)
- Hist 3151—Modern Europe, Hist (4 cr)
- Hist 3156—Modern German Intellectual History, Hist (4 cr)
- Hist 3161—The Enlightenment, Hist (4 cr)
- Hist 3204—Nazism Germany, Hist (4 cr)
- Hist 3207—The Crusades, IP (4 cr)
- Hist 3209—Modern Germany, Hist (4 cr)
- Hist 3210—Popular Religion, Heresy, and Inquisition in the Middle Ages, Hist (4 cr)
- Hist 3211—Modern France, Hist (4 cr)
- Hist 3301—Red, White, and Black: Race/Culture in Early America, HDiv (4 cr)
- Hist 3303—Creation of the American Republic, Hist (4 cr)
- Hist 3351—The U.S. Presidency Since 1900, SS (4 cr)
- Hist 3352—The U.S. 1960s, Hist (4 cr)
- Hist 3353—World War II, Hist (4 cr)
- Hist 3355—United States in Transition, 1877-1920, Hist (4 cr)
- Hist 3356—Civil Rights Movement, 1954-1974, Hist (4 cr)
- Hist 3358—Civil War and Reconstruction, Hist (4 cr)
- Hist 3359—Native Strategies for Survival, 1880-1920, HDiv (4 cr)
- Hist 3361—An Environmental and Geographic History of the United States, Envt (4 cr)
- Hist 3451—Facing West, HDiv (4 cr)
- Hist 3452—Minnesota History, Hist (4 cr)
- Hist 3453—The American Presidency, 1789-1900, Hist (4 cr)
- Hist 3455—American Immigration, Hist (4 cr)
- Hist 3456—History of Religion in America, Hist (4 cr)
- Hist 3457—American Biography and Autobiography, Hist (4 cr)
- Hist 3459—Lewis and Clark: An American Odyssey, Hist (4 cr)
- Hist 3551—Modern Japan, Hist (4 cr)
- Hist 3552—History of Modern China, Hist (4 cr)
- Hist 3554—Korean History, Hist (4 cr)
- Hist 3601—Great Books in Latin American History, IP (4 cr)
- Hist 3608—The Cuban Revolution in Historical Perspective, Hist (4 cr)
- Hist 3704—Women in the Middle Ages, SS (4 cr)
- Hist 3706—Women in Early Modern Europe, SS (4 cr)
- Hist 3707—Gender in East Asia, HDiv (4 cr)
- Hist 3708—European Women’s History, 1600-Present, IP (4 cr)
- Hist 3993—Directed Study (1-5 cr)
- Hist 4993—Directed Study (1-5 cr)
- Hist 2xxx
- Hist 3xxx
- Hist 4xxx

-or- Political Science Focus

**Elective Courses**
An additional 16 credits (exclusive of those used to complete required courses); 8 of which must be in courses above 2xxx

**Elective Courses—2xxx level or below**
Take no more than 8 credit(s) from the following:
- Pol 1101—Introduction to Political Theory, E/CR (4 cr)
- Pol 1401—World Politics, IP (4 cr)
- Pol 1xxx, 2xxx

**Elective Courses—3xxx level or above**
- Pol 3201—Legislative Process, SS (4 cr)
- Pol 3211—The American Presidency, SS (4 cr)
- Pol 3231—Constitutional Law: Civil Liberties and Civil Rights, HDiv (4 cr)
- Pol 3232—Constitutional Law: Governmental Powers and Constraints, SS (4 cr)
- Pol 3262—Minorities and Public Policy, HDiv (4 cr)
- Pol 3263—Political Psychology, SS (4 cr)
- Pol 3351—Ancient and Medieval Political Thought, Hum (4 cr)
- Pol 3352—Modern Political Thought, Hum (4 cr)
- Pol 3354—Political Ethics, E/CR (4 cr)
- Pol 3355—Environmental Political Theory, Envt (4 cr)
- Pol 3401—U.S. Foreign Policy, SS (4 cr)
- Pol 3411—International Law, E/CR (4 cr)
- Pol 4453—Russian Politics and Foreign Policy, IP (4 cr)
- Pol 4461—Diplomatic Negotiations, IP (4 cr)
- Pol 3501—Government and Politics of Asia, SS (4 cr)
- Pol 3502—Government and Politics of Europe, SS (4 cr)
- Pol 3503—Women in Politics Worldwide, IP (4 cr)
- Pol 3996—Field Study in Political Science (1-16 cr)
- Pol 4221—Judicial Politics, SS (4 cr)
- Pol 4251—Political Participation and Voting Behavior, SS (4 cr)
- Pol 4264—American Political Culture, Hist (4 cr)
- Pol 4266—Media and Politics, SS (4 cr)
- Pol 4301—Contemporary Political Thought, Hum (4 cr)
- Pol 4302—International Comparative Political Theory, IP (4 cr)
- Pol 4451—Comparative Foreign Policy, IP (4 cr)
- Pol 4452—International Relations, IP (4 cr)
- Pol 3xxx, 4xxx

- or- Psychology Focus

In addition to Psy 2001, students must complete at least one course from four of the five areas. One must be a designated lab course.

- Psy 2001—Research Methods in Psychology, SS (4 cr)

**Take 0 or more course(s) from the following:**
- Psy 3101—Learning Theory and Behavior Modification, SS (4 cr)
- Psy 3111—Sensation and Perception, SS (4 cr)
- Psy 3112—Cognition, SS (4 cr)

**Take 0 or more course(s) from the following:**
- Psy 3201—Comparative Psychology, Sci-L (4 cr)
- Psy 3211—Biological Psychology, Sci-L (5 cr)
- Psy 3221—Behavioral Biology of Women, Sci (2 cr)
- Psy 3521—Health Psychology, SS (4 cr)

**Take 0 or more course(s) from the following:**
- Psy 3302—Personality, SS (4 cr)
- Psy 3313—Psychopathology, SS (4 cr)
- Psy 4101—Helping Relationships, SS (4 cr)

**Take 0 or more course(s) from the following:**
- Psy 2411—Introduction to Lifespan Developmental Psychology, SS (4 cr)
Education, Secondary (SeEd)

Psyc 3402—Developmental Psychology II: Adolescence, SS (2 cr)
Psyc 3403—Developmental Psychology III: Adulthood and Aging, E/CR (4 cr)

Take 0 or more course(s) from the following:
Pol 3263—Political Psychology, SS (4 cr)
Psyc 3501—Social Psychology, SS (4 cr)
Psyc 3511—Negotiation, SS (4 cr)
Psyc 3525—Multicultural Psychology, HDiv (4 cr)
Psyc 3701—Organizational Behavior, SS (4 cr)

Additional elective credits to total at least 30 credits in the psychology sub-plan (including required courses). Electives may be selected from any category above and the following:

Take 0 or more course(s) from the following:
IS 3800—Practicum in Social Sciences (1-2 cr)
IS 4101—Intro to Prof Conduct, Legal Constraints, Ethics in Human Services, E/CR (2 cr)
Psyc 2993—Directed Study (1-5 cr)
Psyc 3601—History and Philosophy of Psychology, Hist (2 cr)
Psyc 3800—Research Practicum (1-6 cr)
Psyc 3993—Directed Study (1-5 cr)
Psyc 4896—Field Experiences in Psychology, SS (1-4 cr)
Stat 3601—Data Analysis, M/SR (4 cr)
Stat 3602—Multivariate Statistical Analysis, M/SR (4 cr)

-or- Sociology Focus

Soc 3101—Qualitative Research Methodology (4 cr)
Soc 3102—Quantitative Research Methodology, SS (4 cr)
Soc 3401—Classical Sociological Theory, SS (4 cr)
Soc 3402—Contemporary Sociological Theory, SS (4 cr)

No more than 4 credits of the 12 elective credits required for the sub-plan can be from Anth courses. Soc 4901 and Soc 4902 are highly recommended.

Take no more than 4 credit(s) from the following:

Anth 2101—Physical Anthropology, Sci-L (4 cr)
Anth 2103—Archaeology, SS (4 cr)
Anth 2501—Medical Anthropology-An Overview, SS (4 cr)
Anth 3204—Culture, Food, and Agriculture, Envt (4 cr)
Anth 3206—Ecological Anthropology, Envt (4 cr)
Anth 3402—Representations from the Field: American Indian Ethnography, HDiv (4 cr)
Anth 3411—Seminar in Anthropological Methodology, E/CR (4 cr)
Anth 3451—Contemporary American Indians, HDiv (4 cr)
Anth 3452—American Indian Women, HDiv (4 cr)
Anth 3455—North American Archaeology, SS (4 cr)
Anth 3601—Social Justice and Human Rights in Latin America, IP (4 cr)
Anth 3602—Women in Latin America, IP (4 cr)
Anth 3603—Latin American Archaeology, SS (4 cr)
Anth 2xxx, 3xxx, 4xxx

Take 8 or more credit(s) from the following:

Soc 2101—Sociology of Oppression, HDiv (4 cr)
Soc 3111—Sociology of Modernization, IP (4 cr)
Soc 3121—Sociology of Gender, HDiv (4 cr)
Soc 3122—Sociology of Childhoods, HDiv (4 cr)
Soc 3131—World Population, Envt (4 cr)
Soc 3141—Sociology of Deviance, E/CR (4 cr)
Soc 3204—Culture, Food, and Agriculture, Envt (4 cr)
Soc 3251—African Americans, HDiv (4 cr)
Soc 3252—Women in Muslim Society, IP (4 cr)
Soc 3451—Contemporary American Indians, HDiv (4 cr)
Soc 3452—American Indian Women, HDiv (4 cr)
Soc 3601—Social Justice and Human Rights in Latin America, IP (4 cr)
Soc 3602—Women in Latin America, IP (4 cr)
Soc 4901—Independent Project Seminar I (1 cr)
Soc 4902—Independent Project Seminar II, SS (3 cr)
Soc 2xxx, 3xxx, 4xxx

Spanish K–12 Sub-plan

Required Courses for the Sub-plan

Span 2001—Intermediate Spanish I, IP (4 cr)
Span 2002—Intermediate Spanish II, IP (4 cr)
Span 3001—Spanish Composition and Conversation I, IP (4 cr)
Span 3002—Spanish Composition and Conversation II, IP (4 cr)
Span 3101—Introduction to Hispanic Literature, Hum (4 cr)
Span 3211—Literature and Culture of Latin America, Hum (4 cr)
Span 3212—Literature and Culture of Spain, Hum (4 cr)

Study abroad is strongly encouraged.

Visual Arts K–12 Sub-plan

Required Courses for the Sub-plan

ArtS 1101—Principles of Art, FA (4 cr)
ArtH 1111—Ancient to Medieval Art, FA (4 cr)
ArtH 1121—Renaissance to Modern Art, FA (4 cr)
ArtS 1101—Basic Studio Drawing I, ArtP (2 cr)
ArtS 1102—Basic Studio Drawing II, ArtP (2 cr)
ArtS 1103—Basic Studio 2-D Design, ArtP (2 cr)
ArtS 1104—Basic Studio 3-D Design, ArtP (2 cr)
ArtS 1105—Basic Studio Discussion I, ArtP (1 cr)
ArtS 1106—Basic Studio Discussion II, ArtP (1 cr)
ArtS 2500—Photography, ArtP (3 cr)
or
ArtS 3005—Mediation Studies: Digital Imaging, ArtP (3 cr)
or
ArtS 3002—Mediation Studies: Artist’s Books, ArtP (3 cr)
or
ArtS 3006—Mediation Studies: Feminist Art: A Studio Perspective, ArtP (3 cr)

Media Requirements:

Students must complete a minimum of 12 cr in one of the following media plus 6 cr in another and 3 cr in the third media:

First Media

Complete 12 credits

Printmaking

ArtS 2201—Beginning Printmaking I, ArtP (3 cr)
ArtS 2202—Beginning Printmaking II, ArtP (3 cr)
ArtS 3200—Advanced Printmaking I, ArtP (3 cr)
ArtS 3210—Advanced Printmaking II, ArtP (3 cr)
or
Painting

ArtS 2301—Beginning Painting I, ArtP (3 cr)
ArtS 2302—Beginning Painting II, ArtP (3 cr)
ArtS 3300—Advanced Painting I, ArtP (3 cr)
ArtS 3310—Advanced Painting II, ArtP (3 cr)
or
Sculpture

ArtS 2401—Beginning Sculpture I, ArtP (3 cr)
ArtS 2402—Beginning Sculpture II, ArtP (3 cr)
ArtS 3400—Advanced Sculpture I, ArtP (3 cr)
ArtS 3410—Advanced Sculpture II, ArtP (3 cr)
or
Ceramics

ArtS 1050—Beginning Ceramics, ArtP (3 cr)
ArtS 2050—Advanced Ceramics, ArtP (3 cr)

Second Media

Complete 6 credits (must be different from first media)

Printmaking

ArtS 2201—Beginning Printmaking I, ArtP (3 cr)
ArtS 2202—Beginning Printmaking II, ArtP (3 cr)
or
Painting

ArtS 2301—Beginning Painting I, ArtP (3 cr)
ArtS 2302—Beginning Painting II, ArtP (3 cr)
or
Sculpture

ArtS 2401—Beginning Sculpture I, ArtP (3 cr)
ArtS 2402—Beginning Sculpture II, ArtP (3 cr)
or
Ceramics

ArtS 1050—Beginning Ceramics, ArtP (3 cr)
ArtS 2050—Advanced Ceramics, ArtP (3 cr)
or Ceramics
ArtS 1050—Beginning Ceramics, ArtP (3 cr)
ArtS 2050—Advanced Ceramics, ArtP (3 cr)

Third Media
Complete 3 credits (must be different from the first and second media)
ArtS 2201—Beginning Printmaking I, ArtP (3 cr)
ArtS 2301—Beginning Painting I, ArtP (3 cr)
ArtS 2401—Beginning Sculpture I, ArtP (3 cr)
ArtS 1050—Beginning Ceramics, ArtP (3 cr)

Vocal Music K–12 Sub-plan
Required Courses for the Sub-plan
Mus 1101—Core Studies I: Music Theory I, M/SR (4 cr)
Mus 1102—Core Studies I: Music Theory II, M/SR (4 cr)
Mus 1320—Concert Choir, ArtP (1 cr)
Mus 1401—English, Italian, German, and French Diction for Singers, ArtP (1 cr)
Mus 2101—Core Studies II: Music Theory III, Hum (4 cr)
Mus 2102—Core Studies II: Music Theory IV, Hum (4 cr)
Mus 3101—Core Studies III: Medieval, Renaissance, and Baroque Music, Hist (4 cr)
Mus 3102—Core Studies III: Classical, Romantic, and 20th-Century Music, FA (4 cr)
Mus 3301—Instrumental Techniques—Woodwind (1 cr)
Mus 3302—Instrumental Techniques—Brass and Percussion (1 cr)
Mus 3303—Instrumental Techniques—Strings (1 cr)
Mus 3304—Vocal Techniques (1 cr)
Mus 3311—Conducting Techniques (2 cr)
Mus 3331—Choral Conducting and Materials (2 cr)
Mus 3352—Choral Arranging, ArtP (2 cr)
Mus 4901—Senior Project (1 cr)
Mus 1200-1223—Individual Performance Studies *
Mus 3200-3223—Advanced Individual Performance Studies in voice or guitar *

Secondary performance competence on another family (wind, string, percussion, or keyboard)
* Consult with music faculty to determine performance studies requirements.

Education, Secondary Course Descriptions
SeEd 3993. Directed Study. (1-5 cr [max 10 cr]; prereq approved directed study form; fall, spring, every year)
An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum.

SeEd 4102. Teaching and Learning Strategies. (4 cr; prereq admission to the secondary teacher education program; coreq 4103, 4104, 4105; methods; A-F only; fall, every year)
Concepts include teaching and learning strategies for middle and secondary classrooms, planning for lesson and unit instruction and assessment, learning theory, use of technology in the classroom, discipline, and classroom management.

SeEd 4103. Practicum Experience in the Middle and Secondary School. (4 cr; prereq admission to the secondary teacher education program; coreq 4102, 4104, 4105; methods; S-N only; fall, every year)
Field experience in the middle and secondary school.

SeEd 4104. Teaching Diverse Learners. (HDiv; 2 cr; prereq admission to the secondary teacher education program; coreq 4102, 4103, 4105; methods; A-F only; fall, every year)
Study of teaching/learning in diverse settings. Topics include inclusive/special education; multiple intelligences/learning styles; multicultural education; race, gender, sexual orientation, disability, culture, and class; effects of inequity on schooling; preventing and responding to prejudice and discrimination; and intercultural communication.

SeEd 4105. Reading and Literacy in the Content Areas. (2 cr; prereq admission to the secondary teacher education program; coreq 4102, 4103, 4104; methods; A-F only; fall, every year)
Study of how teachers in the various academic disciplines can support reading and literacy in their classrooms and use reading and literacy to enhance learning in the disciplines. Topics include theory and instructional strategies in the areas of reading comprehension, fluency, and vocabulary development.

SeEd 4201. Directed Student Teaching in the Middle and Secondary School. (HDiv; 10 cr; prereq 4102, 4103, 4104, 4105, methods, Spch 1042 or 1052; S-N only; spring, every year)
Students teach for a period of 11 weeks demonstrating application of approaches to teaching and learning in the middle and secondary grades under the guidance of a cooperating teacher and University supervisor.

SeEd 4202. Directed Student Teaching in the Middle and Secondary School. (1-16 cr [max 16 cr]; prereq 4102, 4103, 4104, 4105; methods, Spch 1042 or 1052; S-N only; fall, every year)
For students who need alternative or additional student teaching experience. Students demonstrate application of approaches to teaching and learning in middle and secondary grades under the guidance of a cooperating teacher and University supervisor.

SeEd 4204. Directed Student Teaching in International School at the Middle and Secondary Level. (IP; 10 cr; prereq 4102, 4103, 4104, 4105, methods, Spch 1042 or 1052; S-N only; spring, every year)
Students teach for a period of 11 weeks demonstrating application of approaches to teaching and learning in the middle and secondary grades under the guidance of a cooperating teacher and University supervisor.

SeEd 4205. Directed Student Teaching in the Secondary School. (1-16 cr [max 16 cr]; prereq 4102, 4103, 4104, 4105; methods, Spch 1042 or 1052; S-N only; fall, every year)
For students from colleges that require A-F grading for student teaching through the Global Student Teaching Program.

SeEd 4901. The Teacher and Professional Development. (2 cr; prereq 4201 or 4204 or #; A-F only; spring, every year)
Capstone experience. Professional development issues and philosophy of education, including portfolio assessment.

SeEd 4993. Directed Study. (1-5 cr [max 10 cr]; prereq approved directed study form; fall, spring, every year)
An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum.

Education, Middle and Secondary Methods Course Descriptions
These courses focus on the objectives, curricula, special methods, materials, and evaluation appropriate for teaching the various subject matter areas in the middle and secondary school. Students must complete methods course(s) in their licensure area(s). Methods courses are taken concurrently with secondary education block courses—SeEd 4102, 4103, 4104, 4105—and must be successfully completed before student teaching in a specific field.

ArtE 4123. Methods of Teaching Art K–12. (4 cr; prereq admission to the secondary teacher education program; coreq SeEd 4102, SeEd 4103, SeEd 4104, SeEd 4105; A-F only; fall, every year)
Objectives, curricula, special methods, materials, and evaluation appropriate for teaching art in K–12.

EngE 4121. Methods of Teaching Communication Arts and Literature in the Middle and Secondary School. (4 cr; prereq admission to the secondary teacher education program; coreq SeEd 4102, SeEd 4103, SeEd 4104, SeEd 4105; A-F only; fall, every year)
Objectives, curricula, special methods, materials, and evaluation appropriate for teaching communication arts and literature in the middle and secondary school.

LanE 4123. Methods of Teaching Foreign Language K–12. (4 cr; prereq admission to the SeEd or ElEd teacher education program; coreq SeEd 4102, SeEd 4103, SeEd 4104 or prereq ElEd 3202, ElEd 3212; A-F only; fall, every year)
Objectives, curricula, special methods, materials, and evaluation appropriate for teaching foreign language in K–12.
English (Engl)

Division of the Humanities

In English, students study literature and language, including its development over time and contemporary significance. Courses for both majors and non-majors offer a wide range of approaches and topics. Some courses focus on single authors, genres, or historical periods; others emphasize social contexts of literature, investigate representations of race or gender, or explore literary perceptions of the environment; still others cover film, creative writing, and contemporary popular literature.

Objectives—The curriculum introduces students to the main literary genres and important historical periods and movements in English; to representative works of British, American, and Anglophone literature; and to methods of critical interpretation. The major is designed to meet the needs of students with various goals, including those seeking a foundation for work in fields related to English (e.g., education, communications, editing and publishing, law, theater); those who want a humanistic base in reading, thinking, and writing for a liberal arts education; and those who intend to pursue graduate study in the field. Students engage in critical reading, oral and written analysis of texts, formal argumentation, and research.

English classes tend to be small and conversational. Students collaborate with one another by discussing subtle and complex texts while discovering their own interpretive voices by writing clear and persuasive essays.

English Major

Courses for Admission

Prerequisite Courses

Engl 1011 or equivalent satisfies the College Writing/Freshman Composition requirement and is a prerequisite for admission to the major.

Engl 1011—College Writing, CW (4 cr) or equivalent

Program Requirements

Up to 4 credits of coursework with a grade of D or D+ may be used to meet the major requirements. Courses may not be taken S-N unless offered S-N only.

A minimum GPA of 2.00 is required in the major to graduate. The GPA includes all, and only, University of Minnesota coursework. Grades of F are included in GPA calculation until they are replaced.

Courses for the Program

Required Courses

Engl 1131—Introduction to Literature, Hum (4 cr)

Take exactly 12 credit(s) from the following:

Engl 2201—Survey of British Literature to the 18th Century, Hum (4 cr)
Engl 2202—Survey of British Literature from the 18th Century Forward, Hum (4 cr)
Engl 2211—Survey of American Literature to the Civil War, Hum (4 cr)
Engl 2212—Survey of American Literature from the Civil War Forward, Hum (4 cr)

Research Seminar

A research-based study of a literary subject that forms a capstone experience for majors. 40xx courses are offered in rotation.

Take 4 or more credit(s) from the following:

Engl 4004—Research Seminar: Old English Literature and Language, Hum (4 cr)
Engl 4012—Research Seminar: Imagining the Earth, Hum (4 cr)
Engl 4017—Research Seminar: Tricksters-Conjurers in American Indian and African American Literature, HDiv (4 cr)
Engl 4022—Research Seminar: Rhetoric and Narration, Hum (4 cr)
Engl 4023—Research Seminar: Nationalism and Irish Literature, Hum (4 cr)
Engl 4024—Research Seminar: Poet's Choice: The Book as the 25th Poem, Hum (4 cr)
Engl 4025—Research Seminar: The Elizabeth Mystique, Hum (4 cr)
Engl 4027—Research Seminar: Dickens and Criticism, Hum (4 cr)

Lower Level Elective Courses

4 of the 40 credits in the major must have an HDiv designator at 2xxx or above. No more than 4 credits of 2xxx courses, other than the required surveys, may count in the major. A survey course, not used previously, may count as an elective.

Take no more than 4 credit(s) from the following:

Amln 2311—American Indians of the Great Plains: Victims and Victors, HDiv (4 cr)
Engl 2011—Introduction to Poetry and Poetic Language, Hum (4 cr)
Engl 2012—Introduction to Fiction, Hum (4 cr)
Engl 2013—Introduction to Drama, Hum (4 cr)
Engl 2014—Introduction to Popular Literature: Science Fiction, Hum (4 cr)
Engl 2015—Introduction to Film Studies, Hum (4 cr)
Engl 2031—Gender in Literature and Culture, HDiv (4 cr)
Engl 2032—Sex, the City, and Literature, HDiv (4 cr)
Engl 2041—Introduction to African American Literature, HDiv (4 cr)
Minor Requirements
Up to 4 credits of coursework with a grade of D or D+ may be used to meet the minor requirements. Courses may not be taken S-N unless offered S-N only.
A minimum GPA of 2.00 is required in the minor to graduate. The GPA includes all, and only, University of Minnesota coursework. Grades of F are included in GPA calculation until they are replaced.

Courses for the Program

Required Courses
Engl 1131—Introduction to Literature, Hum (4 cr)

Elective Courses
4 of the 20 credits in the minor must have an HDiv designator at 2xxx or above. No more than 4 credits of 2xxx courses, other than the required surveys, may count in the major. A survey course, not used previously, may count as an elective.

Take no more than 4 credit(s) from the following:

AmIn 2311—American Indians of the Great Plains: Victims and Victors, HDiv (4 cr)
Engl 2011—Introduction to Poetry and Poetic Language, Hum (4 cr)
Engl 2012—Introduction to Fiction, Hum (4 cr)
Engl 2013—Introduction to Drama, Hum (4 cr)
Engl 2014—Introduction to Popular Literature: Science Fiction, Hum (4 cr)
Engl 2015—Introduction to Film Studies, Hum (4 cr)
Engl 2031—Gender in Literature and Culture, HDiv (4 cr)
Engl 2032—Sex, the City, and Literature, HDiv (4 cr)
Engl 2041—Introduction to African American Literature, HDiv (4 cr)
Engl 2059—Introduction to Shakespeare, Hum (4 cr)
Engl 2061—Introduction to Popular Literature: Detection and Espionage in Fiction and Film, Hum (4 cr)
Engl 2106—Topics in Writing: The Environmental Imagination: Reading and Writing about the Natural World, Envt (4 cr)

Elective Courses
Take 4 or more credit(s) from the following:

Engl 3005—Understanding Writing: Theories and Practices, Hum (4 cr)
Engl 3012—Advanced Fiction Writing, ArtP (4 cr)
Engl 3015—Writing Poetry for the 21st Century, ArtP (4 cr)
Engl 3021—Grammar and Language, Hum (4 cr)
Engl 3022—Creative Nonfiction Writing, ArtP (4 cr)
Engl 312—The Rise of the Novel, Hum (4 cr)
Engl 3151—Writing Revolution, Hum (4 cr)
Engl 3154—19th-Century British Fiction, Hum (4 cr)
Engl 3155—20th-Century British Fiction, Hum (4 cr)
Engl 3156—Modern Irish Literature, Hum (4 cr)
Engl 3157—English Renaissance Drama, Hum (4 cr)
Engl 3159—Shakespeare: Studies in the Bard, Hum (4 cr)
Engl 3160—Medieval Literature, Hum (4 cr)
Engl 3161—Topics in Writing: Introduction to Creative Writing, ArtP (4 cr)
Engl 3163—Life in a Medieval City: Literature and Culture in York, 700-1500, Hum (4 cr)
Engl 3164—Fitzgerald and Hemingway, Hum (4 cr)
Engl 3165—English Renaissance Poetry and Prose, Hum (4 cr)
Engl 3166—Postcolonial Literature, Hum (4 cr)
Engl 3253—Modern and Postmodern Love in the Novel, Hum (4 cr)
Engl 3261—Modern British and American Poetry, Hum (4 cr)
Engl 3262—20th-Century American Poetry: From Modern to Contemporary, Hum (4 cr)
Engl 3281—The Literature of Slavery, HDiv (4 cr)
Engl 3301—U.S. Multicultural Literature, HDiv (4 cr)
Engl 3303—American Indian Literature, HDiv (4 cr)
Engl 3311—American Indian Literature, HDiv (4 cr)
Engl 3316—Postcolonial Literature, Hum (4 cr)
Engl 3411—Critical Approaches to Literature, Hum (4 cr)
Engl 3451—Shakespeare’s England, Hum (4 cr)
Engl 3501—The American West Revisited, Hum (4 cr)
Engl 3993—Directed Study (1–5 cr)
Engl 4993—Directed Study (1–5 cr)
Engl 3xxx, 4xxx

English Minor

Courses for Admission

Prerequisite Courses
Engl 1011 or equivalent satisfies the College Writing/Freshman Composition requirement and is a prerequisite for admission to the minor.
Engl 1011—College Writing, CW (4 cr)
or equivalent

Upper Level Elective Courses

Take 16 or more credit(s) from the following:

Engl 3005—Understanding Writing: Theories and Practices, Hum (4 cr)
Engl 3012—Advanced Fiction Writing, ArtP (4 cr)
Engl 3015—Writing Poetry for the 21st Century, ArtP (4 cr)
Engl 3022—Creative Nonfiction Writing, ArtP (4 cr)
Engl 312—The Rise of the Novel, Hum (4 cr)
Engl 3151—Writing Revolution, Hum (4 cr)
Engl 3154—19th-Century British Fiction, Hum (4 cr)
Engl 3155—20th-Century British Fiction, Hum (4 cr)
Engl 3156—Modern Irish Literature, Hum (4 cr)
Engl 3157—English Renaissance Drama, Hum (4 cr)
Engl 3159—Shakespeare: Studies in the Bard, Hum (4 cr)
Engl 3160—Medieval Literature, Hum (4 cr)
Engl 3163—Life in a Medieval City: Literature and Culture in York, 700-1500, Hum (4 cr)
Engl 3164—Fitzgerald and Hemingway, Hum (4 cr)
Engl 3165—English Renaissance Poetry and Prose, Hum (4 cr)
Engl 3166—Postcolonial Literature, Hum (4 cr)
Engl 3253—Modern and Postmodern Love in the Novel, Hum (4 cr)
Engl 3261—Modern British and American Poetry, Hum (4 cr)
Engl 3262—20th-Century American Poetry: From Modern to Contemporary, Hum (4 cr)
Engl 3281—The Literature of Slavery, HDiv (4 cr)
Engl 3301—U.S. Multicultural Literature, HDiv (4 cr)
Engl 3303—American Indian Literature, HDiv (4 cr)
Engl 3311—American Indian Literature, HDiv (4 cr)
Engl 3316—Postcolonial Literature, Hum (4 cr)
Engl 3317—English Renaissance Drama, Hum (4 cr)
Engl 3319—Shakespeare: Studies in the Bard, Hum (4 cr)
Engl 3320—Medieval Literature, Hum (4 cr)
Engl 3321—The American West Revisited, Hum (4 cr)
Engl 3393—Directed Study (1–5 cr)
Engl 3993—Directed Study (1–5 cr)
Engl 3xxx, 4xxx

English (Engl)
English (Eng)

Engl 3156—Modern Irish Literature, Hum (4 cr)
Engl 3157—English Renaissance Drama, Hum (4 cr)
Engl 3159—Shakespeare: Studies in the Bard, Hum (4 cr)
Engl 3161—Medieval Literature, Hum (4 cr)
Engl 3163—Life in a Medieval City: Literature and Culture in York, 700-1500, Hum (4 cr)
Engl 3164—Fitzgerald and Hemingway, Hum (4 cr)
Engl 3165—English Renaissance Poetry and Prose, Hum (4 cr)
Engl 3166—Postcolonial Literature, Hum (4 cr)
Engl 3253—Modern and Postmodern Love in the Novel, Hum (4 cr)
Engl 3261—Modern British and American Poetry, Hum (4 cr)
Engl 3262—20th-Century American Poetry: From Modern to Contemporary, Hum (4 cr)
Engl 3281—The Literature of Slavery, HDiv (4 cr)
Engl 3301—U.S. Multicultural Literature, HDiv (4 cr)
Engl 3311—American Indian Literature, HDiv (4 cr)
Engl 3331—African American Literature, HDiv (4 cr)
Engl 3411—Critical Approaches to Literature, Hum (4 cr)
Engl 3451—Shakespeare’s England, Hum (4 cr)
Engl 3501—The American West Revisited, Hum (4 cr)
Engl 4004—Research Seminar: Old English Literature and Language, Hum (4 cr)
Engl 4012—Research Seminar: Imagining the Earth, Hum (4 cr)
Engl 4017—Research Seminar: Tricksters-Conjurers in American Indian and African American Literature, HDiv (4 cr)
Engl 4022—Research Seminar: Rhetoric and Narration, Hum (4 cr)
Engl 4023—Research Seminar: Nationalism and Irish Literature, Hum (4 cr)
Engl 4024—Research Seminar: Poet’s Choice: The Book as the 25th Poem, Hum (4 cr)
Engl 4025—Research Seminar: The Elizabeth Mystique, Hum (4 cr)
Engl 4027—Research Seminar: Dickens and Criticism, Hum (4 cr)
Engl 5xxx, 4xxx

Teacher Preparation Requirements
Students seeking teaching licensure in communication arts and literature 5–12 should refer to the Education, Secondary (SeEd) section of this catalog. Students completing the course requirements for licensure in Communication Arts/Literature are strongly encouraged to earn an English major. The licensure requirements alone will not yield a major.

English Course Descriptions

Engl 1001. Fundamentals of Writing I. (4 cr; completion of both 1001,1002 meets College Writing requirement; fall, every year)
Intensive practice in the fundamentals of writing. Students learn and apply strategies for generating, organizing, revising, and editing their writing.

Engl 1002. Fundamentals of Writing II. (CW; 4 cr; prereq 1001; spring, every year)
Continuation of Engl 1001. Prepares students for academic writing by continuing coverage of basic writing skills and incorporating coverage of College Writing goals. Engl 1001 and 1002 may be taken in place of College Writing to fulfill the College Writing requirement.

Engl 1011. College Writing. (CW; 4 cr; fall, spring, every year)
Practice in academic writing, with special emphasis on argumentation, reading closely and critically for the purposes of scholarly analysis, responding to and making use of the work of others, and drafting and revising texts.

Engl 1151. Introduction to Literature. (Hum; 4 cr; prereq 1011 or equiv; fall, every year)
Introduction to the study of fiction, poetry, and drama. Emphasis on gaining basic skills of analysis. A prerequisite to advanced courses in English.

Engl 1993. Directed Study. (1-5 cr [max 10 cr]; prereq approved directed study form; fall, spring, every year)
An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum.

Engl 2111. Introduction to Poetry and Poetic Language. (Hum; 4 cr; prereq 1011 or equiv; fall, spring, offered when feasible)
An introduction to the techniques of close reading and the analysis of poetry. Emphasis on appreciating and understanding poetic form.

Engl 2123. Introduction to Drama. (Hum; 4 cr; prereq 1011 or equiv; fall, offered when feasible)
An introduction to creative reading and analysis of fiction (novels and/or short stories).

Engl 2133. Introduction to Literature. (Hum; 4 cr; prereq 1011 or equiv; fall, offered when feasible)
Continuation of Engl 1011. Prepares students for academic writing by introducing students to the techniques of critical reading and analysis of literature.

Engl 3031. Gender in Literature and Culture. (HDiv; 4 cr; prereq 1011 or equiv; fall, spring, offered when feasible)
Introduction to literary and cultural representations of gender. Emphasis on the intersections between power and the social relations of gender, race, class, and sexuality.

Engl 3252. Sex, the City, and Literature. (HDiv; 4 cr; fall, odd years)
The women of Sex and the City struggle in conversation and in their relationships to define male and female as well as intimacy and love. In this course, students also struggle, in class discussions and in writing, to formulate an understanding of the way gender and sex have impacted postmodern understandings of intimacy and love.

Engl 4041. Introduction to African American Literature. (HDiv; 4 cr; prereq 1011 or equiv; spring, offered when feasible)
Introduction to issues and themes in African American literature and culture, with emphasis on historical and cultural context.

Engl 4059. Introduction to Shakespeare. (Hum; 4 cr; prereq 1011 or equiv; spring, even years)
A careful reading of a representative selection of Shakespeare’s poetry and plays (including histories, comedies, tragedies, and romances). Consideration of generic and dramatic conventions, cultural contexts, literary elements, and performance choices on stage and in film. Serves non-majors as well as majors.

Engl 4061. Introduction to Popular Literature: Detection and Espionage in Fiction and Film. (Hum; 4 cr; prereq 1011 or equiv; fall, even years)
Examination of the detective and espionage genres in relation to 20th-century social and geopolitical pressures.

Topics in Writing: Study of a topic or method(s) of writing not normally covered by other English courses.

Engl 2106. Topics in Writing: The Environmental Imagination: Reading and Writing about the Natural World. (Env; 4 cr; prereq 1011 or equiv; fall, spring, offered when feasible)
Writing about the environment. Students learn to use the rich possibilities of language to express their responses to nature and convey to others the importance of close contact with the natural world. Readings in poetry and prose, discussion of technique, and experimentation with a variety of styles and literary forms.

Engl 2121. Topics in Writing: Introduction to Creative Writing. (ArtP; 4 cr; prereq 1011 or equiv; fall, every year)
Introduction to the basic elements of creative writing, including exploration of poetry, story, and journal writing. Practice with techniques such as dialogue, description, voice, and style.

Engl 2171. Topics in Writing: Editing and Proofreading. (Hum; 4 cr; prereq 1011 or equiv; spring, offered when feasible)
Students learn and practice the techniques of developmental editing, copyediting, and proofreading, while exploring career applications for these skills.

Engl 2201. Survey of British Literature to the 18th Century. (Hum; 4 cr; prereq 1011 or equiv, 1131; fall, every year)
Readings in English poetry, prose, and/or drama from the beginnings to the 18th century. Specific authors vary.
Engl 2202. Survey of British Literature from the 18th Century Forward. (Hum; 4 cr; prereq 1011 or equiv; 1131; spring, every year) Readings in English poetry, prose, and/or drama from the 18th century to the present. Specific authors vary.

Engl 2211. Survey of American Literature to the Civil War. (Hum; 4 cr; prereq 1011 or equiv; 1131; fall, spring, offered when feasible) Study of important texts, canonical and non-canonical, and important periods and movements that define the colonial and U.S. experience up to 1865.

Engl 2212. Survey of American Literature from the Civil War Forward. (Hum; 4 cr; prereq 1011 or equiv; 1131; fall, spring, offered when feasible) Study of selected historical and literary texts in U.S. literature, canonical and non-canonical, from 1865 to the present.

Engl 2411. Representations of American Indians in Popular and Academic Culture. (HDiv; 4 cr; prereq 1011 or equiv; fall, offered when feasible) Study of representations of American Indians in American popular and academic culture including literature, films, and sports. Particular attention given to how Indian identity, history, and cultures are represented in pop culture by non-Indians and, more recently, Indians themselves.

Engl 2993. Directed Study. (1-5 cr; max 10 cr; prereq approved directed study form; fall, spring, every year) An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum.

Engl 3005. Understanding Writing: Theories and Practices. (Hum; 4 cr; prereq 1011 or equiv, soph standing, 6 coreq IS 3720 for students working in the Writing Room; fall, every year) Introduction to composition theory: generating, composing, revising, and responding to writing; conventions across disciplines; strategies for teaching and tutoring writing. Weekly short assignments; three formal papers, written and revised in stages; oral presentation of research. Required for first-semester Writing Room staff.

Engl 3012. Advanced Fiction Writing. (ArtP; 4 cr; prereq 107; fall, spring, offered when feasible) For experienced writers. Focus on developing skills and mastering creative and technical elements of writing fiction.

Engl 3015. Writing Poetry for the 21st Century. (ArtP; 4 cr; prereq 1011 or equiv; spring, offered when feasible) A creative writing class. Practice with the different elements of poetry—sound, rhythm, imagery, voice, line—and exploration of the ways contemporary poets use and transform traditional forms and techniques.

Engl 3021. Grammar and Language. (Hum; 4 cr; fall, every year) Study of the English language. Historical development and current structure. Includes language variation and change, social history of language, phonology, syntax, semantics, development of English grammar, prescriptive versus descriptive grammar, and contemporary theories of grammar.

Engl 3032. Creative Nonfiction Writing. (ArtP; 4 cr; prereq 1011 or equiv; spring, offered when feasible) For experienced writers. Focus on understanding and practicing the rhetorical and stylistic choices available to writers of creative nonfiction, especially decisions about structure, pacing, language, style, tone, detail, description, and narrative voice.

Engl 3142. The Rise of the Novel. (Hum; 4 cr; prereq 1131, two from 2201, 2202, 2211, 2212; spring, offered when feasible) The origins of the British novel: experiments with the new form, influence of earlier genres, evolution of formal realism. Authors may include Austen, Burney, Fielding, Richardson, and Sterne.

Engl 3151. Writing Revolution. (Hum; 4 cr; prereq 1131, two from 2201, 2202, 2211, 2212; spring, offered when feasible) Literary analysis of fiction, non-fiction, poetry, and drama that promoted, commented on, or responded to the American Revolution. Writers include Jefferson, Franklin, de Crevecoeur, Paine, Tyler, Freneau, Wheatley, Equiano, Rowson, Brown, Irving, and Child. Focus on the literary construction of national identity and debates about human rights, individualism, and westward colonization.

Engl 3154. 19th-Century British Fiction. (Hum; 4 cr; prereq 1131, two from 2201, 2202, 2211, 2212; fall, spring, offered when feasible) The rise of the novel to respectability and prominence in Britain from the Romantics to the Victorians.

Engl 3155. 20th-Century British Fiction. (Hum; 4 cr; prereq 1131, two from 2201, 2202, 2211, 2212; fall, spring, offered when feasible) Major novelists from the Modernist period and after, focusing on the historical context of the new challenges to literary tradition.

Engl 3156. Modern Irish Literature. (Hum; 4 cr; prereq 1131, two from 2201, 2202, 2211, 2212; spring, offered when feasible) The poetry, fiction, and drama of Irish writers from 1890-1927, with attention to the ways that literature shaped a national identity.

Engl 3157. English Renaissance Drama. (Hum; 4 cr; prereq 1131, two from 2201, 2202, 2211, 2212; fall, offered when feasible) A thorough study of the early modern English theater, including readings of 16th- and 17th-century plays and consideration of the literary and cultural contexts that informed them. Special attention is given to the works of Shakespeare's contemporaries, such as Marlowe, Jonson, Cary, Middleton, and Webster.

Engl 3159. Shakespeare: Studies in the Bard. (Hum; 4 cr; prereq 1131, two from 2201, 2202, 2211, 2212; spring, odd years) A topics-based study of Shakespeare's works and other pertinent texts. Sample topics include "Shakespeare's Women," "Dangerous Rhetoric in Shakespeare," and "Shakespeare and His Sources." Attention is given to historical and literary contexts, and students are asked to consider Shakespeare's work as it is read as well as performed.

Engl 3161. Medieval Literature. (Hum; 4 cr; prereq 1131, two from 2201, 2202, 2211, 2212; fall, spring, offered when feasible) Early and later medieval prose, poetry, and drama produced and/or widely read in England from about 700-1500.

Engl 3163. Life in a Medieval City: Literature and Culture in York, 700-1500. (Hum; 4 cr; prereq 1131, two from 2201, 2202, 2211, 2212 or 6; summer, offered when feasible) Travel to York, England, to study the literature and history of the city from Anglo-Saxon times to the end of the Middle Ages. Focus on the role that York played as the second city of medieval England, emphasizing the diverse cultural influences on the city. Day trips to historically significant sites in the vicinity of York. [Continuing Education course]

Engl 3164. Fitzgerald and Hemingway. (Hum; 4 cr; prereq 1131, two from 2201, 2202, 2211, 2212; fall, spring, offered when feasible) Study of selected short stories, essays, and novels of F. Scott Fitzgerald and Ernest Hemingway with attention given to their role in shaping modern American concepts of masculinity, wealth, and what it means to be "American."

Engl 3165. English Renaissance Poetry and Prose. (Hum; 4 cr; prereq 1131, two from 2201, 2202, 2211, 2212; fall, offered when feasible) An examination of the poetry and prose of early modern England, with special attention to the work of Philip Sidney, John Donne, Mary Wroth, George Herbert, Margaret Cavendish, and John Milton.

Engl 3166. Postcolonial Literature. (Hum; 4 cr; prereq 1131, two from 2201, 2202, 2211, 2212; fall, spring, offered when feasible) Study of literature as site of cultural conflict during and after imperial encounters, from the perspectives of both colonizers and colonized peoples. Particular focus on Britain and its former colonies.

Engl 3253. Modern and Postmodern Love in the Novel. (Hum; 4 cr; prereq 1131, two from 2201, 2202, 2211, 2212; fall, even years) Modernists and postmodernists are famous for casting an ironic glance on God and Truth. But are they as cynical and skeptical about love? In this course, students work through the writings of prominent 20th-century novelists who struggled to define love.

Engl 3261. Modern British and American Poetry. (Hum; 4 cr; prereq 1131, two from 2201, 2202, 2211, 2212; fall, offered when feasible) A study of the continuities and break with traditions in 20th-century poetry. Focus on innovations and experiments in form and theme.

Engl 3262. 20th-Century American Poetry: From Modern to Contemporary. (Hum; 4 cr; prereq 1131, two from 2201, 2202, 2211, 2212; fall, offered when feasible) Study of the radical shifts in poetry and poetics in 20th-century America. Exploration of the ways that poets such as Robert Lowell, Adrienne Rich, Frank O'Hara, Denise Levertov, Allen Ginsberg, James Wright, and Sylvia Plath broke with modernist conventions and New Critical aesthetics and opened the field for the poetry of the late 20th and early 21st centuries.

Engl 3281. The Literature of Slavery. (HDiv; 4 cr; prereq 1131, two from 2201, 2202, 2211, 2212; fall, offered when feasible) Study of fictional and non-fictional writing about chattel slavery in the United States. Readings include 19th-century works written to oppose or support slavery and 20th-century works written to understand slavery and its effects.
Environmental Science (ESci)

Environmental Science (ESci) Program

Environmental Science (ESci) Division of Science and Mathematics

Environmental Science Major

Program Requirements

Students are encouraged to fulfill distribution requirements with courses that complement the environmental science major (e.g., Econ 1111—Microeconomics, Econ 3007—Environmental and Natural Resource Economics I, and Econ 3008—Environmental and Natural Resource Economics II).

Selection of electives must be done in consultation with an environmental science adviser. By the beginning of their junior year students should submit a clearly articulated educational plan and a list of selected electives, to be reviewed and approved by the Environmental Science Advisory Group.

Courses in the Division of Science and Math other than those listed below may be used to fulfill the “Elective Science Courses” with the prior approval of the Environmental Science Advisory Group.
Applied Sciences

Chem 1101 — General Chemistry I, Sci-L (4 cr)
Chem 1102 — General Chemistry II, Sci-L (4 cr)
Math 1021 — Survey of Calculus, M/SR (4 cr)

Courses for the Program

Basic Sciences

Chem 3101 — Analytical Chemistry, Sci-L (4 cr)
Chem 3302 — Organic Chemistry II, Sci-L (4 cr)
Geol 2111 — Geomorphology, Sci (4 cr)

Required courses may not be taken S-N unless offered S-N only.
Up to 4 credits of coursework with a grade of D or D+ may be used to meet the major requirements. A minimum GPA of 2.00 is required in the major to graduate. The GPA includes all, and only, University of Minnesota coursework. Grades of F are included in GPA calculation until they are replaced.

Courses for the Program

Basic Sciences

Chem 1101 — General Chemistry I, Sci-L (4 cr)
Chem 1102 — General Chemistry II, Sci-L (4 cr)
Math 1021 — Survey of Calculus, M/SR (4 cr)
Math 1101 — Calculus I, M/SR (5 cr)

or Math 1021 — Survey of Calculus, M/SR (4 cr)

or Phys 1101 — General Physics I, Sci-L (5 cr)
or Phys 1091 — Principles of Physics I, Sci-L (5 cr)

Applied Sciences

Biol 3131 — Ecology, Sci-L (4 cr)
Geol 1101 — Physical Geology, Sci-L (4 cr)
Geol 2121 — Sedimentology and Stratigraphy, Sci-L (4 cr)

Stat 2601 — Statistical Methods, M/SR (4 cr)

or Math 1091 — Survey of Calculus, M/SR (4 cr)

or Phys 1091 — Principles of Physics I, Sci-L (5 cr)

or Biol 1111 — Fundamentals of Genetics, Evolution, and Development, Sc (3 cr)

or Biol 2101 — Evolution of Biodiversity, Sci-L (4 cr)

Required Practicum

Completion of an applied educational experience in environmental science. An approved educational experience in a work, research, and/or field setting that provides a practical complement to the student’s classroom learning experiences. Educational experiences are approved by the Environmental Science Advisory Group. A wide variety of experiences are possible, ESci 3196 — Environmental Science Field Camp is one example.

ESci 3196 — Environmental Science Field Camp, Sci (2–4 cr)
or Completion of an applied educational experience in environmental science.

Elective Courses

Courses from at least 2 disciplines must be included. No more than 8 credits from xxx courses may be used to meet this requirement. If a second major is sought in the Division Science and Mathematics, at least 12 elective credits for the environmental science major must come from a discipline outside the second major (e.g., a geology major cannot apply more than 8 Geol elective credits toward the environmental science major).

Take 20 or more credit(s) from the following:

Biol 4121 — Herpetology, Sci-L (4 cr)
Biol 4131 — Vertebrate Natural History, Sci-L (4 cr)
Biol 4151 — Entomology, Sci-L (4 cr)
Biol 4172 — Plant Systematics, Sci-L (4 cr)
Biol 4191 — Freshwater Biology, Sci-L (4 cr)
Biol 4331 — Global Change Ecology, Sci (4 cr)
Biol 4351 — Conservation Biology, Sci-L (4 cr)
Chem 2301 — General Chemistry I, Sci (4 cr)
Chem 2302 — Organic Chemistry II, Sci (4 cr)
Chem 3101 — Analytical Chemistry, Sci-L (4 cr)
Chem 3501 — Physical Chemistry I, Sci (4 cr)
Geol 2001 — Natural and Unnatural Geologic Hazards, Envt (4 cr)
Geol 2121 — Sedimentology and Stratigraphy, Sci-L (4 cr)
Geol 2131 — Geomorphology, Sci (4 cr)
Geol 2141 — Glacial and Quaternary Geology, Sci (4 cr)
Phys 2301 — Atmospheric Physics, Envt (4 cr)
Stat 4601 — Biostatistics, M/SR (4 cr)

Environmental Science Course Descriptions

Biol 1111. Fundamentals of Genetics, Evolution, and Development. (Sci; 3 cr; prereq biol major/minor or chem major or any health sciences preprofessional program or ELED or SeEd major with middle school science specialties or #; fall, spring, every year)
Introduction to scientific methods and the history of biology, with an emphasis on mechanisms of inheritance, development, and descent with modification. Overview of pre-Darwinian scientific thought; the theory of evolution; a qualitative introduction to genetics and molecular biology; and a summary of developmental biology.

Biol 2101. Evolution of Biodiversity. (Sci-L; 4 cr; prereq 1101 or 1111 or #; spring, every year)
Analysis of evolutionary trends using historical and contemporary evidence. Principles of classification and phylogenetic reconstruction. Includes laboratory survey of the major groups of organisms. (two 65-min, one 180-min lab)

Biol 3131. Ecology. (Sci-L; 4 cr; prereq Biol 2101 or EnSt 2101 or #; fall, every year)
Basic principles and models of population biology, community structure and function, and ecosystem dynamics. Lab exercises emphasize field work, techniques for characterizing local plant and animal communities, and experimental investigation of topics such as competition and behavioral ecology. (two 65-min, one 180-min lab and field study; weekend field trip required)

Biol 4121. Herpetology. (Sci-L; 4 cr; prereq Biol 2101 or EnSt 2101 or #; spring, odd years)
Survey of amphibians and reptiles, including their evolution, systematics, identification, behavior, ecological relationships, and contemporary problems associated with human activities. (two 65-min, one 180-min lab and field studies)

Biol 4131. Vertebrate Natural History. (Sci-L; 4 cr; prereq Biol 2101 or EnSt 2101 or #; fall, odd years)
Survey of vertebrates, including their evolution, systematics, and ecological relationships. (two 65-min, one 180-min lab or field study)

Biol 4151. Entomology. (Sci-L; 4 cr; prereq Biol 2101 or EnSt 2101 or #; fall, even years)
Structure, life histories, habits, and classification of common families of insects, including their economic significance. (two 65-min, 180-min lab)

Biol 4172. Plant Systematics. (Sci-L; 4 cr; prereq 2101 or EnSt 2101 or #; spring, even years)
Survey of vascular plant taxa, with an emphasis on the flowering plant families and their evolutionary relationships. Lab emphasizes use of keys for identification of Midwestern plant families and genera. (two 65-min, 180-min lab)

Biol 4191. Freshwater Biology. (Sci-L; 4 cr; prereq Biol 2101 or EnSt 2101, 2111 or #; fall, odd years)
Structure, function, and biota of freshwater ecosystems, including lakes, streams and wetlands. Lab emphasizes independent research and field study in local habitats. (two 65-min, one 180-min lab; weekend field trip required)

Biol 4331. Global Change Ecology. (Sci; 4 cr; prereq 3131 or #; spring, odd years)
Global cycles of carbon, water, and nutrients. Advanced consideration of community and ecosystem structure and function. Analysis of natural and human drivers of change in biological systems, including use of quantitative methods and computer models. (two 100-min lab)

Biol 4351. Conservation Biology. (Sci-L; 4 cr; prereq Biol 2101 or EnSt 2101, 2111 or #; fall, even years)
Application of demographic and genetic models to protect biodiversity, including planning for uncertainty. Population viability, inbreeding depression, contemporary evolution, design and management of reserves, and invasive species. Lab exercises include field trips and computer modeling of endangered species. (two 65-min, one 180-min lab)
Environmental Science (ESci)

Chem 1101. General Chemistry I. (Sci-L; 4 cr; prereq Math 0901 or placement beyond Math 0901 using ACT/placement exam score; fall, every year)
Scientific method, measurements, nomenclature, stoichiometry, atomic and molecular structure, thermodynamics, chemical periodicity, introduction to chemical bonding, and properties of common elements and ions. Development of scientific reasoning and problem-solving skills. Laboratory exercises concomitant with these topics. (3 hrs lect, 3 hrs lab)

Chem 1102. General Chemistry II. (Sci-L; 4 cr; prereq 1101; spring, every year)
Continuation of Chem 1101. Chemical bonding, states of matter, solutions, acid-base chemistry, chemical equilibrium, oxidation-reduction reactions, kinetics, thermodynamics, quantum theory, nuclear chemistry, organic chemistry, and biochemistry. Lab exercises concomitant with these topics. (3 hrs lect, 3 hrs lab)

Chem 2301. Organic Chemistry I. (Sci; 4 cr; prereq 1102, coreq 2311; fall, every year)
Introduction to the structure and reactivity of organic molecules; nomenclature and functional groups; stereochemistry; mechanisms of substitution and elimination pathways; physical organic chemistry; introduction to synthetic strategy; fundamentals of spectroscopic techniques. (4 hrs lect)

Chem 2302. Organic Chemistry II. (Sci; 4 cr; prereq 2301, coreq 2321 or # for chem majors; spring, every year)
Continuation of topics from Chem 2301; spectroscopy; chemistry of polyenes, aromatic systems, and amines; enol and enolate chemistry; free-radical chemistry; retro-synthetic analysis; special topics. (4 hrs lect)

Chem 3101. Analytical Chemistry. (Sci-L; 4 cr; prereq 1102; fall, every year)
The application of chemical equilibria to chemical analysis with emphasis on the fundamental quantitative aspects of analytical chemistry. Acid-base, oxidation-reduction, and complexometric titrations, introduction to electrochemical and spectrophotometric analyses and separations. (3 hrs lect, 3 hrs lab)

Chem 3501. Physical Chemistry I. (Sci; 4 cr; prereq 1102, Phys 1101, Math 1102 or #; fall, every year)

EnSt 1101. Environmental Problems and Policy. (Envt; 4 cr; fall, every year)
An introduction to the ways in which state, national, and international political systems deal with environmental issues and goals. The development of environmental governance, the regulatory and economic tools of environmental policy, and the impact of institutions, culture, social movements, and historical development.

EnSt 2101. Environmental Biology. (Sci-L; 4 cr; credit will not be granted if credit has been received for Biol 2101; fall, every year)
Introduction to concepts in biodiversity, evolution, and ecology. Includes basic chemistry and concepts from cell biology, molecular biology, and genetics. A one-course gateway into upper division Biology courses normally requiring the Biol 1111-2101 sequence. (2-65 min lectures, one 180-min lab)

ESci 3106. Environmental Science Field Camp. (Sci; 2-4 cr (max 4 cr); prereq jr status, #; fall, spring, summer, every year)
An educational experience in a field or internship setting focusing on identification and solution of environmental science problems in an environmental field, including environmental geology, hydrology, environmental chemistry or environmental biology. A course syllabus or written plan of work must be approved by the Environmental Science Advisory Committee before registration.

ESci 4901. Environmental Science Senior Seminar I. (1 cr; prereq #; A-F only; fall, every year)
Capstone experience in environmental science. Identification and selection of individual research topics and related bibliographic resources; development of skills in the reading of environmental science literature (assessing data, recognizing gaps in the research findings, identifying problems in research conclusions). Discussion of selected topics of environmental interest.

ESci 4902. Environmental Science Senior Seminar II. (1 cr; prereq 4901, #; A-F only; spring, every year)
Capstone experience in environmental science. Completion of research, assessment of information or data, and formulation of conclusions on the research topic selected. Presentations of research projects.

Geol 1101. Physical Geology. (Sci-L; 4 cr; fall, spring, every year)
Introduction to the materials that make up the Earth and the structures, surface features, and geologic processes involved in its origin and development. Lab work includes study of the major constituents of the Earth’s crust, including the important rocks and minerals; study of surface and geologic features using aerial photographs, topographic maps, and satellite imagery. (3 hrs lect, 3 hrs lab)

Geol 201. Natural and Unnatural Geologic Hazards. (Envt; 4 cr; spring, offered when feasible)
Examination of the more significant interactions between humans and geologic environments and processes. Earthquake and volcanic hazards, river flooding, mass movements and slope stability, coastal hazards, and water resources and pollution. Lectures and problems sets emphasize the quantitative approaches used to determine the likelihood and frequency of natural hazards, assess associated risks, and mitigate damage.

Geol 2121. Sedimentology and Stratigraphy. (Sci-L; 4 cr; prereq 2101; fall, every year)
Processes of sedimentation, including origin, transportation, and deposition of sediments; interpretation of sedimentary environments. Principles of stratigraphy and their applications. Lab work includes sedimentary particle analysis; stratigraphic sections; and interpretation of ancient sedimentary environments based on stratified sequences of sedimentary rock. (3 hrs lect, 3 hrs lab and field trips)

Geol 211. Glacial and Quaternary Geology. (Sci; 4 cr; prereq 1101; fall, every year)
Glaciers, glaciology, glacial deposition, glacial erosion; climatic change and the growth and advance of ice sheets; effect of glaciations on flora and fauna. (3 hrs lect, 3 hrs lab and field trips)

Geol 2161. GIS and Remote Sensing. (Sci; 4 cr; prereq 1101 or Biol 1101 or Biol 1111 or #; spring, offered when feasible)
Introduction to design, development, and application of Geographic Information Systems (GIS); overview of acquisition and utility of satellite data and imagery; emphasis on applications in Earth and environmental sciences; lab component focuses on practical aspects of GIS development and use and involves original semester projects designed and implemented by individual students.

Geol 3501. Hydrology. (Sci; 4 cr; prereq Math 1101 or #; fall, every year)
Elements of surface water hydrology; groundwater occurrence and aquifer characteristics; groundwater flow mechanics and flow nets; well hydraulics; groundwater contamination, contaminant transport, and remediation; management and legal aspects of water resources. (4 hrs lect)

Math 1021. Survey of Calculus. (M/SR; 4 cr; prereq 1012 or placement; fall, every year)
Short course for students in social sciences, biological sciences, and other areas requiring a minimal amount of calculus. Topics include basic concepts of functions, derivatives and integrals, exponential and logarithmic functions, maxima and minima, partial derivatives; applications.

Math 1101. Calculus I. (M/SR; 5 cr; prereq 1012, 1013 or placement; fall, spring, every year)
Limits and continuity; the concepts, properties, and some techniques of differentiation, antidifferentiation, and definite integration and their connection by the Fundamental Theorem. Partial differentiation. Some applications. Students learn the basics of a computer algebra system.

Phys 1091. Principles of Physics I. (Sci-L; 5 cr; prereq high school higher algebra; fall, every year)
Introduction to physics without the use of calculus. Vectors, kinematics, Newton’s laws of motion, work and energy, momentum, torque, fluids, thermal physics, laws of thermodynamics, oscillations and waves. (4 hrs lect, 2 hrs lab)

Phys 1101. General Physics I. (Sci-L; 5 cr; prereq Math 1101 or #; spring, every year)
Vectors, kinematics, laws of motion, circular motion, work-energy theorem, conservation principles, rotational motion, gravitation, simple harmonic oscillations, wave phenomena, fluid mechanics, thermal properties of matter, kinetic theory, laws of thermodynamics. (4 hrs lect and rec, 2 hrs lab)

Phys 2310. Atmospheric Physics. (Envt; 4 cr; prereq 1092 or 1102, Math 1101; spring, every year)
Introduction to atmospheric physics with an emphasis on thermodynamics. Atmospheric thermodynamics including gas laws, phase transitions, laws of thermodynamics, two-component systems, atmospheric stability; radiative transfer including atmospheric optics and remote sensing; some aspects of
The environmental studies major is designed to serve those interested in a broader knowledge of the natural environment and the role of humans in that environment. Students begin with a foundation of knowledge in economics, policy, science, humanities, and statistics. Carefully chosen electives, a required practical internship or research experience, and a capstone seminar provide depth of experience and help students prepare for graduate and professional programs as well as for careers in education, government service, and the private sector.

### Environmental Studies Major

**Program Requirements**

Selection of electives must be intentional and done in close consultation with an environmental studies adviser. Students must submit an elective plan (preferably by the end of sophomore year), to be reviewed and approved by the environment program coordinator and the other voting members of the environment program.

Elective plans must be designed to ensure that there is sufficient depth of coverage in the chosen EnSt electives. For many students, a double-major (or minor) with a closely related disciplinary major is desirable. For some majors, electives can be selected in such a way that many of the courses in a coherent environmental studies elective plan also count toward the second major. Other elective courses, not listed below, may be appropriate to add depth and provide more theoretical context for the environmentally focused coursework (requires written approval of course instructor and the program coordinator). For instance, Pol 3421—International organizations might be an appropriate elective for students wishing to understand international environmental policy. Some generally focused courses (Engl 3032—Creative Nonfiction, for example) are appropriate if course project topics are environmentally themed.

No grades below C- are allowed. Courses may not be taken S-N unless offered S-N only.

A minimum GPA of 2.00 is required in the major to graduate. The GPA includes all, and only, University of Minnesota coursework. Grades of “F” are included in GPA calculation until they are replaced.

### Courses for the Program

**Required Courses**

- Econ 1111—Principles of Microeconomics, SS (4 cr)
- Engl 2106—Topics in Writing: The Environmental Imagination: Reading and Writing about the Natural World, Envt (4 cr) or EnSt 2111—Environmental Ethics, Envt (4 cr)
- EnSt 1101—Environmental Problems and Policy, Envt (4 cr)
- EnSt 2101—Environmental Biology, Sci-L (4 cr) or Biol 1111—Fundamentals of Genetics, Evolution, and Development, Sci (3 cr) and Biol 2101—Evolution of Biodiversity, Sci-L (4 cr)
- EnSt 3996—Internship/Field Experience in Environmental Studies (2–4 cr)
- EnSt 4901—Senior Capstone Experience (2 cr)
- Geol 1101—Physical Geology, Sci-L (4 cr) or Stat 1601—Introduction to Statistics, M/SR (4 cr) or Stat 2601—Statistical Methods, M/SR (4 cr)

**Elective Courses**

Other courses may be appropriate to add depth and provide more theoretical context for the environmentally focused coursework (requires written approval of course instructor and the program coordinator).

At least 16 of the 24 elective credits must be from upper division (3xxx or 4xxx) courses. Of these 16 credits, at least 4 credits must be from science and at least 4 must be from social science and at least 4 must be from science and mathematics.

#### 1xxx-2xxx Electives

Exclusive of those used to meet Required Courses above.

**Take no more than 8 credit(s) from the following:**

- Anth 2101—Physical Anthropology, Sci-L (4 cr)
- Anth 2501—Medical Anthropology-An Overview, SS (4 cr)
- Chem 1101—General Chemistry I, Sci-L (4 cr)
- Chem 1102—General Chemistry II, Sci-L (4 cr)
- Ed 2301—Environmental Science and Place-Based Education, Envt (4 cr)
- Engl 2106—Topics in Writing: The Environmental Imagination: Reading and Writing about the Natural World, Envt (4 cr) or EnSt 2111—Environmental Ethics, Envt (4 cr)
- Geol 2161—GIS and Remote Sensing, Sci (4 cr)
- Geol 2101—Physical Geology, Sci-L (4 cr) or Stat 1601—Introduction to Statistics, M/SR (4 cr) or Stat 2601—Statistical Methods, M/SR (4 cr)
- Phil 2111—Introductory Ethics, Hum (4 cr)
- Phys 2301—Atmospheric Physics, Envt (4 cr)
- Pol 1201—American Government and Politics, E/CR (4 cr)

#### 3xxx-4xxx Elective Courses

**Take 16 or more credit(s) from the following:**

**Science and Mathematics Electives**

**Take 4 or more credit(s) from the following:**

- Biol 3131—Ecology, Sci-L (4 cr)
- Biol 4131—Vertebrate Natural History, Sci-L (4 cr)
- Biol 4151—Entomology, Sci-L (4 cr)
- Biol 4171—Plant Systematics and Evolution, Sci-L (4 cr)
- Biol 4191—Freshwater Biology, Sci-L (4 cr)
- Biol 4331—Global Change Ecology, Sci (4 cr)
- Biol 4351—Conservation Biology, Sci-L (4 cr)
- Chem 3101—Analytical Chemistry, Sci-L (4 cr)
- Chem 3501—Hydrology, Sci (4 cr)
Environmental Studies (EnSt)

Social Science Electives
Take 4 or more credit(s) from the following:
Anth 3204—Culture, Food, and Agriculture, Envt (4 cr)
Anth 3206—Ecological Anthropology, Envt (4 cr)
Econ 3007—Environmental and Natural Resource Economics I, Envt (2 cr)
Econ 3008—Environmental and Natural Resource Economics II, Envt (2 cr)
Hist 3361—An Environmental and Geographic History of the United States, Envt (4 cr)
Pol 3355—Environmental Political Theory, Envt (4 cr)
Soc 3131—World Population, Envt (4 cr)
Soc 3204—Culture, Food, and Agriculture, Envt (4 cr)

Humanities and Education Electives
Take 0 or more credit(s) from the following:
Engl 4012—Research Seminar: Imagining the Earth, Hum (4 cr)
Spn 3623—Seminar: Ecology and Nature in Latin American Literature, Envt (4 cr)

Environmental Studies Course Descriptions

Anth 3101. Physical Anthropology. (Sci-L; 4 cr; A-F only; spring, every year)
Prehistoric human life and culture. Processes of human evolution. The fossil record linking anatomically modern humans with our earliest hominoid ancestors. Human and other primate evolution and genetics. Includes a 90-minute lab session to be scheduled.

Anth 2501. Medical Anthropology-An Overview. (SS; 4 cr; prereq 1111 or Soc 1101 or #; spring, even years)
Utilizes an ecological perspective to explore cultural understandings of health and illness in a variety of societies in North America and abroad. Examines the effects of cultural and physical adaptation, nutrition, culture contact, and modernization on the health and well being of people.

Anth 3204. Culture, Food, and Agriculture. (Envt; 4 cr; +Soc 3204; prereq 1111 or Soc 1101 or #; spring, even years)
Same as Soc 3204. Examines the globalization of food systems utilizing the political ecology of food to understand global and local dimensions of production, marketing, and consumption. Emphasis on connections between food production and national identity, relations of power, genetic engineering, environmental destruction, the politics of world hunger, and local efforts to achieve sustainability.

Anth 3206. Ecological Anthropology. (Envt; 4 cr; prereq 1111 or 2101 or 2103; fall, every year)
Exploration of human ecology and the causes and effects of environmental change, using data from archaeology, biological anthropology, and cultural anthropology. Emphasis on understanding the social and economic context of human adaptations to the environment. Examination of cultures worldwide and through time that have (or have failed to) live sustainably.

Biol 1111. Fundamentals of Genetics, Evolution, and Development. (Sci; 3 cr; prereq Biol major/minor or chem major or any health sciences preprofessional program or EIEd or SeEd major with middle school science specialties or #; fall, spring, every year)
Introduction to scientific methods and the history of biology, with an emphasis on mechanisms of inheritance, development, and descent with modification. Overview of pre-Darwinian scientific thought; the theory of evolution; a qualitative introduction to genetics and molecular biology; and a summary of developmental biology.

Biol 2101. Evolution of Biodiversity. (Sci-L; 4 cr; prereq 1101 or 1111 or #; spring, even years)
Analysis of evolutionary trends using historical and contemporary evidence. Principles of classification and phylogenetic reconstruction. Includes laboratory survey of the major groups of organisms. (two 65-min lect, one 180-min lab)

Biol 3131. Ecology. (Sci-L; 4 cr; prereq Biol 2101 or EnSt 2101 or #; fall, every year)
Basic principles and models of population biology, community structure and function, and ecosystem dynamics. Lab exercises emphasize field work, techniques for characterizing local plant and animal communities, and experimental investigation of topics such as competition and behavioral ecology. (two 65-min lect, one 180-min lab and field study; weekend field trip required)

Biol 4131. Vertebrate Natural History. (Sci-L; 4 cr; prereq Biol 2101 or EnSt 2101 or #; fall, odd years)
Survey of vertebrates, including their evolution, systematics, and ecological relationships. (two 65-min lect, one 180-min lab or field study)

Biol 4151. Entomology. (Sci-L; 4 cr; prereq Biol 2101 or EnSt 2101 or #; fall, even years)
Structure, life histories, habits, and classification of common families of insects, including their economic significance. (two 65-min lect, 180-min lab)

Biol 4171. Plant Systematics and Evolution. (Sci-L; 4 cr; prereq 2101, 3121 or #; spring)
Introduction to the identification and phylogenetics of land plants. Survey of the major trends in plant evolution, including morphological and life history variation among major plant taxa. Use of keys for local flora emphasized. (two 65-min lect, one 180-min lab and field study)

Biol 4191. Freshwater Biology. (Sci-L; 4 cr; prereq Biol 2101 or EnSt 2101, 2111 or #; fall, odd years)
Structure, function, and biota of freshwater ecosystems, including lakes, streams and wetlands. Lab emphasizes independent research and field study in local habitats. (two 65-min lect, one 180-min lab; weekend field trip required)

Biol 4331. Global Change Ecology. (Sci-L; 4 cr; prereq 3131 or #; spring, odd years)
Global cycles of carbon, water, and nutrients. Advanced consideration of community and ecosystem structure and function. Analysis of natural and human drivers of change in biological systems, including use of quantitative methods and computer models. (two 100-min lect)

Biol 4351. Conservation Biology. (Sci-L; 4 cr; prereq Biol 2101 or EnSt 2101, coreq or prereq Biol 3131 or #; fall, even years)
Application of demographic and genetic models to protect biodiversity, including planning for uncertainty. Population viability, inbreeding depression, contemporary evolution, design and management of reserves, and invasive species. Lab exercises include field trips and computer modeling of endangered species. (two 65-min lect, one 180-min lab)

Chem 1101. General Chemistry I. (Sci-L; 4 cr; prereq Math 0901 or placement beyond Math 0901 using ACT/placement exam score; fall, every year)
Scientific method, measurements, nomenclature, stoichiometry, atomic and molecular structure, thermochemistry, chemical periodicity, introduction to chemical bonding, and properties of common elements and ions. Development of scientific reasoning and problem-solving skills. Laboratory exercises concomitant with these topics. (3 hrs lect, 3 hrs lab)

Chem 1102. General Chemistry II. (Sci-L; 4 cr; prereq 1101; spring, every year)
Continuation of Chem 1101. Chemical bonding, states of matter, solutions, acid-base chemistry, chemical equilibrium, oxidation-reduction reactions, kinetics, thermodynamics, quantum theory, nuclear chemistry, organic chemistry, and biochemistry. Lab exercises concomitant with these topics. (3 hrs lect, 3 hrs lab)

Chem 3101. Analytical Chemistry. (Sci-L; 4 cr; prereq 1102; fall, every year)
The application of chemical equilibria to chemical analysis with emphasis on the fundamental quantitative aspects of analytical chemistry. Acid-base, oxidation-reduction, and complexometric titrations, introduction to electrochemical and spectrophotometric analyses and separations. (3 hrs lect, 3 hrs lab)

Econ 1111. Principles of Microeconomics. (SS; 4 cr; prereq high school algebra or #; fall, spring, every year)

Econ 2007. Environmental and Natural Resource Economics I. (Envt; 2 cr; prereq 1111 or #; fall, spring, offered when feasible)
An overview of “brown” pollution and “green” sustainability issues in environmental and natural resource economics. Emphasis on the role of market failures in causing environmental problems and on the design of market mechanisms and incentive regulations to solve those problems. Analysis of current federal policy in the areas of water and air pollution.

Econ 2008. Environmental and Natural Resource Economics II. (Envt; 2 cr; prereq 3007 or #; fall, spring, offered when feasible)
The economic analysis of sustainability, focusing on market designs to discourage over-exploitation of both renewable and exhaustible natural resources. Topics include markets for water, fisheries, and energy.
Environmental Studies (EnSt)

Ed 2301. Environmental Science and Place-Based Education. (Envt; 4 cr; A-F only; summer, every year)
Study of theories, issues, and concepts of environmental science and place-based education while working with environmental specialists and interacting with elementary students at a wetland learning center.

Engl 2106. Topics in Writing: The Environmental Imagination. Reading and Writing about the Natural World. (Envt; 4 cr; prereq 1011 or equiv; fall, spring, offered when feasible)
Writing about the environment. Students learn to use the rich possibilities of language to express their responses to nature and convey to others the importance of close contact with the natural world. Readings in poetry and prose, discussion of technique, and experimentation with a variety of styles and literary forms.

Engl 4012. Research Seminar: Imagining the Earth. (Hum; 4 cr; prereq 1131, two from 2201, 2202, 2211, 2212, #; fall, spring, offered when feasible)
Study of imaginative writing (poetry and prose) about the earth, and an examination of the ways that language transforms or shapes our perceptions of the natural world. In addition to the primary literary works, students read selections about our understanding of the natural world from science, philosophy, and ecocriticism.

EnSt 1101. Environmental Problems and Policy. (Envt; 4 cr; fall, every year)
An introduction to the ways in which state, national, and international political systems deal with environmental issues and goals. The development of environmental governance, the regulatory and economic tools of environmental policy, and the impact of institutions, culture, social movements, and historical development.

EnSt 2101. Environmental Biology. (Sci-L; 4 cr; credit will not be granted if credit has been received for Biol 2101; fall, every year)
Introduction to concepts in biodiversity, evolution, and ecology. Includes basic chemistry and concepts from cell biology, molecular biology, and genetics. A one-course gateway into upper division Biology courses normally requiring the Biol 1111-2101 sequence. (two 65-min lectures, one 180-min lab)

EnSt 2111. Environmental Ethics. (Envt; 4 cr; evening or weekend field trips required; spring, every year)
Exploration of the ways humans perceive, value, and interact with nature and how values and ethics guide the use of and policies toward nature. Examination of mostly Western thought with some exploration of non-Western traditions. Philosophical and ethical concepts are examined through readings, lectures, writing assignments, guest speakers, class discussions, and small group activities.

EnSt 3996. Internship/Field Experience in Environmental Studies. (2-4 cr [max 4 cr]; prereq jr status or #; approved internship proposal; S-N only; fall, spring, summer, every year)
An educational experience in a work, research, and/or field setting that provides practical application of the student’s theoretical classroom learning experiences. A written plan of work must be approved by the Environmental Studies Internship Coordinator before registration.

EnSt 4901. Senior Capstone Experience. (2 cr; prereq 3996; sr status or #; A-F only; spring, every year)
Students present one seminar on their internship/field experience and participate in discussion of the experiences of their peers. Students also consider a case study, giving them the opportunity to engage in interdisciplinary work using the expertise gained from their own focus within the environmental studies major. (two 65-min discussions)

Geol 1101. Physical Geology. (Sci-L; 4 cr; fall, spring, every year)
Introduction to the materials that make up the Earth and the structures, surface features, and geologic processes involved in its origin and development. Lab work includes study of the major constituents of the Earth’s crust, including the important rocks and minerals; study of surface and geologic features using aerial photographs, topographic maps, and satellite imagery. (3 hrs lect, 3 hrs lab)

Geol 2001. Natural and Unnatural Geologic Hazards. (Envt; 4 cr; spring, offered when feasible)
Examination of the more significant interactions between humans and geologic environments and processes. Earthquake and volcanic hazards, river flooding, mass movements and slope stability, coastal hazards, and water resources and pollution. Lectures and problems sets emphasize the quantitative approaches used to determine the likelihood and frequency of natural hazards, assess associated risks, and mitigate damage.

Geol 2101. GIS and Remote Sensing. (Sci; 4 cr; prereq 1101 or Biol 1101 or Biol 1111 or #; spring, offered when feasible)
Introduction to design, development, and application of Geographic Information Systems (GIS); overview of acquisition and utility of satellite data and imagery; emphasis on applications in Earth and environmental sciences; lab component focuses on practical aspects of GIS development and use and involves original semester projects designed and implemented by individual students.

Geol 3501. Hydrology. (Sci; 4 cr; prereq Math 1101 or #; fall, every year)
Elements of surface water hydrology; groundwater occurrence and aquifer characteristics; groundwater flow mechanics and flow nets; well hydraulics; groundwater contamination, contaminant transport, and remediation; management and legal aspects of water resources. (4 hrs lect)

Hist 3361. An Environmental and Geographic History of the United States. (Envt; 4 cr; fall, spring, offered when feasible)
A broad examination of how humans interacted with their natural world throughout American history. Combined emphasis on cultural geography (the study of how various cultural groups shaped the American landscape) with political ecology (the role of the nation’s political economy in driving environmental change). Possible topics include: Columbia River, European and American Indian conflict, Thoreau and the creation of an environmental ethic, the slaughter of the bison as an ecological tragedy, urbanization and environmental racism, conservation as a political movement and the development of environmental policy, eco-feminism, American religion and the environment, the politics of global climate change.

Phil 2111. Introductory Ethics. (Hum; 4 cr; spring, every year)
An introduction to philosophical accounts of what makes right acts right and wrong acts wrong, issues involving the concept of goodness, and arguments or debates about moral responsibility.

Phys 2301. Atmospheric Physics. (Envt; 4 cr; prereq 1092 or 1102, Math 1102; spring, even years)
Introduction to atmospheric physics with an emphasis on thermodynamics. Atmospheric thermodynamics including gas laws, phase transitions, laws of thermodynamics, two-component systems, atmospheric stability; radiative transfer including atmospheric optics and remote sensing; some aspects of atmospheric chemistry such as aerosols, chemical cycles, traces gases; cloud microphysics including nucleation and growth; and atmospheric dynamics including equations of motion for fluid flow; applications to weather systems. (4 hrs lect)

Pol 1201. American Government and Politics. (E/CR; 4 cr; fall, spring, every year)
Analysis of principles, organization, procedures, and powers of government in the United States. The federal system and the role of subnational or local governments; political institutions; public opinion; political parties; political rights, party system; nature, structure, powers, and procedures of legislative, executive, and judicial departments of the national government.

Pol 3355. Environmental Political Theory. (Envt; 4 cr; fall, odd years)
Examination of environmental conceptions of sustainability, citizenship, and democracy, analyzing various formulations of what a “green citizen” and “ecological democracy” might mean. Readings and extensive discussion provide critical insight on contemporary debates about environmental decision-making, sustainability, and education on the individual, social, national, and international levels.

Soc 3131. World Population. (Envt; 4 cr; prereq 1101 or #; fall, every year)
Population theory and demographic method. Dynamics of fertility and mortality as the basis of population forecasting and its policy implications. Emphasis on the tie between Third World demographic trends and population issues in the rest of the world.

Soc 3204. Culture, Food, and Agriculture. (Envt; 4 cr; (Anth 3204); prereq 1101 or Anth 1111 or #; spring, even years)
Same as Anth 3204. Examines the globalization of food systems utilizing the political ecology of food to understand global and local dimensions of production, marketing, and consumption. Emphasis on connections between food production and national identity, relations of power, genetic engineering, environmental destruction, the politics of world hunger, and local efforts to achieve sustainability.

Span 3623. Seminar: Ecology and Nature in Latin American Literature. (Envt; 4 cr; prereq 3002, 3101; fall, offered when feasible)
Study of Latin American texts where authors create characters that read or misread Nature and its preservation or extinction. How globalization is making this issue more relevant in the Latin American context.

Stat 1601. Introduction to Statistics. (M/SR; 4 cr; prereq high school higher algebra; fall, spring, every year)
Scope, nature, tools, language, and interpretation of elementary statistics. Descriptive statistics; graphical and numerical representation of information; measures of location, dispersion, position, and dependence; elementary data analysis. Elementary probability theory, discrete and continuous probability
European Studies (ES)

Interdisciplinary Studies—Academic Dean

Objectives—The purpose of the European studies program is to acquaint students with the culture and society of Europe from the Middle Ages to the present as well as Europe’s classical antecedents. The study of modern Europe reflects recent changes in Central/Eastern Europe and Russia. The approach is interdisciplinary, drawing on various fields of study. The program is administered by the coordinator of European Studies.

European Studies Major

Program Requirements

Students are required to take 4 semester(s) of French, German, Spanish, or other European language.

1. Students develop a coherent program and a plan of study in consultation with their major advisers. Advisers normally are faculty with a specialty in an appropriate area. Upon approval by the advisers, the program and plan are forwarded to the vice chancellor for academic affairs.

2. Any directed study course for which an instructor is available is acceptable provided the subject matter is appropriate.

3. The courses listed below as well as courses in other disciplines are acceptable provided the subject matter is appropriate.

4. Students are encouraged to spend a period of time in Europe pursuing conventional coursework, independent studies, or other study abroad programs.

Courses may not be taken S-N unless offered S-N only.

A minimum GPA of 2.00 is required in the major to graduate. The GPA includes all, and only, University of Minnesota coursework. Grades of F are included in GPA calculation until they are replaced.

Courses for the Program

Language Requirement

Major requirements include language proficiency in French, German, or Spanish equivalent to that required for the completion of the course numbered 2002 in the language. Students planning to pursue advanced courses in French, German, or Spanish should note that proficiency beyond 2002 is sometimes a prerequisite to some of the courses listed below.) Equivalent proficiency in European languages not offered at UMM may also be used to satisfy this requirement.

Required Courses

In addition to the language requirement, 48 credits must be selected from the courses below, with a maximum of 16 credits in any one discipline.

Art History Elective(s)

ArtH 1121—Renaissance to Modern Art, FA (4 cr)
ArtH 3101—Art and Archaeology of Ancient Greece, FA (4 cr)
ArtH 3111—Art and Archaeology of Ancient Rome, FA (4 cr)
ArtH 3132—Castles and Cathedrals, FA (4 cr)
ArtH 3142—Art of the Italian Renaissance, 1300-1520, FA (4 cr)
ArtH 3161—16th-Century Italian Art, FA (4 cr)
ArtH 3171—Baroque Art, FA (4 cr)
ArtH 3201—19th-Century European Art through Post-Impressionism, FA (4 cr)
ArtH 3211—Early Modernist Art: Symbolism to Surrealism, FA (4 cr)
ArtH 3281—Women and Art, FA (4 cr)
ArtH 3291—Facing the Past: Portraiture and Social History, FA (4 cr)

Communication, Media, and Rhetoric Elective(s)

Take no more than 16 credit(s) from the following:
CMR 3411—Intercultural Communication Theory and Research, HDiv (4 cr)

Economics Elective(s)

Take no more than 16 credit(s) from the following:
Econ 3131—Comparative Economic Systems, IP (2 cr)
Econ 4121—International Trade Theory, SS (2 cr)

English Elective(s)

Take no more than 16 credit(s) from the following:
Engl 2201—Survey of British Literature to the 18th Century, Hum (4 cr)
Engl 2202—Survey of British Literature from the 18th Century Forward, Hum (4 cr)
Engl 3154—19th-Century British Fiction, Hum (4 cr)
Engl 3155—20th-Century British Fiction, Hum (4 cr)
Engl 3156—Modern Irish Literature, Hum (4 cr)
Engl 3157—English Renaissance Drama, Hum (4 cr)
Engl 3159—Shakespeare: Studies in the Bard, Hum (4 cr)

French Elective(s)

Take no more than 16 credit(s) from the following:
Fren 1021—July in Paris I: French Language and Culture in Paris, IP (4 cr)
Fren 1023—July in Paris II: French Language and Culture in Paris, FL (4 cr)
Fren 1027—Real to Reel: The Middle Ages and Renaissance in Film for Non-Majors, Hum (4 cr)
Fren 1302—French Cinema for Non-Majors, IP (4 cr)
Fren 1304—French Women Authors for Non-Majors, IP (4 cr)
Fren 2012—French for Professions, IP (4 cr)
Fren 3011—Reading and Analysis of Texts, Hum (4 cr)
Fren 3022—Early Modern Studies: Pre-Enlightenment Culture in France, Hist (4 cr)
Fren 3023—Early Modern Studies: Orature and Literature in Pre-Enlightenment France, Hum (4 cr)
Fren 3026—Early Modern Studies: History of the French Language, Hum (4 cr)
Fren 3027—Early Modern Studies: Real to Reel: The Middle Ages and Renaissance in Film, Hum (4 cr)
Fren 3028—Early Modern Studies: Female Authorship and Medieval Canon Fodder, Hum (4 cr)
Fren 3034—Modern Studies: French Poetry and Music, Hum (4 cr)
Fren 3035—Modern Studies: French Women Authors, IP (4 cr)
Fren 3036—Modern Studies: French Cinema, IP (4 cr)
Fren 3037—Modern Studies: La France du 19e siècle, Hum (4 cr)
Fren 3038—Modern Studies: La France du 20e siècle, Hum (4 cr)
Fren 3043—Francophone Studies: Littérature migrante, IP (4 cr)

Stat 2601, Statistical Methods. (M/SR; 4 cr; prereq Math 1101 or Math 1021; fall, every year)
Descriptive statistics, elementary probability theory; laws of probability, random variables, discrete and continuous probability models, functions of random variables, mathematical expectation. Statistical inference; point estimation, interval estimation, tests of hypotheses. Other statistical methods; linear regression and correlation, ANOVA, nonparametric statistics, statistical quality control, use of statistical computer packages.
European Studies Course Descriptions

ArTH 1121. Renaissance to Modern Art. (FA; 4 cr; spring, every year)
Survey of the major works of art of western Europe and the United States from 1400 to the present.

ArTH 3101. Art and Archaeology of Ancient Greece. (FA; 4 cr; prereq any 1xxx ArTH course or jr status or #; fall, odd years)
Beginning with the Bronze Age civilizations of the Aegean (Minoan, Cycladic, and Mycenaean), this course follows the development of the painting, sculpture, and architecture of ancient Greece, concentrating on the classical period in Athens and the Hellenistic period in the Mediterranean.

ArTH 3111. Art and Archaeology of Ancient Rome. (FA; 4 cr; prereq any 1xxx ArTH course or jr status or #; spring, even years)
In-depth study of Roman art and archaeology beginning with the Villanovans and Etruscans who preceded the Romans and ending with the rise of Early Christian art. Concentration on the public and political art of the various emperors.

ArTH 3132. Castles and Cathedrals. (FA; 4 cr; prereq any 1xxx ArTH course or jr status or #; spring, even years)
An investigation of the two major forms of architectural construction in the Middle Ages. Exploration of the development of the cathedral and castle as architectural forms and examination of the circumstances surrounding their evolution through the medieval period. Examples are drawn from continental Europe, the British Isles, and the Levant.

ArTH 3142. Art of the Italian Renaissance, 1300-1520. (FA; 4 cr; prereq any 1xxx ArTH course or jr status or #; spring, even years)
A variety of methods (including stylistic, gender, and contextual theories) are used to explore the painting and sculpture of such artists as Giotto, Donatello, Leonardo, Raphael, and Michelangelo.

ArTH 3161. 16th-Century Italian Art. (FA; 4 cr; prereq any 1xxx ArTH course or jr status or #; fall, odd years)
The stylistic and theoretical differences evidenced in the fascinating trends of Mannerism and Venetian Renaissance art.

ArTH 3171. Baroque Art. (FA; 4 cr; prereq any 1xxx ArTH course or jr status or #; spring, even years)
A sociohistorical consideration of the stylistic and thematic diversity present in the works of such 17th-century masters as Caravaggio, Rembrandt, Velasquez, Rembrandt, and Vermeer.

ArTH 3201. 19th-Century European Art through Post-Impressionism. (FA; 4 cr; prereq any 1xxx ArTH course or jr status or #; fall, odd years)
Survey of major movements from Neoclassicism through Romanticism, Realism, and Impressionism to Post-Impressionism. Attention is given to formal, conceptual, and formal analysis as well as to the socio-cultural conditions in which artists lived and worked.

ArTH 3211. Early Modernist Art: Symbolism to Surrealism. (FA; 4 cr; prereq any 1xxx ArTH course or jr status or #; spring, even years)
Survey of the major early modernist movements from Symbolism through Cubism, Futurism, Expressionism, Constructivism, De Stijl, and the Bauhaus to Surrealism. Attention is given to theories of modern art as well as to formal and iconographical analyses and to the social conditions in which modern art was created and experienced.

ArTH 3281. Women and Art. (FA; 4 cr; prereq any 1xxx ArTH course or jr status or #; fall, odd years)
A historical survey of women’s roles as creators and patrons of the visual arts in Western European and American societies, from antiquity to the present.

Fren 4021—French and Francophone Theater, Hum (4 cr)
Fren 4991—Independent Study in French Abroad, IP (4 cr)

German Elective(s)
Take no more than 16 credit(s) from the following:
Ger 3601—Studies in German Literature, Hum (4 cr)
Ger 3501—Women’s Issues in Contemporary German Culture, IP (4 cr)
Ger 3203—Periods: German Modernism, IP (4 cr)
Ger 3201—Periods: German Classicism, Hum (4 cr)
Ger 3202—Periods: German Romanticism, Hum (4 cr)
Ger 3501—Women’s Issues in Contemporary German Culture, IP (4 cr)
Ger 3601—Studies in German Literature, Hum (4 cr)

History Elective(s)
Take no more than 16 credit(s) from the following:
Hist 3101—Renaissance and Reformation, Hist (4 cr)
Hist 3102—Early Modern Europe, Hist (4 cr)
Hist 3103—Medieval Europe, Hist (4 cr)
Hist 3151—Modern Europe, Hist (4 cr)
Hist 3156—Modern German Intellectual History, Hist (4 cr)
Hist 3161—The Enlightenment, Hist (4 cr)
Hist 3204—Nazi Germany, Hist (4 cr)
Hist 3207—The Crusades, IP (4 cr)
Hist 3209—Modern Germany, Hist (4 cr)
Hist 3210—Popular Religion, Heresy, and Inquisition in the Middle Ages, Hist (4 cr)
Hist 3211—Modern France, Hist (4 cr)
Hist 3704—Women in the Middle Ages, SS (4 cr)
Hist 3706—Women in Early Modern Europe, SS (4 cr)
Hist 3708—European Women’s History, 1600-Present, IP (4 cr)

Humanities Elective(s)
Take no more than 16 credit(s) from the following:
Hum 3041—New German Cinema, IP (4 cr)
Hum 3042—Weimar Film, IP (4 cr)

Music Elective(s)
Take no more than 16 credit(s) from the following:
Mus 1041—Introduction to Music, FA (4 cr)
Mus 3101—Core Studies III: Medieval, Renaissance, and Baroque Music, Hist (4 cr)

Political Science Elective(s)
Take no more than 16 credit(s) from the following:
Pol 1401—World Politics, IP (4 cr)
Pol 3352—Modern Political Thought, Hum (4 cr)
Pol 3502—Government and Politics of Europe, SS (4 cr)
Pol 4301—Contemporary Political Thought, Hum (4 cr)

Spanish Elective(s)
Take no more than 16 credit(s) from the following:
Span 3212—Literature and Culture of Spain, Hum (4 cr)
Span 3651—Seminar: Miguel de Cervantes Saavedra’s “El ingenioso hidalgo Don Quijote de la Mancha,” Hum (4 cr)
Span 3652—Seminar: Literary Minorities in Early Modern Spain, Hum (4 cr)
Span 3653—Seminar: Maria de Zayas: Literary Violence in Golden Age Spain, Hum (4 cr)
Span 3654—Seminar: Sex, Love, and Marriage in Golden Age Spanish Literature, Hum (4 cr)
Span 3671—Seminar: origins of the Spanish Character, Hum (4 cr)
Span 3672—Seminar: Reform in Spain: The Saint and the Journalist, Hum (4 cr)
Span 3681—Seminar: Romanticism and Revolution in 19th-Century Spain, Hum (4 cr)
Span 3683—Seminar: Modernity and Identity in Spain, 1900-1930, Hum (4 cr)
Span 4001—Research Symposium, Hum (4 cr)

Theatre Arts Elective(s)
Take no more than 16 credit(s) from the following:
Th 3101—World Theatre: History and Literature I, FA (4 cr)
Th 3102—World Theatre: History and Literature II, FA (4 cr)
Arth 3391. Facing the Past: Portraiture and Social History. (Fa; 4 cr; prereq any 1xxx Arth course or jr status or #; fall, spring, offered when feasible)

This seminar examines functions and formats of portraits created primarily in Western Europe between 1400-1800, in order to gain greater insight as to how various social identities (such as that of husband and wife, child, friend, and freak of nature) were visually constructed and verbally interpreted.

Cmr 3411. Intercultural Communication Theory and Research. (Hdiv; 4 cr; prereq 1101 or #; fall, offered when feasible)

Study of intercultural communication from an interpersonal and group perspective.

Econ 3131. Comparative Economic Systems. (IP; 2 cr; prereq 1111, 1112 or #; fall, spring, offered when feasible)

Comparison of the theory and functioning of the major economic systems of the world; economic reform in capitalist and socialist economies.

Econ 4121. International Trade Theory. (SS; 2 cr; prereq 3201 or #; spring, every year)

Overview of why trade occurs, pattern of trade and international factor movement. Effect of trade and trade policy on the economy. Current topics in trade theory.

Engl 2201. Survey of British Literature to the 18th Century. (Hum; 4 cr; prereq 1101 or equiv; 1131; fall, every year)

Readings in English poetry, prose, and/or drama from the beginnings to the 18th century. Specific authors vary.

Engl 2202. Survey of British Literature from the 18th Century Forward. (Hum; 4 cr; prereq 1101 or equiv; 1131; spring, every year)

Readings in English poetry, prose, and/or drama from the 18th century to the present. Specific authors vary.

Engl 3154. 19th-Century British Fiction. (Hum; 4 cr; prereq 1131, two from 2201, 2202, 2211, 2212; fall, spring, offered when feasible)

The rise of the novel to respectability and prominence in Britain from the Romantics to the Victorians.

Engl 3155. 20th-Century British Fiction. (Hum; 4 cr; prereq 1131, two from 2201, 2202, 2211, 2212; fall, spring, offered when feasible)

Major novelists from the Modernist period and after, focusing on the historical context of the new challenges to literary tradition.

Engl 3156. Modern Irish Literature. (Hum; 4 cr; prereq 1131, two from 2201, 2202, 2211, 2212; spring, offered when feasible)

The poetry, fiction, and drama of Irish writers from 1890-1927, with attention to the ways that literature shaped a national identity.

Engl 3157. English Renaissance Drama. (Hum; 4 cr; prereq 1131, two from 2201, 2202, 2211, 2212; fall, offered when feasible)

A thorough study of the early modern English theater, including readings of 16th- and 17th-century plays and consideration of the literary and cultural contexts that informed them. Special attention is given to the works of Shakespeare’s contemporaries, such as Marlowe, Jonson, Cary, Middleton, and Webster.

Engl 3159. Shakespeare: Studies in the Bard. (Hum; 4 cr; prereq 1131, two from 2201, 2202, 2211, 2212; spring, odd years)

A topics-based study of Shakespeare’s works and other pertinent texts. Sample topics include “Shakespeare’s Women,” “Dangerous Rhetoric in Shakespeare,” and “Shakespeare and His Sources.” Attention is given to historical and literary contexts, and students are asked to consider Shakespeare’s s work as it is read as well as performed.

Fren 1021. July in Paris I: French Language and Culture in Paris. (IP; 4 cr; summer, every year)

Four weeks of intensive beginning French language and culture at the Sorbonne, Paris IV; guided visits to cultural and historical sites. UMM July in Paris course for students with no French experience or less than one semester of college-level French. Does not satisfy FL Gen Ed requirement. See also Fren 1023 and 3060: July in Paris II and III: French Language and Culture in Paris. (Continuing Education courses)

Fren 1025. July in Paris II: French Language and Culture in Paris. (FL; 4 cr; prereq 1001 or placement; summer, every year)

Fren 1002 equivalent for the July in Paris Program. Four weeks of intensive beginning French language and culture at the Sorbonne, Paris IV; guided visits to cultural and historical sites. Satisfies UMM language requirement. See also Fren 1021 and 3060: July in Paris I and III: French Language and Culture in Paris. (Continuing Education courses)

Fren 1027. Real to Reel: The Middle Ages and Renaissance in Film for Non-Majors. (Hum; 4 cr; does not count towards the Fren major or minor; fall, spring, offered when feasible)

Introduction to the culture of the Middle Ages and Renaissance as perceived through film. Students learn to critique film, to become aware of techniques, cultural differences, and biases that obtain in its production. Material includes films, cartoons, and television commercials. Discussion and papers in English.

Fren 1302. French Cinema for Non-Majors. (IP; 4 cr; does not count towards the Fren major or minor; fall, spring, offered when feasible)

The history of filmmaking in France from the Lumière brothers to the present; introduction to major trends in film theory. All films have English subtitles. Taught in English.

Fren 1304. French Women Authors for Non-Majors. (IP; 4 cr; does not count toward the Fren major or minor; fall, spring, offered when feasible)

French women’s movements during the 20th century, the historical relationship of gender and class, and the lives of women from various ethnic backgrounds in France; the history of French women authors in a global context. Taught in English.

Fren 2012. French for Professionals. (IP; 4 cr; prereq or coreq 2002; spring, offered when feasible)

Equips students with skills to function as bilingual citizens in a global market, focusing on specialized vocabularies and skills related to specific fields especially business, the health professions, and international relations. Exploration of French contributions to contemporary issues of international scope and development of career interests.

Fren 3031. Reading and Analysis of Texts. (Hum; 4 cr; prereq 3001 or #; spring, every year)

Introduction to representative literary works of France and the French-speaking world. Development of ease in reading French; introduction to methods for analyzing its style and meanings.

Fren 3032. Early Modern Studies: Pre-Enlightenment Culture in France. (Hist; 4 cr; prereq or coreq 3011 or #; fall, spring, offered when feasible)

This course traces the history of French culture from the Middle Ages until the French Revolution; it examines the geography, language, and institutions of medieval and early modern France. Meets Early Modern Studies (EMS) requirement in French major.

Fren 3033. Early Modern Studies: Orature and Literature in Pre-Enlightenment France. (Hum; 4 cr; prereq or coreq 3011 or #; fall, spring, offered when feasible)

Survey of French literature from the Middle Ages to the Enlightenment; a study of the successive literary forms of these eras with an emphasis on contemporaneous reading and interpretative strategies. Meets Early Modern Studies (EMS) requirement in French major.

Fren 3036. Early Modern Studies: History of the French Language. (Hum; 4 cr; prereq or coreq 3011 or #; fall, spring, offered when feasible)

Traces the development of Latin to Modern French. Examines the evolution of phonological, morphological, and syntactical changes. Looks at the influence of non-Romance languages, the codification of French, the role of the Academie Francaise, and more recent influences of immigration and technology. Meets Early Modern Studies (EMS) requirement in French major.

Fren 3037. Early Modern Studies: Real to Reel: The Middle Ages and Renaissance in Film. (Hum; 4 cr; prereq or coreq 3011 or #; fall, offered when feasible)

Introduction to the culture of the Middle Ages and Renaissance as perceived through film. Students learn to critique film, to become aware of techniques, cultural differences, and biases that obtain in its production. Material includes films, cartoons, and television commercials. Meets Early Modern Studies (EMS) Requirement.

Fren 3038. Early Modern Studies: Female Authorship and Medieval Canon fodder. (Hum; 4 cr; prereq or coreq 3011 or #; fall, spring, offered when feasible)

The ways in which Medieval and Early-Modern women appropriated the male domain of literature to create and authorize their own writing acts. Examination of the works of the Contessa de Dia, Christine de Pisan, Permette du Guillet, Louise Labé, Marguerite de Navarre, and Madame de Lafayette, among others. Meets Early Modern Studies (EMS) requirement in French major.

Fren 3039. Modern Studies: French Poetry and Music. (Hum; 4 cr; prereq or coreq 3011 or #; fall, spring, offered when feasible)

Survey of French poetry and music with emphasis on 19th and 20th century poetry and 20th-21st century music. Studying music enhances understanding of the fundamentals of verse, including rhyme, meter, and sound. Meets Modern Studies (MOS) requirement in French major.
An independent study designed for study abroad and based on the student's research interest in French or Francophone language, culture, history, etc. The project is defined in consultation with a Francophone Studies faculty member before the student leaves the United States. The faculty member guides the project via e-mail.

Ger 3041. New German Cinema. (IP; 4 cr; [Hum 3041]; prereq 3031; fall, offered when feasible)

Same as Hum 3041. Traces the development of New German Cinema, which began in the 1960s, and continues in the post-unification period. Introduction to films by both East and West German directors who define this national cinema; the cultural, political, and economic context of its production; reference to theories and critiques to provide an overview of German film and culture of the period. Film presentations are in German with English subtitles. Readings and lectures are in English. Final papers are either in German (for German credit) or English (for Humanities credit).

Ger 3042. Weimar Film. (IP; 4 cr; [Hum 3042]; prereq 3031; spring, offered when feasible)

Same as Hum 3042. Development of the German film as expressionistic art form. Film as text, film as history, film as aesthetic expression. Film presentations are in German but with English subtitles in most cases. Readings and lectures are in English. Final papers either in German (for German credit) or English (for Humanities credit).

Ger 3101. Survey of German Literature and Culture I. (Hum; 4 cr; prereq 3031 or #; fall, every year)

Chronological study of German literature and its cultural background from the early beginnings through the 18th century. Selected representative works are read and analyzed.

Ger 3201. Periods: German Classicism. (Hum; 4 cr; prereq 3101, 3102 or #; spring, even years)

Readings in aesthetic theory and exemplary works by writers of the period. Texts by Goethe and Schiller are read and analyzed in conjunction with opera libretti based on their works. Modern films and videos of theater performances supplement the readings.

Ger 3202. Periods: German Romanticism. (Hum; 4 cr; prereq 3101, 3102 or #; spring, odd years)

Readings in Romantic theory and works by important authors of the period: Wackenroder, Tieck, Novalis, Eichendorff, and E.T.A. Hoffmann. Other art forms, such as music and painting, supplement the literary discussions.

Ger 3203. Periods: German Modernism. (IP; 4 cr; prereq 3101, 3102 or #; fall, spring, offered when feasible)

Explores the culture of German-speaking countries around the turn of the 20th century (1890-1933) through literature, music, and the visual arts, especially as manifested in Symbolism, Secession (Art Nouveau), Expressionism, Dada, and New Objectivity.

Ger 3501. Women's Issues in Contemporary German Culture. (IP; 4 cr; [Hum 3501]; prereq 3031 or #; spring, offered when feasible)

Same as Hum 3501. Focus is on the German women’s movement during the 20th century, historical relationship of gender and class, and lives of women from various ethnic backgrounds in Germany and Austria. Short stories, essays, and poems document the evolution of feminist literary theory in German studies. Readings and lectures are in English. Final papers either in German (for German credit) or English (for Humanities credit).

Ger 3601. Studies in German Literature. (Hum; 4 cr; prereq 3031; fall, odd years)

Selected readings in German reflecting modern literary trends. The course examines the cultural politics in the evolution of the literature in the formerly divided Germany, using plays, novels, biography, and documentary reports. It deals with questions of literary theory, history, and socio-political structures.

Hist 3101. Renaissance and Reformation. (Hist; 4 cr; spring, odd years)

Examination of European history and historiography between 1350 and 1600 with emphasis on cultural “renaisances” and religious “reformations.”

Hist 3102. Early Modern Europe. (Hist; 4 cr; fall, spring, offered when feasible)

Survey of historical developments in Europe from about 1350 through the 18th century.

Hist 3103. Medieval Europe. (Hist; 4 cr; fall, spring, offered when feasible)

Survey of historical developments in Europe from about 500 to 1500.

Hist 3151. Modern Europe. (Hist; 4 cr; fall, spring, offered when feasible)

History of modern Europe emphasizing political, economic, social, and intellectual developments since 1789.

Hist 3156. Modern German Intellectual History. (Hist; 4 cr; fall, even years)

Many of the most influential ideas of the 19th and 20th centuries emerged from the German-speaking world and it is worth considering how and why that happened. Examination of the German intellectual history since 1815 and the various relationships between ideas and politics that have shaped German state-building, as well as the ways in which those ideas have had other lives in other places.

Hist 3161. The Enlightenment. (Hist; 4 cr; spring, even years)

The intellectual ferment of the Enlightenment has been given the credit and the blame for all things modern—from the concept of human rights and the democracies it has engendered to the subversion of those rights in the totalitarian regimes of the 20th century. Exploration of the ideas of the Enlightenment and their political context and attempt to answer the question of how such an important development in human history can be viewed in such contradictory ways.

Hist 3204. Nazi Germany. (Hist; 4 cr; fall, odd years)

History of Nazi Germany. Social and political origins, Nazi rule in the 1930s, the “final solution,” World War II, and Germany’s attempt to assess this era in its history.
Hist 3207. The Crusades. (IP; 4 cr; spring, odd years) Explores the historical contexts and consequences of the European Crusades between the 11th century and early modern period, including the perspective of European Jews, Turkish and Arabic Muslims, and Byzantine and Near Eastern Christians.

Hist 3209. Modern Germany. (Hist; 4 cr; spring, even years) Examination of German history from the development of German national ideas through unification and consolidation of the modern German state in 1871 and through its re-unification at the end of the 20th century. Examines one of the most fascinating and tumultuous periods in German and European history, why the attempt to understand the German past has occupied so many historians, and why the debates surrounding that attempt have been so contentious. Sources include writings by established historians of Germany, novels, films, and music.

Hist 3310. Popular Religion, Heresy, and Inquisition in the Middle Ages. (Hist; 4 cr; fall, spring, offered when feasible) The history of popular religious belief and practice in medieval Europe (c. 500-1500) and the relationship between heresy, reform, and inquisition. Topics may include pilgrimage, prayer, saints and sacraments; religious roles for laypeople and women; new orders and heresies; and the late-medieval growth of inquisitorial activity and administration.

Hist 3311. Modern France. (Hist; 4 cr; fall, even years) Examination of French culture and history from the Revolution (1789) to the present. The ways in which successive governments, from Napoleon’s empire through the Fifth Republic, have come to terms with legacies of the Revolution and the development of national citizenship, individual rights, and the politicization of women.

Hist 3704. Women in the Middle Ages. (SS; 4 cr; spring, even years) Analysis of the history of European women and gender systems as constructed during the Middle Ages (c. 500-1500).

Hist 3706. Women in Early Modern Europe. (SS; 4 cr; fall, spring, offered when feasible) Examination of the lives of women in Europe from about 1350 through the 18th century.

Hist 3708. European Women’s History, 1600-Present. (IP; 4 cr; fall, spring, offered when feasible) Examination of the forces that have shaped the lives of European women since 1600 and analysis of how changes in the structures of power and authority—religious, political, social, familial—affect the choices available to them. Students engage critically with the question of what bringing gender to the forefront of the study of European history has to teach them. Students gain an understanding of many of the underpinnings of American society, which has been deeply affected by European patterns of thought about women and their place in the world.

Hum 3041. New German Cinema. (IP; 4 cr; [Ger 3041]; fall, offered when feasible) Same as Ger 3041. Traces the development of New German Cinema, which began in the 1960s, and continues in the post-unification period. Introduction to films by both East and West German directors who define this national cinema; the cultural, political, and economic context of its production; reference to theories and critiques to provide an overview of German film and culture of the period. Film presentations are in German with English subtitles. Readings and lectures are in English. Final papers are either in German (for German credit) or English (for Humanities credit).

Hum 3042. Weimar Film. (IP; 4 cr; [Ger 3042]; spring, offered when feasible) Same as Ger 3042. Development of the German film as expressionistic art form. Film as text, film as history, film as aesthetic expression. Film presentations are in German but with English subtitles in most cases. Readings and lectures are in English. Final papers either in German (for German credit) or English (for Humanities credit).

Mus 1041. Introduction to Music. (FA; 4 cr; fall, every year) Survey emphasizing development of an intelligent understanding and appreciation of music. For non-music majors.

Mus 3101. Core Studies Ill: Medieval, Renaissance, and Baroque Music. (Hist; 4 cr; prereq 1102, major or minor or #; fall, every year) Historical development of Western music and representative literature of the various periods and styles.

Pol 1401. World Politics. (IP; 4 cr; fall, every year) The contemporary international system, including nationalism, international political economy, foreign policy formulation, and global concerns such as the environment and conflict. North/South debate, definitions of power, the new world order, regional vs. global conflicts, and avenues of cooperation.

Pol 3352. Modern Political Thought. (Hum; 4 cr; prereq 1101 or #; spring, odd years) A survey of Western social and political thought from the 16th through the 19th centuries.

Pol 3502. Government and Politics of Europe. (SS; 4 cr; prereq 1501 or #; fall, even years) The comparative study of contemporary government/politics in Europe. Emphasizes influence of economic, cultural, and other factors. Parties, bureaucracy, legislatures, executives: way in which they reflect and contribute to political life.

Pol 4301. Contemporary Political Thought. (Hum; 4 cr; prereq 1101, 3001 or #; spring, even years) A survey of social and political thought in the 20th and 21st centuries.

Span 3212. Literature and Culture of Spain. (Hum; 4 cr; prereq 3002, 3101; fall, offered when feasible) Study of important exemplary works of Spanish (peninsular) literary and cultural production through major historical periods. Texts are examined in light of multiple contexts, such as artistic, political, historical, and philosophical.

Span 3561. Seminar: Miguel de Cervantes Saavedra’s “El ingenioso hidalgo Don Quijote de la Mancha.” (Hum; 4 cr; prereq 3002, 3101; fall, offered when feasible) Study of Miguel de Cervantes Saavedra’s novel “El ingenioso hidalgo Don Quijote de la Mancha” in light of its socio-historical context.

Span 3652. Seminar: Literary Minorities in Early Modern Spain. (Hum; 4 cr; prereq 3002, 3101; fall, offered when feasible) Study of the representative literary works written by or about Spanish Jewish and Muslim minorities in light of their respective socio-historical contexts.

Span 3653. Seminar: Maria de Zayas: Literary Violence in Golden Age Spain. (Hum; 4 cr; prereq 3002, 3101; fall, offered when feasible) Study of the major works of 17th-century writer Maria de Zayas y Sotomayor, “The Enchantments of Love” (1637) and “The Disenchantments of Love” (1647), in light of their socio-historical contexts and the political issues surrounding the formation of literary canons.

Span 3654. Seminar: Sex, Love, and Marriage in Golden Age Spanish Literature. (Hum; 4 cr; prereq 3002, 3101; fall, offered when feasible) The theme of sex, love, and marriage in Golden Age Spanish Literature through prose, poetry, and theatre of the Golden Age (XVI-XVII centuries) Spain. Consideration of the gender relations and gender politics reflected in the works and the socio-historical context in which these works were produced.

Span 3671. Seminar: origins of the Spanish Character. (Hum; 4 cr; prereq 3002, 3101; fall, offered when feasible) Analysis of the Medieval and Golden Age roots of many of the beliefs and attitudes of contemporary Spain. Themes common to Spain, explored in both traditional and modern contexts, may include honor, patriotism, religion, idealism, individuality, satire, love, pride, etc.

Span 3672. Seminar: Reform in Spain: The Saint and the Journalist. (Hum; 4 cr; prereq 3002, 3101; fall, offered when feasible) Analyzing, comparing, and contrasting the lives and writings of St. Teresa of Avila (XVI Century) and Mariano Jose de Larra (XIX Century) as they worked toward a better Spain. Difficulties of religious and cultural reform as well as differences in traditional and enlightenment values are explored.

Span 3681. Seminar: Romanticism and Revolution in 19th-Century Spain. (Hum; 4 cr; prereq 3002, 3101; fall, offered when feasible) Study of representative texts (prose and poetry) from the first half of the 19th century in Spain, with emphasis on the expression of the Romantic vision within the particular political context of the period, marked by tensions between liberal reform and traditional conservatism.

Span 3682. Seminar: Realism and Reform in 19th-Century Spain. (Hum; 4 cr; prereq 3002, 3101; fall, offered when feasible) Study of representative texts (novels, stories, and essays) from the second half of the 19th century in Spain, with emphasis on the rise of realism as an exploration of the socio-political reality of the era and the need for reform. The focus is on general trends in Western cultures (e.g., industrialization, positivism, secularization).

Span 3683. Seminar: Modernity and Identity in Spain, 1900-1930. (Hum; 4 cr; prereq 3002, 3101; fall, offered when feasible) Study of representative texts (prose and poetry) from the early decades of the 20th century in Spain with particular emphasis on their responses to changes brought by modernity: advancing technology, modern psychology, political experimentation, spiritual exploration, and artistic innovation.
Foreign/World Languages and Literatures

(See American Indian Studies [AmIn], Chinese [Chn], Education [Ed], French [Fren], German [Ger], Italian [Ital], Interdisciplinary Studies [IS], and Spanish [Span].)

UMM offers majors and minors in French, German, and Spanish. Some beginning courses in Chinese, Italian, Dakota, and Sign Language are also offered. Study of a foreign language, culture, and literature may be undertaken for its own sake as part of a traditional liberal education. It is useful as well for preparation for teaching, graduate or professional work, and business careers.

In addition to organized foreign language programs, UMM offers a variety of other language options. See the individual discipline sections for complete catalog descriptions. Check the Class Schedule for courses to be taught in a specific term. The following are courses that could be offered.

Foreign/World Languages and Literatures Course Descriptions

AmIn 1301. Dakota Language I. (FL; 4 cr; fall, every year)
An introduction to speaking, writing, and reading Dakota language and an overview of Dakota culture. [Continuing Education course]

AmIn 1302. Dakota Language II. (FL; 4 cr; prereq 1301 or #; spring, every year)
A continuation of 1301 with greater emphasis on conversation and culture. [Continuing Education course]

Chn 1001. Beginning Modern Chinese I. (FL; 4 cr; fall, every year)
First semester of a two-semester sequence in first-year modern standard Chinese (Mandarin) for students who have no previous exposure to the Chinese language. Introduction to the sounds of Mandarin, basic grammar, vocabulary, and the Chinese writing system. [Continuing Education course]

Chn 1002. Beginning Modern Chinese II. (FL; 4 cr; prereq 1001 or #; spring, every year)
Second semester of the two-semester sequence in first-year Chinese. Designed for those who have completed first-semester Chinese or who have equivalent preparation. Introduction to additional modern standard Chinese (Mandarin) grammar, vocabulary, and sentence structures. By the end of the semester, students should be able to recognize some of the Chinese characters, write about part of them from memory, conduct simple conversations, and read simple Chinese texts on general topics. [Continuing Education course]

Ed 1011. Beginning Sign Language I. (FL; 3 cr; prereq #; fall, every year)
Students develop a working vocabulary of conceptually based signs. Emphasis is on receptive as well as expressive abilities. Students develop an awareness of the history of sign language and deaf culture and explore various signing systems and their most common uses. A performance of the student’s signing skills is evaluated. [Continuing Education course]

Ed 2011. Intermediate Sign Language I. (FL; 3 cr; prereq 1012 or #; fall, spring, offered when feasible)
Students develop a working vocabulary of conceptually based signs. Emphasis is on receptive as well as expressive abilities. Students continue to develop an awareness of the history of sign language and deaf culture and explore various signing systems and their most common uses. A performance of the student’s signing skills will be evaluated. [Continuing Education course]

Ed 2012. Intermediate Sign Language II. (FL; 3 cr; prereq 2011; fall, spring, offered when feasible)
Students develop a working vocabulary of conceptually based signs. Students interact with members of the deaf community and participate in field trips. Students help educate the campus and surrounding communities about deaf people and their culture by presenting a performance at the end of the semester. [Continuing Education course]

Ital 1301. Beginning Italian I. (FL; 4 cr; fall, every year)
Introduction to Italian as it is presently spoken and written. Basic sounds, structures, and vocabulary of Italian. Understanding, reading, and writing the language and communicating in Italian about everyday situations. Relationship between culture and language. [Continuing Education course]

Ital 1302. Beginning Italian II. (FL; 4 cr; prereq 1301 or placement or #; spring, every year)
Continuation of 1301. [Continuing Education course]

Ital 1311. Modern Italy Through Literature and Film. (Hum; 3 cr; fall, spring, offered when feasible)
Examination of the political, social, and cultural transformations of Italy from its unification in the second half of the 19th century to contemporary issues of immigration and multiculturalism as reflected in literature and film. Topics include the unification and forging a new national identity; life under Fascism; the Resistance and post-war period; the “southern question”; the “economic miracle” of the 1960s; recent immigration and current cultural transformations. [Continuing Education course]

Ital 1321. Intermediate Italian I. (IP; 4 cr; prereq 1302 or #; fall, spring, offered when feasible)
Continued development of listening, reading, writing, and speaking skills; review of the fundamental elements of the Italian language. Emphasis on authentic cultural and literary texts appropriate to this level. [Continuing Education course]

Ital 1331. The Eternal City: The Language and Culture of Rome I. (FL; 4 cr; summer, offered when feasible)
Beginning course for UMM study abroad in Rome, Italy. Four weeks of Italian language together with the art and literature of Rome. Emphasis on works of art, literature, and film belonging to several periods and addressing the history and character of the city. Excursions to relevant sites in and near Rome. No previous experience in Italian required. [Continuing Education course]

Ital 1332. The Eternal City: The Language and Culture of Rome II. (IP; 4 cr; prereq 1302 or equiv; summer, offered when feasible)
Advanced course for UMM study abroad in Rome, Italy. Four weeks of Italian language together with the art and literature of Rome. Emphasis on works of art, literature, and film belonging to several periods and addressing the history and character of the city. Excursions to relevant sites in and near Rome. [Continuing Education course]

Span 2121. Associated Languages: Intensive Portuguese. (IP; 4 cr; prereq 2002 or Fren 2002 or #; fall, spring, offered when feasible)
Intensive, accelerated study of the basic skills of Brazilian Portuguese (reading, writing, listening, and speaking) with emphasis on oral competency.
French (Fren)

Division of the Humanities

French is an important language of diplomacy, commerce, and health care, and is used in research across the globe and in many disciplines, such as music, art, linguistics, history, law, political science, anthropology, biology, chemistry, mathematics, and philosophy. The French discipline gives students the language and analytic skills necessary to engage intellectually with these interconnected fields in French and to appreciate the cultures of France and Francophone countries throughout the world.

Objectives—The French discipline teaches the skills necessary for communicating with a variety of French-speaking peoples and for understanding their rich cultures, ideas, institutions, and writings, past and present. It invites students to think critically about the target cultures and their own and to understand the value of diverse philosophies of life and art.

Study Abroad

In light of today’s increasingly interdependent world, the UMM French faculty endorses study abroad in combination with a French major or minor as the most effective means by which to

- improve language abilities
- broaden academic horizons
- globalize one’s world view
- expand career opportunities
- advance cross-cultural and problem-solving skills
- gain confidence in oneself personally and professionally

Certificate Program in French

The certificate program in French responds to the growing demand for individuals who can communicate successfully in a global environment, and is intended for students whose other academic commitments prevent them from completing either a major or minor in French. To earn a certificate, a student must

a) complete a minimum of 12 credits in French at UMM at the 2xxx and/or 3xxx level. All courses for the certificate must be taken on campus at UMM. Students are encouraged to study abroad, but the UMM French faculty need to assess the skills and progress of the student. Therefore, classes taken abroad (including July in Paris) do not count for the certificate.

b) earn at least a B in each of the three courses (S-N grades will not be accepted for the Certificate).

No courses in English may count toward the French certificate program. Students who complete a major or minor in French are not eligible for the certificate program.

A student who has met the above requirements will receive a reference letter from the UMM French faculty certifying completion of the certificate program as well as language competence based on guidelines published by the American Council on the Teaching of Foreign Languages (ACTFL).

French Major

Courses for Admission

Beginning French

Beginning French I and II or equivalent previous language experience required to take intermediate French.

Program Requirements

Students are strongly encouraged to study abroad, but should also plan to complete a significant amount of coursework in French at UMM. Up to 9 credits for one semester abroad or 16 credits for a year abroad my count towards the French major. Students may count Fren 3060—July in Paris III: French Language and Culture in Paris toward the major as an on-campus course. Transfer students may apply up to 9 credits from another institution towards the French major. Students who wish to apply both transfer and study abroad credits must petition the French faculty for approval.

Students majoring in French are strongly encouraged to take at least one year of instruction in another foreign language.

No courses taught in English may count towards the French major.

No grades below C- are allowed. Courses may not be taken S-N unless offered S-N only.

A minimum GPA of 2.00 is required in the major to graduate. The GPA includes all, and only, University of Minnesota coursework. Grades of F are included in GPA calculation until they are replaced.

Courses for the Program

Required Courses

Fren 2001—Intermediate French I, IP (4 cr)
Fren 2002—Intermediate French II, IP (4 cr)
Fren 3001—Conversation and Composition, IP (4 cr)
Fren 3011—Reading and Analysis of Texts, Hum (4 cr)

Early Modern Studies (EMS)

These courses fall within the period from the Middle Ages to the French Revolution. Students gain familiarity with the history, culture, and literature of France from its beginning in feudal society through the Enlightenment and the end of the Ancien Regime.

Take 4 or more credit(s) from the following:

Fren 3022—Early Modern Studies: Pre-Enlightenment Culture in France, Hist (4 cr)
Fren 3023—Early Modern Studies: Orature and Literature in Pre-Enlightenment France, Hum (4 cr)
Fren 3026—Early Modern Studies: History of the French Language, Hum (4 cr)
Fren 3027—Early Modern Studies: Real to Reel: The Middle Ages and Renaissance in Film, Hum (4 cr)
Fren 3028—Early Modern Studies: Female Authorship and Medieval Canon Fodder, Hum (4 cr)

Modern Studies (MOS)

These courses cover a wide range of historical, literary, and cultural moments and movements that have marked France’s development since 1789, the beginning of the French Revolution.

Take 4 or more credit(s) from the following:

Fren 3034—Modern Studies: French Poetry and Music, Hum (4 cr)
Fren 3035—Modern Studies: French Women Authors, IP (4 cr)
Fren 3036—Modern Studies: French Cinema, IP (4 cr)
Fren 3037—Modern Studies: La France du 19e siècle, Hum (4 cr)
Fren 3038—Modern Studies: La France du 20e siècle, Hum (4 cr)
A minimum GPA of 2.00 is required in the minor to graduate.

The GPA includes all, and only, University of Minnesota coursework. Grades of F are included in GPA calculation until S-N unless offered S-N only.

No courses taught in English may count toward the French minor.

No courses in the French minor may be earned abroad and/or transferred from another college/university. Students who wish to apply more than 6 such credits to the French minor must petition the French faculty for approval. Decisions will be made on an individual basis.

No courses taught in English may count toward the French minor.

Students are strongly encouraged to study abroad. Up to 6 credits towards a French minor may be earned abroad and/or transferred from another college/university. Students who wish to apply more than 6 such credits to the French minor must petition the French faculty for approval. Decisions will be made on an individual basis.

No courses taught in English may count toward the French minor.

No grades below C- are allowed. Courses may not be taken S-N unless offered S-N only.

A minimum GPA of 2.00 is required in the minor to graduate. The GPA includes all, and only, University of Minnesota coursework. Grades of F are included in GPA calculation until they are replaced.

Francophone Studies (FRS)

These courses examine the literature, film, history and cultures of French-speaking populations living in Africa, North America, the Caribbean, South America, Europe, and Asia.

Take 4 or more credit(s) from the following:
- Fren 3041—Francophone Studies: Francophone Worlds, IP (4 cr)
- Fren 3042—Francophone Studies: Contes francophones, IP (4 cr)
- Fren 3043—Francophone Studies: Littérature migrante, IP (4 cr)
- Fren 3044—Francophone Studies: L’Amérique francophone, Hum (4 cr)
- Fren 3045—Francophone Studies: West African Francophone Cinema, IP (4 cr)
- Fren 3046—Francophone Studies: Morocco: History, Story, Myth, IP (4 cr)

Compilation of the French Major Portfolio

The portfolio is a collection of work charting students’ intellectual progress from Fren 3001 throughout the French major. Beginning in Fren 3001, students keep all syllabi, papers, and exams—including work completed abroad—in one 3-ring binder. Senior year, students write a brief paper summarizing their intellectual history in the French major and present their portfolio to the French faculty.

Senior Seminar

Fren 4901 must be taken on campus and the final seminar presentation must be given in French.

- Fren 4901—Senior Seminar (4 cr)

Elective Courses

An additional 8 credits of 3xxx or above courses exclusive of those used to fulfill required courses. Fren 2011 and Fren 2012 may also be used to satisfy this elective requirement.

Electives can be chosen from the list above or the following:

Take 8 or more credit(s) from the following:
- Fren 2011—Introduction to French Phonetics, Hum (4 cr)
- Fren 2012—French for Professions, IP (4 cr)

French Minor

Courses for Admission

Beginning French

Beginning French I and II or equivalent previous language experience required to take intermediate French.

Minor Requirements

Students are strongly encouraged to study abroad. Up to 6 credits towards a French minor may be earned abroad and/or transferred from another college/university. Students who wish to apply more than 6 such credits to the French minor must petition the French faculty for approval. Decisions will be made on an individual basis.

No courses taught in English may count toward the French minor.

No grades below C- are allowed. Courses may not be taken S-N unless offered S-N only.

A minimum GPA of 2.00 is required in the minor to graduate. The GPA includes all, and only, University of Minnesota coursework. Grades of F are included in GPA calculation until they are replaced.

Courses for the Program

Required Courses
- Fren 3001—Conversation and Composition, IP (4 cr)
- Fren 301—Reading and Analysis of Texts, Hum (4 cr)

Elective Courses

Take 16 or more credit(s) from the following:
- Fren 2011—Intermediate French I, IP (4 cr)
- Fren 2012—Intermediate French II, IP (4 cr)
- Fren 2013—Continuation of 1001.
- Fren 2002—Intermediate French I, IP (4 cr)
- Fren 2003—Continuation of 1002.
- Fren 3001—Conversation and Composition, IP (4 cr)
- Fren 3002—Continuation of 1002.
- Fren 3003—Continuation of 1003.

Electives can be chosen from the list above or the following:

Take 4 or more credit(s) from the following:
- Fren 3001—Conversation and Composition, IP (4 cr)
- Fren 3002—Continuation of 1002.
- Fren 3003—Continuation of 1003.

Elective Courses

An additional 8 credits of 3xxx or above courses exclusive of those used to fulfill required courses. Fren 2011 and Fren 2012 may also be used to satisfy this elective requirement.

Electives can be chosen from the list above or the following:

Take 8 or more credit(s) from the following:
- Fren 2011—Introduction to French Phonetics, Hum (4 cr)
- Fren 2012—French for Professions, IP (4 cr)

More courses may be used to fulfill required courses. Fren 2011 and Fren 2012 may also be used to satisfy this elective requirement.

Electives can be chosen from the list above or the following:

Take 8 or more credit(s) from the following:
- Fren 2011—Introduction to French Phonetics, Hum (4 cr)
- Fren 2012—French for Professions, IP (4 cr)

More courses may be used to fulfill required courses. Fren 2011 and Fren 2012 may also be used to satisfy this elective requirement.

Electives can be chosen from the list above or the following:

Take 8 or more credit(s) from the following:
- Fren 2011—Introduction to French Phonetics, Hum (4 cr)
- Fren 2012—French for Professions, IP (4 cr)

More courses may be used to fulfill required courses. Fren 2011 and Fren 2012 may also be used to satisfy this elective requirement.

Electives can be chosen from the list above or the following:

Take 8 or more credit(s) from the following:
- Fren 2011—Introduction to French Phonetics, Hum (4 cr)
- Fren 2012—French for Professions, IP (4 cr)

More courses may be used to fulfill required courses. Fren 2011 and Fren 2012 may also be used to satisfy this elective requirement.

Electives can be chosen from the list above or the following:

Take 8 or more credit(s) from the following:
- Fren 2011—Introduction to French Phonetics, Hum (4 cr)
- Fren 2012—French for Professions, IP (4 cr)

More courses may be used to fulfill required courses. Fren 2011 and Fren 2012 may also be used to satisfy this elective requirement.

Electives can be chosen from the list above or the following:

Take 8 or more credit(s) from the following:
- Fren 2011—Introduction to French Phonetics, Hum (4 cr)
- Fren 2012—French for Professions, IP (4 cr)

More courses may be used to fulfill required courses. Fren 2011 and Fren 2012 may also be used to satisfy this elective requirement.

Teacher Preparation Requirements

Students seeking teaching licensure in French K–12 should refer to the Education, Secondary (SeEd) section of this catalog.

Required Proficiency/Placement Examination—Students who plan to complete courses in the same language they studied in high school must take the placement examination and abide by the placement recommendation. If, after an initial exposure to the recommended course, the placement seems inappropriate, students may follow the recommendation of their language instructor as to the proper entry course.

French Course Descriptions

Fren 1001. Beginning French I. (FL; 4 cr; fall, every year)
An introduction to oral and written French, its basic structure, and to French culture.

Fren 1002. Beginning French II. (FL; 4 cr; prereq 1001 or placement or #; spring, every year)
Continuation of 1001.
Fren 1021. July in Paris I: French Language and Culture in Paris. (IP; 4 cr; summer, every year)
Four weeks of intensive beginning French language and culture at the Sorbonne, Paris IV; guided visits to cultural and historical sites. UMM July in Paris course for students with no French experience or less than one semester of college-level French. Does not satisfy FL Gen Ed requirement. See also Fren 1023 and 3060: July in Paris II and III: French Language and Culture in Paris. (Continuing Education courses)

Fren 1023. July in Paris II: French Language and Culture in Paris. (FL; 4 cr; prereq 1001 or placement; summer, every year)
Fren 1002 equivalent for the July in Paris Program. Four weeks of intensive beginning French language and culture at the Sorbonne, Paris IV; guided visits to cultural and historical sites. Satisfies UMM language requirement. See also Fren 1021 and 3060: July in Paris I and III: French Language and Culture in Paris (Continuing Education courses).

Fren 1027. Real to Reel: The Middle Ages and Renaissance in Film for Non-Majors. (Hum; 4 cr; does not count towards the Fren major or minor; fall, spring, offered when feasible)
Introduction to the culture of the Middle Ages and Renaissance as perceived through film. Students learn to critique film, to become aware of techniques, cultural differences, and biases that obtain in its production. Material includes films, cartoons, and television commercials. Discussion and papers in English.

Fren 1302. French Cinema for Non-Majors. (IP; 4 cr; does not count toward the Fren major or minor; fall, spring, offered when feasible)
The history of filmmaking in France from the Lumière brothers to the present; introduction to major trends in film theory. All films have English subtitles. Taught in English.

Fren 1304. French Women Authors for Non-Majors. (IP; 4 cr; does not count toward the Fren major or minor; fall, spring, offered when feasible)
French women’s movements during the 20th century, the historical relationship of gender and class, and the lives of women from various ethnic backgrounds in France; the history of French women authors in a global context. Taught in English.

Fren 1311. West African Francophone Cinema for Non-Majors. (IP; 4 cr; does not count toward the Fren major or minor; fall, spring, offered when feasible)
Introduction to the history of cinema in French-speaking West Africa. Students learn to read African films, to recognize and analyze political themes in the films, and to become sensitive to issues facing many African nations in the postcolonial world. All films have English subtitles. Taught in English.

Fren 1312. Morocco: History, Story, Myth for Non-Majors. (IP; 4 cr; does not count toward the Fren major or minor; summer, offered when feasible)
Study of the ways that history, myth, and storytelling intertwine to create Moroccan identity and of the different methods of telling stories through orature, literature, weaving, ceramics, and music. Students learn about current concerns and successes in Moroccan society. Taught in English. (Continuing Education course)

Fren 1993. Directed Study. (1-5 cr [max 10 cr]; prereq approved directed study form; fall, spring, every year)
An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum.

Fren 2001. Intermediate French I. (IP; 4 cr; prereq 1002 or placement or #; fall, every year)
Review of the essential structural patterns of the French language; continued development of oral, aural, reading, and writing skills based on cultural and literary texts appropriate to this level.

Fren 2002. Intermediate French II. (IP; 4 cr; prereq 2001 or placement or #; spring, every year)
Review of the essential structural patterns of the French language; continued development of oral, aural, reading, and writing skills based on cultural and literary texts appropriate to this level.

Fren 2011. Introduction to French Phonetics. (Hum; 4 cr; open to all students of French; fall, spring, offered when feasible)
Training in French pronunciation through general and French phonetics geared towards speakers of American English.

Fren 2012. French for Professions. (IP; 4 cr; prereq or coreq 2002; spring, offered when feasible)
Equips students with skills to function as bilingual citizens in a global market, focusing on specialized vocabularies and skills related to specific fields especially business, the health professions, and international relations. Exploration of French contributions to contemporary issues of international scope and development of career interests.

Fren 2993. Directed Study. (1-5 cr [max 10 cr]; prereq approved directed study form; fall, spring, every year)
An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum.

Fren 3001. Conversation and Composition. (IP; 4 cr; prereq 2002 or placement or #; fall, every year)
Conversation, including work on sounds and sound patterns as well as vocabulary building and practice based on common situations; writing skills; and advanced grammar review.

Fren 3011. Reading and Analysis of Texts. (Hum; 4 cr; prereq 3001 or #; spring, every year)
Introduction to representative literary works of France and the French-speaking world. Development of ease in reading French; introduction to methods for analyzing its style and meanings.

Fren 3022. Early Modern Studies: Pre-Enlightenment Culture in France. (Hist; 4 cr; prereq or coreq 3011 or #; fall, spring, offered when feasible)
This course traces the history of French culture from the Middle Ages until the French Revolution; it examines the geography, language, and institutions of medieval and early modern France. Meets Early Modern Studies (EMS) requirement in French major.

Fren 3023. Early Modern Studies: Orature and Literature in Pre-Enlightenment France. (Hum; 4 cr; prereq or coreq 3011 or #; fall, spring, offered when feasible)
Survey of French literature from the Middle Ages to the Enlightenment; a study of the successive literary forms of these eras with an emphasis on contemporaneous reading and interpretative strategies. Meets Early Modern Studies (EMS) requirement in French major.

Fren 3026. Early Modern Studies: History of the French Language. (Hum; 4 cr; prereq or coreq 3011 or #; fall, spring, offered when feasible)
Traces the development of Latin to Modern French. Examines the evolution of phonological, morphological, and syntactical changes. Looks at the influence of non-Romance languages, the codification of French, the role of the Académie Française, and more recent influences of immigration and technology. Meets Early Modern Studies (EMS) requirement in French major.

Fren 3027. Early Modern Studies: Real to Reel: The Middle Ages and Renaissance in Film. (Hum; 4 cr; prereq or coreq 3011 or #; fall, offered when feasible)
Introduction to the culture of the Middle Ages and Renaissance as perceived through film. Students learn to critique film, to become aware of techniques, cultural differences, and biases that obtain in its production. Material includes films, cartoons, and television commercials. Meets Early Modern Studies (EMS) Requirement.

Fren 3028. Early Modern Studies: Female Authorship and Medieval Canon Fodder. (Hum; 4 cr; prereq or coreq 3011 or #; fall, spring, offered when feasible)
The ways in which Medieval and Early-Modem women appropriated the male domain of literature to create and authorize their own writing acts. Examination of the works of the Contessa de Dia, of Christine de Pisan, Perrine du Guillet, Louise Labé, Marguerite de Navarre, and Madame de Lafayette, among others. Meets Early Modern Studies (EMS) requirement in French major.

Fren 3034. Modern Studies: French Poetry and Music. (Hum; 4 cr; prereq or coreq 3011 or #; fall, spring, offered when feasible)
Survey of French poetry and music with emphasis on 19th and 20th century poetry and 20th-21st century music. Studying music enhances understanding of the fundamentals of verse, including rhyme, meter, and sound. Meets Modern Studies (MOS) requirement in French major.

Fren 3035. Modern Studies: French Women Authors. (IP; 4 cr; prereq or coreq 3011 or #; fall, spring, offered when feasible)
French women’s movements during the 20th century, the historical relationship of gender and class, and the lives of women from various ethnic backgrounds in France; the history of French women authors in a global context. Meets Modern Studies (MOS) requirement in French major.

Fren 3036. Modern Studies: French Cinema. (IP; 4 cr; prereq or coreq 3011 or #; fall, spring, offered when feasible)
The history of filmmaking in France from the Lumière brothers to the present; introduction to major trends in film theory. Meets Modern Studies (MOS) requirement in French major.
Fren 3037. Modern Studies: La France du 19e siècle. (Hum; 4 cr; prereq or coreq 3011 or #; fall, spring, offered when feasible) Examines the emergence of Romanticism, Modernity, Realism, and Naturalism in a historical context shaped by the successive revolutions of 1789, 1815, 1830, 1848, and 1870; industrialization; the rise of a middle class; advances in technology and medicine; and the centrality of images and the popular press in daily life in France. Meets Modern Studies (MOS) requirement in French major.

Fren 3038. Modern Studies: La France du 20e siècle. (Hum; 4 cr; prereq or coreq 3011 or #; fall, spring, offered when feasible) From la belle époque through two world wars and the civil unrest of 1968; from France’s efforts to come to terms with its colonial past to its role within the European Union, from Proust to Pessac, this course examines French history, culture, and literary movements of the past century to the present day. Meets Modern Studies (MOS) requirement in French major.

Fren 3041. Francophone Studies: Francophone Worlds. (IP; 4 cr; prereq or coreq 3011 or #; fall, spring, offered when feasible) Readings in a variety of cultural and literary texts from among French-language writers of Africa, the Caribbean, Asia, North America, and Europe; study of issues of national identity, race, gender, and postcolonial consciousness. Meets Francophone Studies (FRS) requirement in French major.

Fren 3042. Francophone Studies: Contes francophones. (IP; 4 cr; prereq or coreq 3011 or #; fall, spring, offered when feasible) Study of the oral tale in African and Caribbean cultures. Examination of the form of these tales, their thematic structure, and how these tales have been translated into written and/or cinematographic texts. Meets Francophone Studies (FRS) requirement in French major.

Fren 3043. Francophone Studies: Littérature migrante. (IP; 4 cr; prereq or coreq 3011 or #; fall, spring, offered when feasible) Examination of texts written by people on the move: immigrants, migrants, people in exile. How do their texts move with them? How do these movements challenge national paradigms? Meets Francophone Studies (FRS) requirement in French major.

Fren 3044. Francophone Studies: L’Amérique francophone. (Hum; 4 cr; prereq or coreq 3011 or #; fall, spring, offered when feasible) Survey of literary texts and movements in Francophone North America, including Quebec and Louisiana, as well as the history of French exploration of the New World. A discussion of the cultural tensions that have threatened and continue to shape Francophone identity in North America. Meets Francophone Studies (FRS) requirement in French major.

Fren 3045. Francophone Studies: West African Francophone Cinema. (IP; 4 cr; prereq or coreq 3011 or #; fall, spring, offered when feasible) Introduction to the history of cinema in French-speaking West Africa. Students learn to read African films, to recognize and analyze political themes in the films, and to become sensitive to issues facing many African nations in the postcolonial world. Meets Francophone Studies (FRS) requirement in French major.

Fren 3046. Francophone Studies: Morocco: History, Story, Myth. (IP; 4 cr; prereq or coreq 3011 or #; summer, offered when feasible) Study of the ways that history, myth, and storytelling intertwine to create Moroccan identity and of the different methods of telling stories through orature, literature, weaving, ceramics, and music. Students learn about current concerns and successes in Moroccan society. Meets Francophone Studies (FRS) requirement for the French major. [Continuing Education course]

Fren 3060. July in Paris III: French Language and Culture in Paris. (IP; 4 cr [max 8 cr]; prereq 1002 or equiv; summer, every year) Four weeks of intermediate or advanced French-language study at the Sorbonne, Paris IV; guided visits to cultural and historical sites. UMM July in Paris course for students who have had a minimum of one year of college-level French. See also Fren 1021 and Fren 1023: July in Paris I and II: French Language and Culture in Paris. [Continuing Education courses]

Fren 3993. Directed Study. (1-5 cr [max 10 cr]; prereq approved directed study form; fall, spring, every year) An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum.

Fren 4011. Advanced Language Studies: Thème et Version. (Hum; 4 cr; prereq or coreq 3011 or #; spring, even years) The art of translation applied to everyday discourse, literary texts, and a number of professional fields: journalism, international business, and political, social, and natural sciences with a particular emphasis on specialized vocabularies and advanced grammar and syntax.

Fren 4012. Advanced Language Studies: Advanced French Grammar. (Hum; 4 cr; prereq or coreq 3011 or #; spring, odd years) Refinement of grammar. Students gain a deeper understanding of the functionality of the French language through a study of French grammar and through applied and historical linguistics.

Fren 4021. French and Francophone Theater. (Hum; 4 cr; prereq or coreq 3011 or #; fall, spring, offered when feasible) The study of theatrical texts of France and other French-speaking countries, including the history of theater, various theatrical movements, and the political nature of theatrical texts. Some oral interpretation is included.

Fren 4901. Senior Seminar. (4 cr; prereq completion of 32 credits toward the French major; must be taken on campus; spring, every year) A capstone experience for majors, consisting of a substantial scholarly or creative work (at the undergraduate level) within the discipline. Conducted as a seminar.

Fren 4991. Independent Study in French Abroad. (IP; 4 cr [max 12 cr]; prereq 2002 or #; 3022 or 3032 or 3041 recommended; fall, spring, offered when feasible) An independent study designed for study abroad and based on the student’s research interests in French or Francophone language, culture, history, etc. The project is defined in consultation with a French faculty member before the student leaves the United States. The faculty member guides the project via e-mail.

Fren 4993. Directed Study. (1-5 cr [max 10 cr]; prereq approved directed study form; fall, spring, every year) An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum.

Gender, Women, and Sexuality Studies (GWSS)

Division of the Social Sciences

This is an interdisciplinary program housed in the Division of the Social Sciences. The program is administered by the Gender, Women, and Sexuality Studies (GWSS) coordinator who is a faculty member of any of the four divisions.

Gender and sexuality are urgent contemporary issues that impact the culture, politics, and economics of American and international societies. Because such issues affect nearly every professional field and avenue of inquiry, GWSS students engage critically with theoretical and practical models from across the disciplines.

Objectives—To explore the implications and intersections of gender and sexuality across disciplinary, chronological, and geographical barriers. Through diverse methodologies and critical paradigms, students explore the impact of gender and sexuality in their own lives and in the world around them.

Gender, Women, and Sexuality Studies Major

Program Requirements

Students interested in the major should meet with their adviser before the beginning of their junior year.

Students develop a coherent program of study in consultation with their adviser. In developing an elective plan, students are also strongly encouraged to consult with faculty who teach within the GWSS program.

No grades below C- are allowed. Courses may not be taken S-N unless offered S-N only.
A minimum GPA of 2.00 is required in the major to graduate. The GPA includes all, and only, University of Minnesota coursework. Grades of “F” are included in GPA calculation until they are replaced.

**Courses for the Program**

**Required Courses**

**Note:** Some of the courses required for the major carry prerequisites.

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engl 2031—Gender in Literature and Culture</td>
<td>HDiv (4 cr)</td>
<td></td>
</tr>
<tr>
<td>GWSS 1101—Introduction to Gender, Women, and Sexuality Studies</td>
<td>HDiv (4 cr)</td>
<td></td>
</tr>
<tr>
<td>GWSS 4901—Assessment of Student Learning in Gender, Women, and Sexuality Studies</td>
<td>1 cr</td>
<td></td>
</tr>
<tr>
<td>Soc 3121—Sociology of Gender, HDiv</td>
<td>1 cr</td>
<td></td>
</tr>
</tbody>
</table>

**Elective Requirements**

Students must fill the remaining 27 credits with courses from the following lists. These courses must come from at least three different disciplines. A course not listed below may be applied to the elective requirement with the consent of the instructor and GWSS coordinator. With the approval of the GWSS coordinator, up to 8 credits can be supplied by internship experiences.

**Primarily Gender, Women, and Sexuality Content**

*Take 19 or more credits from the following:*

- Anth 3452—American Indian Women, HDiv (4 cr)
- Anth 3602—Women in Latin America, IP (4 cr)
- ArtH 3281—Women and Art, FA (4 cr)
- ArtS 3006—Media Studies: Feminist Art: A Studio Perspective, ArtP (3 cr)
- Engl 2032—Sex, the City, and Literature, HDiv (4 cr)
- Engl 4025—Research Seminar: The Elizabeth Mystique, Hum (4 cr)
- Fren 1304—French Women Authors for Non-Majors, IP (4 cr)
- Fren 3028—Early Modern Studies: Female Authorship and Medieval Canon Fodder, Hum (4 cr)
- Fren 3035—Modern Studies: French Women Authors, IP (4 cr)
- Ger 3501—Women’s Issues in Contemporary German Culture, IP (4 cr)
- GWSS 4101—Feminist Theory, HDiv (4 cr)
- Hist 1402—Women in U.S. History, HDiv (4 cr)
- Hist 3706—Women in Early Modern Europe, SS (4 cr)
- Hist 3707—Gender in East Asia, HDiv (4 cr)
- Hist 3708—European Women’s History, 1600-Present, IP (4 cr)
- Hum 3501—Women’s Issues in Contemporary German Culture, IP (4 cr)
- Phil 2141—Analytic Feminism, Hum (4 cr)
- Pol 3035—Women in Politics Worldwide, IP (4 cr)
- Psy 1071—Human Sexuality, SS (4 cr)
- Psy 3051—The Psychology of Women and Gender, HDiv (4 cr)
- Psy 3221—Behavioral Biology of Women, Sci (2 cr)
- Soc 3252—Women in Muslim Society, IP (4 cr)
- Soc 3452—American Indian Women, HDiv (4 cr)
- Soc 3602—Women in Latin America, IP (4 cr)
- Span 3653—Seminar: María de Zayas: Literary Violence in Golden Age Spain, Hum (4 cr)
- Span 3654—Seminar: Sex, Love, and Marriage in Golden Age Spanish Literature, Hum (4 cr)

**Partial Gender, Women, and Sexuality Content**

*Take no more than 8 credits from the following:*  

- Anth 2501—Medical Anthropology-An Overview, SS (4 cr)
- Econ 3351—Globalization: Examining India’s Social and Economic Development, IP (4 cr)
- Econ 4011—Labor Economics I, HDiv (2 cr)
- Engl 3142—The Rise of the Novel, Hum (4 cr)
- Engl 3154—19th-Century British Fiction, Hum (4 cr)
- Engl 3301—U.S. Multicultural Literature, HDiv (4 cr)
- Engl 3522—Harlem Renaissance, HDiv (4 cr)
- Fren 1302—French Cinema for Non-Majors, IP (4 cr)
- Fren 1311—West African Francophone Cinema for Non-Majors, IP (4 cr)
- Fren 3036—Modern Studies: French Cinema, IP (4 cr)
- Fren 3041—Francophone Studies: Francophone Worlds, IP (4 cr)
- Fren 3042—Francophone Studies: Contes francophones, IP (4 cr)
- Fren 3043—Francophone Studies: Littérature migrante, IP (4 cr)
- Fren 3045—Francophone Studies: West African Francophone Cinema, IP (4 cr)
- Hist 3001—Families Through the Prism of Memory, Genealogy, and History, Hist (4 cr)
- Mgmt 3351—Globalization: Examining India’s Social and Economic Development, IP (4 cr)
- Phil 2112—Professional Ethics, E/CR (4 cr)
- Psy 3542—Multicultural Psychology, HDiv (4 cr)
- Soc 2101—Systems of Oppression, HDiv (4 cr)
- Soc 3122—Sociology of Childhoods, HDiv (4 cr)

**Gender, Women, and Sexuality Studies Minor**

**Minor Requirements**

Students develop a coherent program of study in consultation with their adviser. In developing an elective plan, students are strongly encouraged to consult with faculty who teach within the GWSS program.

No grades below C- are allowed. Courses may not be taken S-N unless offered S-N only.

A minimum GPA of 2.00 is required in the minor to graduate. The GPA includes all, and only, University of Minnesota coursework. Grades of “F” are included in GPA calculation until they are replaced.

**Courses for the Program**

**Required Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>GWSS 1101—Introduction to Gender, Women, and Sexuality Studies</td>
<td>HDiv (4 cr)</td>
<td></td>
</tr>
</tbody>
</table>

**Elective Requirements**

Students must fill the remaining 20 credits with courses from the following lists. These courses must come from at least three different disciplines. A course not listed below may be applied to the elective requirement with the consent of the instructor and GWSS coordinator.

**Primarily Gender, Women, and Sexuality Content**

*Take 16 or more credits from the following:*  

- Anth 3452—American Indian Women, HDiv (4 cr)
- Anth 3602—Women in Latin America, IP (4 cr)
- ArtH 3281—Women and Art, FA (4 cr)
- ArtS 3006—Media Studies: Feminist Art: A Studio Perspective, ArtP (3 cr)
- Engl 2031—Gender in Literature and Culture, HDiv (4 cr)
- Engl 2032—Sex, the City, and Literature, HDiv (4 cr)
- Engl 4025—Research Seminar: The Elizabeth Mystique, Hum (4 cr)
- Fren 1304—French Women Authors for Non-Majors, IP (4 cr)
- Fren 3028—Early Modern Studies: Female Authorship and Medieval Canon Fodder, Hum (4 cr)
- Fren 3035—Modern Studies: French Women Authors, IP (4 cr)
- Ger 3501—Women’s Issues in Contemporary German Culture, IP (4 cr)
Partial Gender, Women, and Sexuality Content

Take no more than 4 credits (s) from the following:

Anth 2501—Medical Anthropology-An Overview, SS (4 cr)
Econ 3351—Globalization: Examining India’s Social and Economic Development, IP (4 cr)
Engl 4101—Labor Economics I, HDiv (2 cr)
Engl 3142—The Rise of the Novel, Hum (4 cr)
Engl 3154—19th-Century British Fiction, Hum (4 cr)
Engl 3301—U.S. Multicultural Literature, HDiv (4 cr)
Engl 3522—Harlem Renaissance, HDiv (4 cr)
Fren 1302—French Cinema for Non-Majors, IP (4 cr)
Fren 1311—West African Francophone Cinema for Non-Majors, IP (4 cr)
Fren 3036—Modern Studies: French Cinema, IP (4 cr)
Fren 3041—Francophone Studies: Francophone Worlds, IP (4 cr)
Fren 3042—Francophone Studies: Contes francophones, IP (4 cr)
Fren 3043—Francophone Studies: Literature migrante, IP (4 cr)
Fren 3045—Francophone Studies: West African Francophone Cinema, IP (4 cr)
Hist 3001—Families Through the Prism of Memory, Genealogy, and History, Hist (4 cr)
Mgmt 3351—Globalization: Examining India’s Social and Economic Development, IP (4 cr)
Phil 2112—Professional Ethics, E/CR (4 cr)
Psych 3542—Multicultural Psychology, HDiv (4 cr)
Soc 2101—Systems of Oppression, HDiv (4 cr)
Soc 3122—Sociology of Childhoods, HDiv (4 cr)

Gender, Women, and Sexuality Studies Course Descriptions

Anth 2501. Medical Anthropology-An Overview, SS. 4 cr; prereq 1111 or Soc 1101 or Hist 1101 or Hist 1111 or #; spring, even years

Utilizes an ecological perspective to explore cultural understandings of health and illness in a variety of societies in North America and abroad. Examines the effects of cultural and physical adaptation, nutrition, culture contact, and modernization on the health and well being of people.

Anth 3452. American Indian Women. (HDiv; 4 cr; Soc 3452; prereq 1111 or Soc 1101 or #; fall, every year)

Same as Soc 3452. The role of Indian and mixed-blood women in a variety of North American Indian cultures, both traditional and contemporary, using ethnography, autobiography, life history, biography, and fiction. The interaction of Indian women and their cultures with the colonizing cultures of Western Europe and the United States.

Anth 3602. Women in Latin America. (IP; 4 cr; Soc 3602; prereq 1111 or Soc 1101 or #; fall, odd years)

Same as Soc 3602. Study of the social statuses of women in Latin American countries and the cultural norms influencing these statuses. Topics include class differences and the varied interests of women of different classes and ethnicities, women’s movements, economic and political conditions, religion and women, etc.

Arth 3281. Women and Art. (FA; 4 cr; prereq any 1xxx Arth course or jr status or #; fall, odd years)

A historical survey of women’s roles as creators and patrons of the visual arts in Western European and American societies, from antiquity to the present.

Engl 3142. The Rise of the Novel. (Hum; 4 cr; Engl 3131; two from 2201, 2202, 2211, 2212; spring, offered when feasible)

The origins of the British novel: experiments with the new form, influence of earlier genres, evolution of formal realism. Authors may include Austen, Brontë, Fielding, Richardson, and Sterne.

Engl 3154. 19th-Century British Fiction. (Hum; 4 cr; Engl 3131; two from 2201, 2202, 2211, 2212; fall, offered when feasible)

The rise of the novel to respectability and prominence in Britain from the 1820s, through the present; introduction to major trends in film theory. All films have English subtitles. Taught in English.

Gender, Women, and Sexuality Studies (GWSS)

Arts 3006. Media Studies: Feminist Art: A Studio Perspective. (ArtP; 3 cr [max 9 cr]; prereq major or minor or #; fall, spring, offered when feasible)

The impact of the women’s movement of the 1970s on contemporary art. Exploration of the notion of “women’s work” as a studio practice; the materials, methods, and issues that define feminist work.

Econ 3351. Globalization: Examining India’s Social and Economic Development. (IP; 4 cr; Soc 3351; prereq 1111 or 1112 or #; spring, offered when feasible)

Same as Mgmt 3351. Observe and study the impact of globalization on the Indian economy. Examine the growing class divide between the middle and upper middle class and the lower class. Study the problem of mass poverty in India and its various ramifications such as child labor, lack of education and basic health care, and the inherent gender bias. Examine sustainable grass roots efforts to combat some of these problems. [Continuing Education course]

Econ 4101. Labor Economics I. (HDiv; 2 cr; econ 3201 or #; fall, every year)

Wage and employment determination. Distribution of earnings and earnings inequality by race and sex. Labor supply applications.

Engl 2031. Gender in Literature and Culture. (HDiv; 4 cr; Engl 1111 or equiv; fall, spring, offered when feasible)

Introduction to literary and cultural representations of gender. Emphasis on the intersections between power and the social relations of gender, race, class, and sexuality.

Engl 2032. Sex, the City, and Literature. (HDiv; 4 cr; fall, odd years)

The women of Sex and the City struggle in conversation and in their relationships to define male and female as well as intimacy and love. In this course, students also struggle, in class discussions and in writing, to formulate an understanding of the way gender and sex have impacted postmodern understanding of intimacy and love.

Engl 3142. The Rise of the Novel. (Hum; 4 cr; Engl 3131; two from 2201, 2202, 2211, 2212; spring, offered when feasible)

The origins of the British novel: experiments with the new form, influence of earlier genres, evolution of formal realism. Authors may include Austen, Brontë, Fielding, Richardson, and Sterne.

Engl 3154. 19th-Century British Fiction. (Hum; 4 cr; Engl 3131; two from 2201, 2202, 2211, 2212; fall, spring, offered when feasible)

The rise of the novel to respectability and prominence in Britain from the 1820s, through the present; introduction to major trends in film theory. All films have English subtitles. Taught in English.

Engl 3301. U.S. Multicultural Literature. (HDiv; 4 cr; Engl 3131; two from 2201, 2202, 2211, 2212; spring, offered when feasible)

Examination of literatures by African American, American Indian, Asian American, Chicana/o, U.S. Latino/a, and other under-represented peoples.

Engl 3522. Harlem Renaissance. (HDiv; 4 cr; Engl 3131; two from 2201, 2202, 2211, 2212; fall, even years)

During the 1920s, there was a major aesthetic outsourcing in the African American community. Listen to jazz, examine African American artwork, and read poetry, short stories, novels and essays from Harlem Renaissance writers.

Engl 4025. Research Seminar: The Elizabeth Mystique. (Hum; 4 cr; fall, spring, offered when feasible)

Elizabeth I ruled England from 1558–1603; she was an astute politician, a minor poet, a talented rhetorician, and the creative inspiration for many other writers of her day, all despite—or perhaps because of—her gender. This class considers many textual and visual attempts to represent this ever-paradoxical and sometimes controversial figure.

Fren 1302. French Cinema for Non-Majors. (IP; 4 cr; does not count toward the Fren major or minor; fall, spring, offered when feasible)

The history of filmmaking in France from the Lumière brothers to the present; introduction to major trends in film theory. All films have English subtitles. Taught in English.

Fren 1304. French Women Authors for Non-Majors. (IP; 4 cr; does not count toward the Fren major or minor; fall, spring, offered when feasible)

French women’s movements during the 20th century, the historical relationship of gender and class, and the lives of women from various ethnic backgrounds in France; the history of French women authors in a global context. Taught in English.
Gender, Women, and Sexuality Studies (GWSS)

Fren 1311. West African Francophone Cinema for Non-Majors. (IP; 4 cr; does not count toward the Fren major or minor; fall, spring, offered when feasible)
Introduction to the history of cinema in French-speaking West Africa. Students learn to read African films, to recognize and analyze political themes in the films, and to become sensitive to issues facing many African nations in the postcolonial world. All films have English subtitles. Taught in English.

Fren 3028. Early Modern Studies: Female Authorship and Medieval Canon Fodder. (Hum; 4 cr; prereq or coreq 3011 or #; fall, spring, offered when feasible)
The ways in which Medieval and Early-Modern women appropriated the male domain of literature to create and authorize their own writing acts. Examination of the works of the Contessa de Dia, of Christine de Pisan, Perrette du Guillot, Louise Labé, Marguerite de Navarre, and Madame de Lafayette, among others. Meets Early Modern Studies (EMS) requirement in French major.

Fren 3035. Modern Studies: French Women Authors. (IP; 4 cr; prereq or coreq 3011 or #; fall, spring, offered when feasible)
French women’s movements during the 20th century, the historical relationship of gender and class, and the lives of women from various ethnic backgrounds in France; the history of French women authors in a global context. Meets Modern Studies (MOS) requirement in French major.

Fren 3036. Modern Studies: French Cinema. (IP; 4 cr; prereq or coreq 3011 or #; fall, spring, offered when feasible)
The history of filmmaking in France from the Lumière brothers to the present; introduction to major trends in film theory. Meets Modern Studies (MOS) requirement in French major.

Fren 3041. Francophone Studies: Francophone Worlds. (IP; 4 cr; prereq or coreq 3011 or #; fall, spring, offered when feasible)
Readings in a variety of cultural and literary texts from among French-language writers of Africa, the Caribbean, Asia, North America, and Europe; study of issues of national identity, race, gender, and postcolonial consciousness. Meets Francophone Studies (FRS) requirement in French major.

Fren 3042. Francophone Studies: Centres francophones. (IP; 4 cr; prereq or coreq 3011 or #; fall, spring, offered when feasible)
Study of the oral tale in African and Caribbean cultures. Examination of the form of these tales, their thematic structure, and how these tales have been translated into written and/or cinematographic texts. Meets Francophone Studies (FRS) requirement in French major.

Fren 3043. Francophone Studies: Littérature migrante. (IP; 4 cr; prereq or coreq 3011 or #; fall, spring, offered when feasible)

Fren 3045. Francophone Studies: West African Francophone Cinema. (IP; 4 cr; prereq or coreq 3011 or #; fall, spring, offered when feasible)
Introduction to the history of cinema in French-speaking West Africa. Students learn to read African films, to recognize and analyze political themes in the films, and to become sensitive to issues facing many African nations in the postcolonial world. Meets Francophone Studies (FRS) requirement in French major.

Ger 3501. Women’s Issues in Contemporary German Culture. (IP; 4 cr; [Hum 3501]; prereq 3011 or #; spring, offered when feasible)
Same as Hum 3501. Focus is on the German women’s movement during the 20th century, historical relationship of gender and class, and lives of women from various ethnic backgrounds in Germany and Austria. Short stories, essays, and poems document the evolution of feminist literary theory in German studies. Readings and lectures are in English. Final papers either in German (for German credit) or English (for Humanities credit).

GWSS 1101. Introduction to Gender, Women, and Sexuality Studies. (HDiv; 4 cr; fall, every year)
Overview of gender and feminist theories, history of the women’s movement, and the impact of gender in everyday life.

GWSS 3993. Directed Study. (1-5 cr; max 10 cr; prereq approved directed study form; fall, spring, every year)
An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum.

GWSS 4101. Feminist Theory. (HDiv; 4 cr; prereq 1101 or 1111 or #; fall, spring, offered when feasible)
Engages students in a critical examination of several influential works participating in the elaboration of feminist theories. Readings and discussions focus on a series of themes and issues—gender, sexuality, race, class, language, bodies, etc.—and how these issues bear upon society.

GWSS 4901. Assessment of Student Learning in Gender, Women, and Sexuality Studies. (1 cr; prereq completion of 32 cr in women’s studies; S-N only; fall, spring, every year)
Requires a portfolio collecting syllabi and documents from courses or internships in gender, women, and sexuality studies; a paper reviewing the UMM Gender, Women, and Sexuality Studies program; participation in a panel discussion. Students can work with any faculty teaching gender, women, and sexuality studies courses.

Hist 1402. Women in U.S. History. (HDiv; 4 cr; fall, spring, offered when feasible)
Themes and methods in the history of women in the United States. Topics may include women in the colonial era; American Indian, African American, and immigrant women; sex roles; women and work, family, politics, the law, and religion.

Hist 3001. Families Through the Prism of Memory, Genealogy, and History. (Hist; 4 cr; fall, every year)
Historical and genealogical approach to the study of family.

Hist 3704. Women in the Middle Ages. (SS; 4 cr; spring, even years)
Analysis of the history of European women and gender systems as constructed during the Middle Ages (c. 500-1500).

Hist 3706. Women in Early Modern Europe. (SS; 4 cr; fall, spring, offered when feasible)
Examination of lives of women in Europe from about 1350 through the 18th century.

Hist 3707. Gender in East Asia. (HDiv; 4 cr; fall, spring, offered when feasible)
Study of the changing perceptions of gender in East Asia from its earliest written records until the present. Special emphasis on the changing role of women in East Asia. Exploration of the way gendered discourse affected broader understandings of society, politics, the economy, and culture.

Hist 3708. European Women’s History, 1600-Present. (IP; 4 cr; fall, spring, offered when feasible)
Examination of the forces that have shaped the lives of European women since 1600 and analysis of how changes in the structures of power and authority—religious, political, social, familial—affected the choices available to them. Students engage critically with the question of what bringing gender to the forefront of the study of European history has to teach them. Students gain an understanding of many of the underpinnings of American society, which has been deeply affected by European patterns of thought about women and their place in the world.

Hum 3501. Women’s Issues in Contemporary German Culture. (IP; 4 cr; [Ger 3501]; spring, offered when feasible)
Same as Ger 3501. Focus is on the German women’s movement during the 20th century, historical relationship of gender and class, and lives of women from various ethnic backgrounds in Germany and Austria. Short stories, essays, and poems document the evolution of feminist literary theory in German studies. Readings and lectures are in English. Final papers either in German (for German credit) or English (for Humanities credit).

Mgmt 3351. Globalization: Examining India’s Social and Economic Development. (IP; 4 cr; [Econ 3351]; prereq Econ 1111 or Econ 1112 or #; spring, offered when feasible)
Same as Econ 3351. Observe and study the impact of globalization on the Indian economy. Examine the growing class divide between the middle and upper middle class and the lower class. Study the problem of mass poverty in India and its various ramifications such as child labor, lack of education and basic health care, and the inherent gender bias. Examine sustainable grass roots efforts to combat some of these problems. [Continuing Education course]

Phil 2112. Professional Ethics. (EC; 4 cr; fall, every year)
A critical examination of moral issues that arise in a person’s professional life. Possible topics include affirmative action, autonomy in the workplace, ethical issues in advertising, corporate responsibility, coercive wage offers, distributive justice, and sexual harassment. Issues concerning race, gender, and women are included in selected modules.
An introduction to the sociological study of gender. Focus on gender differences and gender inequality. Analysis of the changing roles, opportunities, and expectations of women and men as their societies (and subsequently, gender relations and power) undergo change in today's world.

Same as Anth 3602. Study of the social statuses of women in Latin American countries and the cultural norms influencing these statuses. Topics include class differences and the varied interests of women of different classes and ethnicities, women's movements, economic and political conditions, religion and women, etc.

Study of the major works of 17th-century writer Maria de Zayas y Sotomayor, "The Enchantments of Love" (1637) and "The Disenchanted of Love" (1647), in light of their socio-historical contexts and the political issues surrounding the formation of literary canons.

The theme of sex, love, and marriage in Golden Age Spanish Literature. (Hum; 4 cr; prereq 3002, 3101; fall, offered when feasible)

Same as Anth 3602. Women in Latin America. (IP; 4 cr; [Anth 3602]; prereq 1101 or Anth 111 or #; fall, odd years)

Geography (Geog)

Program Requirements

Up to 8 credits of coursework with a grade of D or D+ may be used to meet the major requirements if offset by an equivalent number of credits of A or B. A minimum GPA of 2.00 is required in the major to graduate. The GPA includes all, and only, University of Minnesota coursework. Grades of F are included in GPA calculation until they are replaced.
Students intending to pursue graduate studies in the geological sciences should take CSci 1301, Geol 2151, Math 1102, and Phys 1101.

Courses for the Program

Required Courses

Geol 1101—Physical Geology, Sci-L (4 cr)
Geol 2101—Mineralogy and Crystallography, Sci-L (4 cr)
Geol 2111—Igneous and Metamorphic Petrology, Sci-L (4 cr)
Geol 2121—Sedimentology and Stratigraphy, Sci-L (4 cr)
Geol 3101—Structural Geology, Sci-L (4 cr)
Geol 3196—Geology Field Camp, Sci (6 cr)
Geol 4901—Geology Senior Seminar (1 cr)
Geol 4902—Geology Senior Seminar Presentations (1 cr)
Chem 1101—General Chemistry I, Sci-L (4 cr)
Chem 1102—General Chemistry II, Sci-L (4 cr)
Math 1101—Calculus I, M/CR (5 cr)

Elective Courses

Take 10 or more credit(s) from the following:

Geol 3993—Directed Study (1–5 cr)
Geol 4140—Advanced Glacial and Quaternary Geology, Sci (4 cr)
Geol 4130—Advanced Geomorphology, Sci (4 cr)
Geol 4101—Advanced Geology of the National Parks, Sci (4 cr)
Geol 3501—Hydrology, Sci (4 cr)
Geol 3401—Geophysics, Sci (4 cr)
Geol 3411—Advanced Stratigraphy: Subsurface Methods, Sci (4 cr)
Geol 3421—Airphoto Interpretation, Sci (4 cr)
Geol 3501—Hydrology, Sci (4 cr)

Recommended for graduate studies:

Geol 2151—Historical Geology: Earth History and Changing Scientific Perspectives, Sci-L (4 cr)

Additional Electives

Courses must be chosen in consultation with a geology adviser.

Take 7 or more credit(s) from the following:

Biol 1xxx, 2xxx, 3xxx, 4xxx
Chem 1xxx, 2xxx, 3xxx, 4xxx
CSci 1xxx, 2xxx, 3xxx, 4xxx
Math 1xxx, 2xxx, 3xxx, 4xxx
NSci 1xxx, 2xxx, 3xxx, 4xxx
Phys 1xxx, 2xxx, 3xxx, 4xxx
Stat 1xxx, 2xxx, 3xxx, 4xxx

Geology Minor

Minor Requirements

Up to 8 credits of coursework with a grade of D or D+ may be used to meet the minor requirements if offset by an equivalent number of credits earning a grade of A or B. The GPA in these courses must be at least 2.00.

Courses for the Program

Minor Required Courses

Geol 1101—Physical Geology, Sci-L (4 cr)
Geol 2101—Mineralogy and Crystallography, Sci-L (4 cr)
Geol 2111—Igneous and Metamorphic Petrology, Sci-L (4 cr)
Geol 2121—Sedimentology and Stratigraphy, Sci-L (4 cr)
Chem 1101—General Chemistry I, Sci-L (4 cr)
Chem 1102—General Chemistry II, Sci-L (4 cr)

Elective Courses

Take 8 or more credit(s) from the following:

Geol 2131—Geomorphology, Sci (4 cr)
Geol 2141—Glacial and Quaternary Geology, Sci (4 cr)
Geol 2151—Historical Geology: Earth History and Changing Scientific Perspectives, Sci-L (4 cr)
Geol 2161—GIS and Remote Sensing, Sci (4 cr)
Geol 3001—Global Tectonics, Sci (4 cr)
Geol 3111—Introduction to Invertebrate Paleontology, Sci-L (4 cr)
Geol 3401—Geophysics, Sci (4 cr)
Geol 3411—Advanced Stratigraphy: Subsurface Methods, Sci (4 cr)
Geol 3421—Airphoto Interpretation, Sci (4 cr)
Geol 3501—Hydrology, Sci (4 cr)
Geol 4130—Advanced Geomorphology, Sci (4 cr)
Geol 4140—Advanced Glacial and Quaternary Geology, Sci (4 cr)

Take no more than 3 credit(s) from the following:

Geol 1993—Directed Study (1–5 cr)
Geol 2993—Directed Study (1–5 cr)
Geol 3993—Directed Study (1–5 cr)
Geol 4993—Directed Study (1–5 cr)

Teacher Preparation Requirements

Students seeking teaching licensure in earth and space science 9–12 should refer to the Education, Secondary (SeEd) section of this catalog.

Geology Course Descriptions

Geol 1001. Environmental Geology: Geology in Daily Life. (Sci; 4 cr; may not count toward the geol major or minor; spring, every year)
Effects of volcanoes, earthquakes, and floods on humans and civilization; geologic problems associated with rural and urban building, waste management, and waste disposal; the importance of geologic knowledge in the discovery of fossil fuels and mineral resources. (4 hrs lect)

Geol 1011. Geology of the National Parks. (Sci; 4 cr; may not count toward the geol major or minor; fall, offered when feasible)
Exploration of the fundamental aspects of the geosciences: earth materials, geologic time, plate tectonics, and the evolution of landscapes by examining the geology and geologic history of the U.S. national parks. (4 hrs lect)

Geol 1012. Oceanography. (Sci; 4 cr; may not count toward geol major or minor; fall, offered when feasible)
Physiography and geological evolution of ocean basins; marine sedimentation; coastal processes and environments; chemical evolution, and chemical and physical properties of seawater; ocean-atmosphere interactions; deep-ocean circulation; waves and tides; marine ecosystems. (4 hrs lect)

Geol 1013. Physical Geology. (Sci-L; 4 cr; fall, spring, every year)
Introduction to the materials that make up the Earth and the structures, surface features, and geologic processes involved in its origin and development. Lab work includes study of the major constituents of the Earth’s crust, including the important rocks and minerals; study of surface and geologic features using aerial photographs, topographic maps, and satellite imagery. (3 hrs lect, 3 hrs lab)

Geol 1993. Directed Study. (1–5 cr [max 10 cr]; prereq approved directed study form; fall, spring, every year)
An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum.

Geol 2001. Natural and Unnatural Geologic Hazards. (Envt; 4 cr; spring)
Examination of the more significant interactions between humans and geologic environments and processes. Earthquake and volcanic hazards, river flooding, mass movements and slope stability, coastal hazards, and water resources and pollution. Lectures and problems sets emphasize the quantitative approaches used to determine the likelihood and frequency of natural hazards, assess associated risks, and mitigate damage.
Geol 2101. Mineralogy and Crystallography. (Sci-L; 4 cr; prereq 1101, Chem 1101 or #; fall, every year)
Classification, identification, physical and chemical properties, origin and natural occurrence of major mineral groups. Lab study of crystal systems by use of models; introduction to optical aspects and physical and chemical testing. (3 hrs lect, 6 hrs lab and field trips)

Geol 2111. Igneous and Metamorphic Petrology. (Sci-L; 4 cr; prereq 2101; spring, every year)
Classification, composition, genesis, and natural occurrence of igneous and metamorphic rocks; lab study and identification of rocks by various macroscopic, microscopic, and chemical means. (3 hrs lect, 6 hrs lab and field trips)

Geol 2121. Sedimentology and Stratigraphy. (Sci-L; 4 cr; prereq 2101; fall, every year)
Processes of sedimentation, including origin, transportation, and deposition of sediments; interpretation of sedimentary environments. Principles of stratigraphy and their applications. Lab work includes sedimentary particle analysis; stratigraphic sections; and interpretation of ancient sedimentary environments based on stratified sequences of sedimentary rock. (3 hrs lect, 3 hrs lab and field trips)

Geol 2131. Geomorphology. (Sci; 4 cr; prereq 1101; spring, odd years)
Study of Earth's surface and surficial processes; weathering, erosion, and deposition, and the resulting landforms and products; the history of the study of landforms in the United States. (3 hrs lect, 3 hrs lab and field trips)

Geol 2141. Glacial and Quaternary Geology. (Sci; 4 cr; prereq 1101; fall, even years)
Glaciers, glaciology, glacial deposition, glacial erosion; climatic change and the growth and advance of ice sheets; effect of glaciations on flora and fauna. (3 hrs lect, 3 hrs lab and field trips)

Geol 2151. Historical Geology: Earth History and Changing Scientific Perspectives. (Sci-L; 4 cr; spring, every year)
Development of fundamental theories and principles of geology, including stratigraphy, uniformitarianism, geologic time, evolution, and plate tectonics. Emphasis on how geological thought has evolved through time as the scientific, religious, and political climate has changed. Discussion of the Earth's history and science's changing views of the Earth; continental movements, mountain building, and the evolution and development of organisms and ecosystems. Lab experience on methods of interpreting Earth's history, rocks, fossils, and structures and solving geological problems. (3 hrs lect, 3 hrs lab)

Geol 2161. GIS and Remote Sensing. (Sci; 4 cr; prereq 1101 or Biol 1101 or Biol 1111 or #; spring, offered when feasible)
Introduction to design, development, and application of Geographic Information Systems (GIS); overview of acquisition and utility of satellite data and imagery; emphasis on applications in Earth and environmental sciences; lab component focuses on practical aspects of GIS development and use and involves original semester projects designed and implemented by individual students.

Geol 2301. Geology of Minnesota. (Sci-L; 4 cr; summer, offered when feasible)
Active, hands-on learning both in class and on class field trips to selected localities throughout the state. Field trips include: Pipestone National Monument; glacial geology of west-central Minnesota; geology of the Minnesota River Valley; and St. Cloud Quarry Park. [Continuing Education course]

Geol 2993. Directed Study. (1-5 cr [max 10 cr]; prereq approved directed study form; fall, spring, every year)
An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum.

Geol 3001. Global Tectonics. (Sci; 4 cr; prereq #; fall, spring, offered when feasible)
Internal structure and composition of the earth; geometry and motion of lithospheric plates; geological and geophysical processes at plate boundaries; evolution of mountain belts; heat flow, thermal convection, and the driving mechanism for plate movement.

Geol 3006. X-ray Diffraction Techniques for the Identification of Clay Minerals in Geologic Environments. (2 cr; prereq 1101; half semester course; spring, offered when feasible)
Introduction to clay mineralogy, discussion of the significance of clay minerals in physiochemical and biological processes that occur in terrestrial and marine environments, and the application of X-ray diffraction in the identification and analysis of clays in different geologic environments.

Geol 3011. Earth Resources. (Envt; 4 cr; prereq any 1xxx or 2xxx Geol course or #; fall, offered when feasible)
Geology of mineral (base metals, precious metals, and non-metals), energy (fossil fuels, uranium, and alternatives), and other (water and soil) resources; overview of techniques for resource identification, delineation, and extraction; discussion of issues (e.g., environmental, political, and social) surrounding resource identification, extraction, and use; global resource distribution, historical trends, and future outlook.

Geol 3101. Structural Geology. (Sci-L; 4 cr; prereq 2101 or #; spring, every year)
Elementary concepts of stress and strain, theory of rock deformation; description and classification of structures in the Earth's crust; application of geometric, analytical, and map interpretation techniques to solving structural problems; field mapping problems. (3 hrs lect, 3 hrs lab and field trips)

Geol 3111. Introduction to Invertebrate Paleontology. (Sci-L; 4 cr; prereq 1121 or #; spring, odd years)
Morphyology and evolutionary record of the major invertebrate groups characterized by significant fossil representation. Principles of evolution, paleoecology, and paleoenvironmental interpretations of fossil assemblages. (3 hrs lect, 3 hrs lab)

Geol 3196. Geology Field Camp. (Sci; 6 cr; prereq 2121, 2151, 3101; summer, every year)
Identification and solution of geological problems in the field, including stratigraphic correlation, construction of cross sections and geologic maps, report preparation, field mapping, structural analysis, and environmental interpretation of Precambrian and Paleozoic rock units. Offered only during summer at a 6-week residential camp.

Geol 3401. Geophysics. (Sci; 4 cr; prereq Math 1101, Phys 1101 or #; fall, odd years)
Propagation of seismic waves, earthquake seismology, and the structure of the Earth; the origin and nature of the Earth's magnetic and gravitational fields; the Earth's internal production and flow of heat; composition, state, and rheology of the Earth's interior; plate tectonics and elementary geodynamics. (4 hrs lect)

Geol 3411. Advanced Stratigraphy: Subsurface Methods. (Sci; 4 cr; prereq 1101, 2121 or #; spring, odd years)
Techniques and methods of investigating subsurface geologic and stratigraphic features. Includes a discussion of drilling methods, subsurface mapping methods, and techniques for interpreting subsurface geologic trends. (2 hrs lect, 4 hrs lab)

Geol 3421. Aerial Photo Interpretation. (Sci; 4 cr; prereq 1101 or #; spring, offered when feasible)
Interpretation of geologic landforms, cultural features, and vegetative patterns as viewed from aerial photographs. Geologic features studied include volcanic, mass wasting, and glacial flow features; coastal and fluvial features; groundwater solution features; and structural features. (2 hrs lect, 4 hrs lab)

Geol 3501. Hydrology. (Sci; 4 cr; prereq Math 1101 or #; fall, every year)
Elements of surface water hydrology; groundwater occurrence and aquifer characteristics; groundwater flow mechanics and flow nets; well hydraulics; groundwater contamination, contaminant transport, and remediation; management and legal aspects of water resources. (4 hrs lect)

Geol 3593. Directed Study. (1-5 cr [max 10 cr]; prereq approved directed study form; fall, spring, every year)
An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum.

Geol 4130. Advanced Geomorphology. (Sci; 4 cr; max 8 cr; prereq 2151; fall, spring, offered when feasible)
Surficial processes and the resulting landforms; may include catastrophic events, large lakes, arid regions geomorphology or the evolution of the Badlands. (3 hrs lect, 3 hrs lab and field trips)

Geol 4140. Advanced Glacial and Quaternary Geology. (Sci; 4 cr; max 8 cr; prereq 2141; fall, odd years)
Glacial geology and glacial history; may include pre-pleistocene glaciations, quaternary stratigraphy, or subglacial processes. (3 hrs lect, 3 hrs lab and field trips)

Geol 4901. Geology Senior Seminar. (1 cr; prereq #; required for geol major; fall, every year)
Capstone experience in Geology. Discussion of selected topics of geologic interest.

Geol 4902. Geology Senior Seminar Presentations. (1 cr; prereq #; required for geol major; spring, every year)
Capstone experience in geology. Presentations of research projects.
An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum.

**German (Ger)**

**Division of the Humanities**

The purpose of the German curriculum is to introduce students to the language, literature, and culture of German-speaking countries. The courses are designed to promote a global perspective by encouraging students to take a close look at another culture and in this way become aware of both the diversity and similarity among all people. The courses satisfy general education and major/minor requirements and prepare students for teaching or graduate study.

**Objectives**—Students develop a number of skills, including listening comprehension and speaking, reading and writing, to communicate effectively in German about everyday situations, literature, and culture. Students gain an awareness of the structure of languages and facility with the German idiom, enabling them to read and write reports and papers. In literature seminars, students learn aesthetic appreciation through the interpretation of texts and to organize their thoughts for effective argumentation. Many German courses give students an interdisciplinary perspective, using history, art, architecture, music, and film. Study abroad is recommended to increase fluency and proficiency and to develop cultural literacy. The German program prepares its graduates for careers in teaching, business, political science, the natural sciences, medicine, music, psychology, philosophy, theology, and law, among others. Several courses in the natural sciences, if taken in German, may be applied toward the German major and minor to prepare students for graduate study in those fields and internships or career opportunities.

**Study Abroad**

In light of today’s increasingly interdependent world, the UMM German faculty endorses study abroad in combination with a German major or minor, as the most effective means by which to

- improve language abilities
- broaden academic horizons
- globalize one’s world view
- expand career opportunities
- advance cross-cultural and problem-solving skills
- gain confidence in oneself personally and professionally

Study in Austria and Germany—Students interested in a foreign study experience may spend a semester or a full year in Berlin (Humboldt University), Vienna (Center for Central European Studies), or Freiburg (University of Freiburg) through the Institute of European Studies. Language prerequisites vary for individual programs. Internships are available in all of them. Through the Learning Abroad Center, students may also participate in bilateral exchanges to Austria and Karl Franzens University in Graz and with the University of Salzburg.

**German Major**

**Courses for Admission**

**Beginning German**

Beginning German I and II or equivalent previous language experience required to take intermediate German.

**Program Requirements**

No grades below C- are allowed. Courses may not be taken S-N unless offered S-N only.

A minimum GPA of 2.00 is required in the major to graduate. The GPA includes all, and only, University of Minnesota coursework. Grades of F are included in GPA calculation until they are replaced.

In addition to the requirements for the major, students are encouraged to complete at least one year of instruction in another foreign language.

**Courses for the Program**

**Required Courses**

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<tr>
<th>Course</th>
<th>Credits</th>
<th>Notes</th>
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<tr>
<td>Ger 2011—German Conversation and Composition, IP</td>
<td>4 cr</td>
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<td>Ger 2002—Intermediate German II: German Culture</td>
<td>4 cr</td>
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<td>and Civilization, IP</td>
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<tr>
<td>Ger 2011—German Conversation and Composition, IP</td>
<td>4 cr</td>
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<td>Ger 3011—Readings in German, IP</td>
<td>4 cr</td>
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<td>Ger 3010—Survey of German Literature and Culture</td>
<td>4 cr</td>
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<td>I, Hum</td>
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<td>Ger 3012—Survey of German Literature and Culture</td>
<td>4 cr</td>
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<td>II, Hum</td>
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<tr>
<td>Take 4 or more credits(s) from the following:</td>
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<td>Ger 3201—Periods: German Classicism, Hum</td>
<td>4 cr</td>
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<td>Ger 3202—Periods: German Romanticism, Hum</td>
<td>4 cr</td>
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<tr>
<td>Ger 3203—Periods: German Modernism, IP</td>
<td>4 cr</td>
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**Elective Courses**

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<tbody>
<tr>
<td>Hist 3156—Modern German Intellectual History, Hist</td>
<td>4 cr</td>
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<td>Hist 3204—Nazi Germany, Hist</td>
<td>4 cr</td>
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<tr>
<td>Hist 3209—Modern Germany, Hist</td>
<td>4 cr</td>
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**German Minor**

**Courses for Admission**

**Beginning German**

Beginning German I and II or equivalent previous language experience required to take intermediate German.

**Minor Requirements**

No grades below C- are allowed. Courses may not be taken S-N unless offered S-N only.

A minimum GPA of 2.00 is required in the minor to graduate. The GPA includes all, and only, University of Minnesota coursework. Grades of F are included in GPA calculation until they are replaced.

**A minimum GPA of 2.00 is required in the minor to graduate.**

**Courses for Admission**

**Beginning German**

Beginning German I and II or equivalent previous language experience required to take intermediate German.

**Minor Requirements**

No grades below C- are allowed. Courses may not be taken S-N unless offered S-N only.

A minimum GPA of 2.00 is required in the minor to graduate. The GPA includes all, and only, University of Minnesota coursework. Grades of F are included in GPA calculation until they are replaced.
Courses for the Program

Required Courses

Ger 2001—Intermediate German I, IP (4 cr)
Ger 2002—Intermediate German II: German Culture and Civilization, IP (4 cr)
Ger 2011—German Conversation and Composition, IP (4 cr)
Ger 3011—Readings in German, IP (4 cr)
Ger 3010—Survey of German Literature and Culture I, Hum (4 cr)
Ger 3012—Survey of German Literature and Culture II, Hum (4 cr)

Elective Courses

Phys 3101, 3501, or 4101 may count as elective credit if taken in German.

Take 8 or more credits from the following:

Ger 3031—German Play, ArtP (4 cr)
Ger 3041—New German Cinema, IP (4 cr)
Ger 3042—Weimar Film, IP (4 cr)
Ger 3501—Women’s Issues in Contemporary German Culture, IP (4 cr)
Ger 3601—Studies in German Literature, Hum (4 cr)
Ger 3611—Austrian Studies, Hum (4 cr)
Ger 3xx, 4xxx
Hist 3156—Modern German Intellectual History, Hist (4 cr)
Hist 3204—Nazi Germany, Hist (4 cr)
Hist 3209—Modern Germany, Hist (4 cr)

Teacher Preparation Requirements

Students seeking teaching licensure in German K–12 should refer to the Education, Secondary (SeEd) section of this catalog.

Required Proficiency/Placement Examination

Students who plan to complete courses in the same language they studied in high school must take the proficiency/placement exam and abide by the placement recommendation. If, after an initial exposure to the recommended course, the placement seems inappropriate, students may follow the recommendation of their language instructor as to the proper entry course.

German Course Descriptions

Ger 1001. Beginning German I. (FL; 4 cr; fall, every year)
Introduction to German as it is spoken and written presently. The course acquaints students with the basic sounds, structures, and vocabulary of German and enables them to understand, read, and write the language and to communicate in German about everyday situations. It makes them aware of the relationship between culture and language.

Ger 1002. Beginning German II. (FL; 4 cr; prereq 1001 or placement or #; spring, every year)
Continuation of 1001.

Ger 1991. Directed Study. (1-5 cr [max 10 cr]; prereq approved directed study form; fall, spring, every year)
An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum.

Ger 2001. Intermediate German I. (IP; 4 cr; prereq 1002 or placement or #; fall, every year)
The skills of listening, reading, and writing are enforced through grammar review and discussion of modern texts.

Ger 2002. Intermediate German II: German Culture and Civilization. (IP; 4 cr; prereq 2001 or #; spring, every year)
A variety of readings in German to examine the historical and contemporary aspects of the culture of German-speaking countries. Students give oral reports and write papers about art, architecture, literature, philosophy, or music. They keep a journal of visits to sites on the World Wide Web relevant to topics such as geography, history, and culture.

Ger 2011. German Conversation and Composition. (IP; 4 cr; prereq 1002 or #; may enroll concurrently with 2001; fall, every year)
This course builds on grammar and structure learned in the beginning sequence. Students engage in discussions about daily activities and topics of their interest. Models for writing and speaking are provided in the form of short stories, newspaper articles, and literary excerpts. Visual materials serve as points of departure for conversation and composition.

Ger 2993. Directed Study. (1-5 cr [max 10 cr]; prereq approved directed study form; fall, spring, every year)
An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum.

Ger 3011. Readings in German. (IP; 4 cr; prereq 2011 or #; may enroll concurrently with 2001; soph or higher recommended; spring, every year)
Students read and analyze modern texts in order to advance their ability to comprehend and discuss various literary styles. This course is a prerequisite for more advanced courses in the major and minor.

Ger 3031. German Play. (ArtP; 4 cr; prereq 2001 or #; fall, spring, offered when feasible)
Reading, study, and presentation of a short contemporary play. Enhances fluency and familiarity with the modern German idiom.

Ger 3041. New German Cinema. (IP; 4 cr; =[Hum 3041]; prereq 3011; fall, offered when feasible)
Same as Hum 3041. Traces the development of New German Cinema which began in the 1960s, and continues in the post-unification period. Introduction to films by both East and West German directors who define this national cinema; the cultural, political, and economic context of its production; reference to theories and critiques to provide an overview of German film and culture of the period. Film presentations are in German with English subtitles. Readings and lectures are in English. Final papers are either in German (for German credit) or English (for Humanities credit).

Ger 3042. Weimar Film. (IP; 4 cr; =[Hum 3042]; prereq 3011; spring, offered when feasible)
Same as Hum 3042. Development of the German film as expressionistic art form. Film as text, film as history, film as aesthetic expression. Film presentations are in German but with English subtitles in most cases. Readings and lectures are in English. Final papers either in German (for German credit) or English (for Humanities credit).

Ger 3101. Survey of German Literature and Culture I. (Hum; 4 cr; prereq 3011 or #; fall, every year)
Chronological study of German literature and its cultural background from the early beginnings through the 18th century. Selected representative works are read and analyzed.

Ger 3102. Survey of German Literature and Culture II. (Hum; 4 cr; prereq 3011 or #; spring, every year)
Chronological study of German literature and its cultural background from the 18th century to the 20th century. Selected representative works are read and analyzed.

Ger 3201. Periods: German Classicism. (Hum; 4 cr; prereq 3011, 3102 or #; spring, even years)
Readings in aesthetic theory and exemplary works by writers of the period. Texts by Goethe and Schiller are read and analyzed in conjunction with operas libretti based on their works. Modern films and videos of theater performances supplement the readings.

Ger 3202. Periods: German Romanticism. (Hum; 4 cr; prereq 3101, 3102 or #; spring, odd years)
Readings in Romantic theory and works by important authors of the period: Wackenroder, Tieck, Novalis, Eichendorff, and E.T.A. Hoffmann. Other art forms, such as music and painting, supplement the literary discussions.

Ger 3203. Periods: German Modernism. (IP; 4 cr; prereq 3011, 3102 or #; fall, spring, offered when feasible)
Explores the culture of German-speaking countries around the turn of the 20th century (1890-1933) through literature, music, and the visual arts, especially as manifested in Symbolism, Secession (Art Nouveau), Expressionism, Dada, and New Objectivity.

Ger 3501. Women’s Issues in Contemporary German Culture. (IP; 4 cr; =[Hum 3501]; prereq 3011 or #; spring, offered when feasible)
Same as Hum 3501. Focus is on the German women’s movement during the 20th century, historical relationship of gender and class, and lives of women from various ethnic backgrounds in Germany and Austria. Short stories, essays, and poems document the evolution of feminist literary theory in German studies. Readings and lectures are in English. Final papers either in German (for German credit) or English (for Humanities credit).
An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum.

Ger 4901. Senior Project. (1-5 cr [max 10 cr]; prereq 3011 or #; fall, spring, every year)
A substantial scholarly or creative work (at the undergraduate level) in conjunction with or upon the completion of another course within the discipline. The senior project is recommended for German majors.

Ger 4993. Directed Study. (0-5 cr [max 10 cr]; prereq approved directed study form; fall, spring, every year)
An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum.

History (Hist)

Division of the Social Sciences

Objectives—The history curriculum is designed to introduce students to the study of the human past. Students majoring in history learn to approach decision-making with an awareness of a broad range of choices; learn to think critically and communicate their ideas effectively; integrate their academic study with their intellectual and moral maturation; understand the construction of historical knowledge; and learn how to learn. The curriculum emphasizes the role of the student as an active learner and encourages individualized learning experiences, including those outside of established coursework, and the development of close working relationships between students and faculty.

History Major

Program Requirements

Students should develop a coherent program of study in consultation with their major adviser. The student and adviser must meet to plan the student’s course of study and ensure that the major encompasses breadth across regions and time periods. The student’s plan must involve at least one western and one non-western course. The student must bring a list of history courses completed and ongoing.

When the student applies for graduation the adviser reviews the student’s course of study to document that the student has successfully demonstrated breadth across regions and time periods in the major.

Prior to the end of the second week of the student’s last semester before graduation, the student completes an anonymous online assessment of how well the program of study has enhanced the student’s

• familiarity with a range of historical periods and cultures sufficiently broad to allow meaningful exploration of the human experience in varied times and places;
• ability to critically analyze, interpret, and synthesize various types of historical materials;
• insight into the construction of historical knowledge as reflective of personal and social contexts;
• ability to initiate and pursue a course of historical inquiry.

No grades below C- are allowed.

A minimum GPA of 2.00 is required in the major to graduate. The GPA includes all, and only, University of Minnesota coursework. Grades of F are included in GPA calculation until they are replaced.

Courses for the Program

Required Courses

These courses may not be taken S-N unless offered S-N only.

Hist 1101—Introduction to World History to 1500, Hist (4 cr)
or Hist 1102—Introduction to World History Since 1500, Hist (4 cr)
Hist 4110—Tutorial in History (1 cr)
Hist 4120—Tutorial in History (4 cr)

Elective Courses

Elective course numbering system:
• 300x to 301x—Topics that transcend traditional chronological categories
• 310x to 311x—Europe before 1750
• 315x to 316x—Europe since 1750
• 320x to 321x—Selected European nations
• 330x to 331x—North America or the U.S. before 1865
• 335x to 336x—U.S. since 1865
• 345x to 346x—U.S. history that transcends traditional chronological categories
• 355x to 356x—Selected Asian nations
• 360x to 361x—Latin America
• 370x to 371x—History of women

Students must include at least one western and one non-western course.

Take 28 or more credit(s) from the following:

Hist 1301—Introduction to U.S. History, Hist (4 cr)
Hist 1402—Women in U.S. History, HDiv (4 cr)
Hist 1501—Introduction to East Asian History: China, Japan, and Korea before 1800., IP (4 cr)
Hist 1601—Latin American History: A Basic Introduction, IP (4 cr)
Hist 2001—The Study of History: Schools, Rules, and Tools, Hist (4 cr)
Hist 3001—Families Through the Prism of Memory, Genealogy, and History, Hist (4 cr)
Hist 3008—The Making of the Islamic World, HDiv (4 cr)
Hist 3009—Microhistory, Hist (4 cr)
Hist 3012—History of Ancient Greece and Rome, Hist (4 cr)
Hist 3101—Renaissance and Reformation, Hist (4 cr)
Hist 3102—Early Modern Europe, Hist (4 cr)
Hist 3103—Medieval Europe, Hist (4 cr)
Hist 3151—Modern Europe, Hist (4 cr)
Hist 3156—Modern German Intellectual History, Hist (4 cr)
Hist 3161—The Enlightenment, Hist (4 cr)
Hist 3204—Nazi Germany, Hist (4 cr)
Hist 3207—The Crusades, IP (4 cr)
Hist 3209—Modern Germany, Hist (4 cr)
Hist 3210—Popular Religion, Heresy, and Inquisition in the Middle Ages, Hist (4 cr)
Hist 3211—Modern France, Hist (4 cr)
History Minor

Minor Requirements

No grades below C- are allowed.

A minimum GPA of 2.00 is required in the minor to graduate. The GPA includes all, and only, University of Minnesota coursework. Grades of F are included in GPA calculation until they are replaced.

Courses for the Program

Required Courses

These courses may not be taken S-N unless offered S-N only.

Hist 1101—Introduction to World History to 1500, Hist (4 cr) or Hist 1102—Introduction to World History Since 1500, Hist (4 cr)

Elective Courses

An additional 16 credits in history of which 12 credits are at 2xxx or above.

There should be evidence of work in at least two geographic areas, with at least one of these in a non-Western area.

Take no more than 4 credit(s) from the following:

Hist 1301—Introduction to U.S. History, Hist (4 cr)
Hist 1402—Women in U.S. History, Hist (4 cr)
Hist 1501—Introduction to East Asian History: China, Japan, and Korea before 1800, IP (4 cr)
Hist 1601—Latin American History: A Basic Introduction, IP (4 cr)
Hist 1xxx

Take 12 or more credit(s) from the following:

Hist 2001—The Study of History: Schools, Rules, and Tools, Hist (4 cr)
Hist 3001—Families Through the Prism of Memory, Genealogy, and History, Hist (4 cr)

Hist 3008—The Making of the Islamic World, HDiv (4 cr)
Hist 3009—Microhistory, Hist (4 cr)
Hist 3012—History of Ancient Greece and Rome, Hist (4 cr)
Hist 3101—Renaissance and Reformation, Hist (4 cr)
Hist 3102—Early Modern Europe, Hist (4 cr)
Hist 3103—Medieval Europe, Hist (4 cr)
Hist 3151—Modern Europe, Hist (4 cr)
Hist 3156—Modern German Intellectual History, Hist (4 cr)
Hist 3161—The Enlightenment, Hist (4 cr)
Hist 3204—Nazi Germany, Hist (4 cr)
Hist 3207—The Crusades, IP (4 cr)
Hist 3209—Modern Germany, Hist (4 cr)
Hist 3210—Popular Religion, Heresy, and Inquisition in the Middle Ages, Hist (4 cr)
Hist 3211—Modern France, Hist (4 cr)
Hist 3251—American Indians and the United States: A History, HDiv (4 cr)
Hist 3301—Red, White, and Black: Race/Culture in Early America, HDiv (4 cr)
Hist 3303—Creation of the American Republic, Hist (4 cr)
Hist 3351—The U.S. Presidency Since 1900, SS (4 cr)
Hist 3352—The U.S. 1960s, Hist (4 cr)
Hist 3353—World War II, Hist (4 cr)
Hist 3355—United States in Transition, 1877-1920, Hist (4 cr)
Hist 3356—Modern German Intellectual History, Hist (4 cr)
Hist 3357—Modern Japan, Hist (4 cr)
Hist 3358—Civil War and Reconstruction, Hist (4 cr)
Hist 3359—Native Strategies for Survival, 1880-1920, HDiv (4 cr)
Hist 3361—An Environmental and Geographic History of the United States, Env (4 cr)
Hist 3451—Facing West, HDiv (4 cr)
Hist 3452—Minnesota History, Hist (4 cr)
Hist 3453—The American Presidency, 1789-1900, Hist (4 cr)
Hist 3455—American Immigration, Hist (4 cr)
Hist 3456—History of Religion in America, Hist (4 cr)
Hist 3457—American Biography and Autobiography, Hist (4 cr)
Hist 3459—Lewis and Clark: An American Odyssey, Hist (4 cr)
Hist 3501—Modern Japan, Hist (4 cr)
Hist 3551—The U.S. Presidency Since 1900, SS (4 cr)
Hist 3552—The U.S. 1960s, Hist (4 cr)
Hist 3553—World War II, Hist (4 cr)
Hist 3555—United States in Transition, 1877-1920, Hist (4 cr)
Hist 3556—Civil War and Reconstruction, Hist (4 cr)
Hist 3557—Modern Germany, Hist (4 cr)
Hist 3558—Civil War and Reconstruction, Hist (4 cr)
Hist 3559—Native Strategies for Survival, 1880-1920, HDiv (4 cr)
Hist 3601—Great Books in Latin American History, IP (4 cr)
Hist 3608—The Cuban Revolution in Historical Perspective, Hist (4 cr)
Hist 3704—Women in the Middle Ages, SS (4 cr)
Hist 3706—Women in Early Modern Europe, SS (4 cr)
Hist 3707—Gender in East Asia, HDiv (4 cr)
Hist 3708—European Women’s History, 1600-Present, IP (4 cr)
Hist 3993—Directed Study (1–5 cr)
Hist 4993—Directed Study (1–5 cr)
Hist 1xxx, 2xxx, 3xxx, 4xxx

History Course Descriptions

Hist 1101. Introduction to World History to 1500. (Hist; 4 cr; fall, every year) Methods, themes, and problems in study of world history to 1500.

Hist 1102. Introduction to World History Since 1500. (Hist; 4 cr; spring, every year) Methods, themes, and problems in the study of world history since 1500.

Hist 1301. Introduction to U.S. History. (Hist; 4 cr; fall, every year) Methods, themes, and problems in the study of the history of the United States.
Hist 1402. Women in U.S. History. (HDIV; 4 cr; fall, spring, offered when feasible) Themes and methods in the history of women in the United States. Topics may include women in the colonial era; American Indian, African American, and immigrant women; sex roles; women and work, family, politics, the law, and religion.

Hist 1501. Introduction to East Asian History: China, Japan, and Korea before 1800. (IP; 4 cr; fall, offered when feasible) Examination of the social, political, economic, technological, and cultural changes in East Asia before 1800. Possible sub-themes include the rise of the Confucian world order, the spread of Buddhism, and East Asian interactions with the outside world. Discussion of changing perceptions of gender.

Hist 1601. Latin American History: A Basic Introduction. (IP; 4 cr; spring, even years) Methods, themes, and problems in the study of Latin American history.

Hist 2001. The Study of History: Schools, Rules, and Tools. (Hist; 4 cr; spring, odd years) Introduction to historical research methods and 20th-century historiography. How to evaluate and employ primary and secondary sources, to cite evidence, and to develop critical historical arguments in a research project. Exploration of key transformations within the field of history, surveying various schools of thought, and assessing the specific advantages and challenges of the approaches. Topics may include Freudian and Marxist interpretations, the Annales school, quantitative analysis, anthropological and sociological approaches, and gender and postcolonial theory.

Hist 3001. Families Through the Prism of Memory, Genealogy, and History. (Hist; 4 cr; fall, even years) Historical and genealogical approach to the study of family.

Hist 3008. The Making of the Islamic World. (HDIV; 4 cr; fall, even years) Examines the origins, spread, and impact of Islamic civilization from the 6th through 15th centuries with particular emphasis upon political, religious, and intellectual developments.

Hist 3009. Microhistory. (Hist; 4 cr; fall, spring, offered when feasible) An in-depth historical examination of one or more locales and their relationship to broader historical phenomena.

Hist 3102. Early Modern Europe. (Hist; 4 cr; fall, spring, offered when feasible) A chronological survey of ancient Greece and Rome, two cultures fundamental to the development of Western society. Starts with the prehistory of Greece and ends with the decline of the Roman Empire. Texts, visual art, and architecture are used to examine these cultures and to analyze how they perceived themselves and others.

Hist 3101. Renaissance and Reformation. (Hist; 4 cr; spring, even years) Examination of western European history and historiography between 1350 and 1600 with emphasis on cultural “renaissances” and religious “reformations.”

Hist 3103. Medieval Europe. (Hist; 4 cr; fall, spring, offered when feasible) Survey of historical developments in Europe from about 1350 through the 18th century.

Hist 3166. Modern German Intellectual History. (Hist; 4 cr; fall, even years) Many of the most influential ideas of the 19th and 20th centuries emerged from the German-speaking world and it is worth considering how and why that happened. Examination of the German intellectual history since 1815 and the various relationships between ideas and politics that have shaped German state-building, as well as the ways in which those ideas have had other lives in other places.

Hist 3161. The Enlightenment. (Hist; 4 cr; spring, even years) The intellectual ferment of the Enlightenment has been given the credit and the blame for all things modern—from the concept of human rights and the democracy it has engendered to the subversion of those rights in the totalitarian regimes of the 20th century. Exploration of the ideas of the Enlightenment and their political context and attempt to answer the question of how such an important development in human history can be viewed in such contradictory ways.

Hist 3162. The Scottish Enlightenment: Texts and Contexts. (IP; 4 cr; (Phil 3162); summer, offered when feasible) Same as Phil 3162. Study of the philosophy and history of the Scottish Enlightenment. Focus on its original setting through analysis and discussion of primary texts and scholarly interpretations, guest lectures, and small-group discussions with recognized experts in the study of the Scottish Enlightenment. Includes visits to historically significant cities and sites. [Continuing Education course]

Hist 3204. Nazi Germany. (Hist; 4 cr; fall, odd years) History of Nazi Germany. Social and political origins, Nazi rule in the 1930s, the “final solution,” World War II, and Germany’s attempt to assess this era in its history.

Hist 3207. The Crusades. (IP; 4 cr; spring, odd years) Explores the historical contexts and consequences of the European Crusades between the 11th century and early modern period, including the perspective of European Jews, Turkish and Arabic Muslims, and Byzantine and Near Eastern Christians.

Hist 3209. Modern Germany. (Hist; 4 cr; spring, even years) Examination of German history from the development of German national ideas through unification and consolidation of the modern German state in 1871 and through its re-unification at the end of the 20th century. Examines one of the most fascinating and tumultuous periods in German and European history, why the attempt to understand the German past has occupied so many historians, and why the debates surrounding that attempt have been so contentious. Sources include written by established historians of Germany, novels, films, and music.

Hist 3210. Popular Religion, Heresy, and Inquisition in the Middle Ages. (Hist; 4 cr; fall, spring, offered when feasible) The history of popular religious belief and practice in medieval Europe (c. 500-1500) and the relationship between heresy, reform, and inquisition. Topics may include pilgrimage, prayer, saints and sacraments; religious roles for laypeople and women; new orders and heresies; and the late-medieval growth of inquisitorial activity and administration.

Hist 3211. Modern France. (Hist; 4 cr; fall, even years) Examination of French culture and history from the Revolution (1789) to the present. The ways in which successive governments, from Napoleon’s empire through the Fifth Republic, have come to terms with legacies of the Revolution such as national citizenship, individual rights, and the politicization of women.


Hist 3301. Red, White, and Black: Race/Culture in Early America. (HDIV; 4 cr; fall, odd years) History of race in early America. Exploration of the coming together of three groups of peoples—Africans, American Indians, and Europeans—and the roles which they played in the emergence of the “first new nation.”

Hist 3303. Creation of the American Republic. (Hist; 4 cr; fall, spring, offered when feasible) Examination of the history of the United States from the beginning of the Seven Years’ War in 1754 to the end of the War of 1812. The origins of the nation and the political, cultural, and social changes that accompanied the birth and early years of the American Republic. Focus on the political and social history of the American Revolution. Other topics include women in revolutionary America, the reenchantment of slavery, indigenous people and early Indian policy, religion and revivalism, the constitutional crisis, and the early presidencies.

Hist 3351. The U.S. Presidency Since 1900. (SS; 4 cr; fall, even years) History of the 20th-century U.S. presidency. Brief consideration of the Presidency before 1900, analysis of performance of presidents since 1900 in roles of chief executive, commander-in-chief, chief diplomat, and chief of state during an era of enlarged governmental functions at home and world power abroad.

Hist 3352. The U.S. 1960s. (Hist; 4 cr; fall, even years) History of the United States in the 1960’s. Backgrounds to the 1960s; political and cultural issues of the decade; the Kennedy promise, civil rights and other movements, Vietnam war, counterculture, conservative backlash, and legacy.

Hist 3353. World War II. (Hist; 4 cr; fall, spring, offered when feasible) Origins, political and military aspects of the war in Europe and Asia, domestic mobilization, the Holocaust and Atomic Bomb, aftermath.
Hist 3355. United States in Transition, 1877-1920. (Hist; 4 cr; spring, even years)
The incorporation of the United States and ongoing tensions between unity and diversity, nativism and Anti-Catholicism, and the development of political culture, and the changing nature of regional identity.

Hist 3356. Civil Rights Movement, 1954-1974. (Hist; 4 cr; fall, spring, offered when feasible)
Background of the Civil Rights movement, emergence of the theory and practice of nonviolence, various Civil Rights groups, role of women, and other accomplishments of the movement, its aftermath, and influence.

Hist 3358. Civil War and Reconstruction. (Hist; 4 cr; fall, spring, offered when feasible)
Origin, context, and significance of the Civil War and Reconstruction.

Hist 3359. Native Strategies for Survival, 1880-1920. (HDIV; 4 cr; fall, odd years)
Exploration of the events and policies that sought to eliminate American Indian communities and cultures and the strategies that American Indians developed to survive. Students gain insight into a pivotal time for the “incorporation” of the United States and ongoing tensions between unity and diversity that characterize the nation’s political economy and social structure. Paradoxes under scrutiny include the degree to which policies claiming to emancipate actually imprisoned and prisons became homelands.

Hist 3361. An Environmental and Geographic History of the United States. (Envt; 4 cr; fall, spring, offered when feasible)
A broad examination of how humans interacted with their natural world throughout American history. Combined emphasis on cultural and political ecology (the study of how various cultural groups shaped the American landscape) and political ecology (the role of the nation’s political economy in driving environmental change). Possible topics include: the Columbian Exchange, European and American Indian conflict, Thoreau and the creation of an environmental ethic, the slaughter of the bison as an ecological tragedy, urbanization and environmental racism, conservation as a political movement and the development of environmental policy, eco-feminism, American religion and the environment, the politics of global climate change.

Hist 3451. Facing West. (HDIV; 4 cr; fall, spring, offered when feasible)
History of the American West. What is the West to the United States? Examination of the meaning of the West as both place and process for U.S. history; exploring the distinctive role that the West has played in the development of the United States from 1790 to the 21st century. Special emphasis on the interplay between different peoples in the vast and varied region.

Hist 3452. Minnesota History. (Hist; 4 cr; fall, spring, offered when feasible)
Examination of the social, cultural, and political history of Minnesota with emphasis on American Indian and European-American conflict, immigration and ethnicity, the development of political culture, and the changing nature of regional identity.

Hist 3453. The American Presidency, 1789-1900. (Hist; 4 cr; fall, spring, offered when feasible)
Growth and development of the U.S. presidency during its first century. Emphasis on selected presidencies such as those of George Washington, Thomas Jefferson, Andrew Jackson, James K. Polk, Abraham Lincoln, and William McKinley.

Hist 3455. American Immigration. (Hist; 4 cr; spring, every year)
The role of voluntary migration in U.S. history from the late 18th century to the present. Emphasis on settlement, ethnicity, nativism, transnational issues, immigration law. Possible topics include European immigrants and “whiteness,” restriction of immigration from Asia, ethnicity and U.S. foreign and military policy, and the varieties of immigration, legal and undocumented, since 1965.

Hist 3456. History of Religion in America. (Hist; 4 cr; fall, spring, offered when feasible)
The history of religion in American life from the perspective of ordinary Americans. Religious diversity receives special emphasis. Topics may include New England witchcraft, the First and Second Great Awakenings, American Indian belief systems, nativism and Anti-Catholicism, religion and politics, immigrant religion and new fundamentalist movements.

Hist 3457. American Biography and Autobiography. (Hist; 4 cr; fall, spring, offered when feasible)
Seminar and readings in biography and autobiography; a long paper on an aspect of the biography of an American of the student’s choice.

Hist 3459. Lewis and Clark: An American Odyssey. (Hist; 4 cr; fall, spring, offered when feasible)
The journey of Meriwether Lewis and William Clark and the men under their command has long been considered the quintessential American adventure and an audacious exercise in individual courage. What was the object of the Corps of Discovery’s journey? Why does this journey remain such a compelling story almost two centuries after it concluded? (Continuing Education course)

Hist 3551. Modern Japan. (Hist; 4 cr; fall, spring, offered when feasible)
The history of Japan from the foundation of the Tokugawa Shogunate until the present. Special attention to issues of gender, nationalism, and modernity.

Hist 3552. History of Modern China. (Hist; 4 cr; spring, offered when feasible)
Study of the history of China from the foundation of the Qing dynasty in the 1600s until the present. Special attention to issues of gender, nationalism, and modernity.

Hist 3554. Korean History. (Hist; 4 cr; fall, spring, offered when feasible)
The history of the Korean peninsula from neolithic times to the present. Special attention to evolving Korean understandings of gender and technology.

Hist 3601. Great Books in Latin American History. (IP; 4 cr; fall, every year)
A look at Latin American history through great books.

Hist 3608. The Cuban Revolution in Historical Perspective. (Hist; 4 cr; fall, spring, offered when feasible)
A survey of modern Cuban history with an emphasis on the Cuban Revolution. An introduction to a wide variety of perspectives.

Hist 3704. Women in the Middle Ages. (SS; 4 cr; spring, even years)
Analysis of the history of European women and gender systems as constructed during the Middle Ages (c. 500-1500).

Hist 3706. Women in Early Modern Europe. (SS; 4 cr; fall, spring, offered when feasible)
Examination of lives of women in Europe from about 1350 through the 18th century.

Hist 3707. Gender in East Asia. (HDIV; 4 cr; fall, spring, offered when feasible)
Study of the changing perceptions of gender in East Asia from its earliest written records until the present. Special emphasis on the changing role of women in East Asia. Exploration of the way gendered discourse affected broader understandings of society, politics, the economy, and culture. Background in East Asian history, while preferred, is not required.

Hist 3708. European Women’s History, 1600-Present. (IP; 4 cr; fall, spring, offered when feasible)
Examination of the forces that have shaped the lives of European women since 1600 and analysis of how changes in the structures of power and authority—religious, political, social, familial—affected the choices available to them. Students engage critically with the question of what bringing gender to the forefront of the study of European history has to teach them. Students gain an understanding of many of the underpinnings of American society, which has been deeply affected by European patterns of thought about women and their place in the world.

Hist 3993. Directed Study. (1-5 cr [max 10 cr]; prereq approved directed study form; fall, spring, every year)
An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum.

Hist 4110. Tutorial in History. (1 cr [max 2 cr]; prereq history major; no cr for 4110 until 4120 completed; fall, spring, every year)
A culminating historical research project. Students who wish to graduate in December must begin this project the preceding spring. Students should register for 4110 before 4120.

Hist 4120. Tutorial in History. (4 cr [max 8 cr]; prereq history major; no cr for 4110 until 4120 completed; fall, spring, every year)
A culminating historical research project. Students who wish to graduate in December must begin this project the preceding spring. Students should register for 4110 before 4120.

Hist 4993. Directed Study. (1-5 cr [max 10 cr]; prereq approved directed study form; fall, spring, every year)
An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum.
Honors Program

Interdisciplinary Studies— Academic Dean

The Honors Program represents an opportunity for UMM students to pursue an interdisciplinary and interdivisional curriculum and work toward graduation “with honors.” All UMM students are eligible to participate in the Honors Program.

Honors courses are limited to a class size of 20. The elective courses examine a particular topic from an interdisciplinary perspective. The courses are often team-taught by faculty from different UMM academic divisions and concern subjects of special interest to the faculty who design them.

Further information about the Honors Program may be obtained from the Academic Center for Enrichment (ACE) office at www.morris.umn.edu/ACE.

Admission Requirements

Students normally apply to the program in spring semester of their freshman year and begin coursework in their sophomore year. While everyone may apply, academic success in the fall semester, faculty recommendations, and a short essay may be used to limit the number of students to those with the proven motivation and ability to likely succeed in the program. Applications are available at the Academic Center for Enrichment, 5 Student Center.

Honors Program Requirements

Senior Honors Project: It is the responsibility of the student to secure a project adviser for the senior honors project, identify two other faculty for the panel in consultation with the project adviser, and register for at least 2 credits of IS 4994H—Senior Honors Project. Students should submit the completed project to the Honors Program director and panel members by April 1 and arrange for the defense.

A minimum GPA of 3.50 in all University of Minnesota, Morris courses is required. Grades of “F” are included in GPA calculation until they are replaced.

Courses for the Program

Required Courses

IS 2001H is usually completed in fall of the sophomore year.

IS 2001H—Honors: Traditions in Human Thought, HUM, H (2 cr)
IS 4994H—Senior Honors Project, H (1–4 cr)

Elective Courses

Any fully-approved IS 3xxxH course may be used to fulfill the 4 course elective requirement.

Take 4 or more course(s) from the following:

IS 3111H—Honors: The End of the World as We’ve Known It: The Apocalypse Then and Now, SS, H (2 cr)
IS 3203H—Honors: A Cross-Section of the Enlightenment, HIST, H (2 cr)
IS 3204H—Honors: Ecological Health and the Sustainability of Common-Property Resources, ENVT, H (2 cr)
IS 3206H—Honors: Introduction to Game Theory, M/SR, H (2 cr)
IS 3207H—Honors: Utopia(s), HUM, H (2 cr)
IS 3208H—Honors: Totalitarianism: Imagination, Theory, and Experience, SS, H (2 cr)
IS 3209H—Honors: Apocalypse Now? The Science and Policy of Preparing for a Catastrophe, ENVT, H (2 cr)
IS 3212H—Honors: Totalitarianism: Imagination, Theory, and Experience. (Hist; 2 cr; prereq participation in Honors Program or #; fall, every year)
IS 3213H—Honors: The Science and Policy of Preparing for a Catastrophe. (Env; 2 cr; prereq participation in Honors Program or #; fall, every year)
IS 3218H—Honors: Global Encounters and the Making of the Contemporary World. 1450 to the Present. (Hist; 2 cr; prereq participation in Honors Program or #; fall, every year)
IS 3224H—Honors: Totalitarianism: Imagination, Theory, and Experience. (Hist; 2 cr; prereq participation in Honors Program or #; fall, every year)
IS 3225H—Honors: The Science and Policy of Preparing for a Catastrophe. (Env; 2 cr; prereq participation in Honors Program or #; fall, every year)
IS 3226H—Honors: Global Encounters and the Making of the Contemporary World. 1450 to the Present. (Hist; 2 cr; prereq participation in Honors Program or #; fall, every year)
IS 3227H—Honors: Global Encounters and the Making of the Contemporary World. 1450 to the Present. (Hist; 2 cr; prereq participation in Honors Program or #; fall, every year)

Honors Course Descriptions

IS 2001H, Honors: Traditions in Human Thought. (Hum; 2 cr; prereq participation in the Honors Program or #; fall, every year)
A study of a selection of significant works from history, literature, philosophy, science, and religion across continents from the earliest writings to the present day. Critical reading, writing, and discussion in an interdisciplinary context are emphasized.

IS 3111H, Honors: The End of the World as We’ve Known It: The Apocalypse Then and Now. (SS; 2 cr; prereq participation in Honors Program or #; fall, spring, offered when feasible)
Exploration of the occasions and representations of apocalyptic views, focusing on the historical, political, and psychological implications. Antecedents and effects of end-of-the-world prophecies are explored through the use of popular culture (e.g. music, science fiction, other media), writings from across cultural and religious frames of reference, and various historical, political, and psychological resources.

IS 3203H, Honors: A Cross-Section of the Enlightenment. (Hist; 2 cr; prereq participation in Honors Program or #; fall, spring, offered when feasible)
A cross-section of the cultural and intellectual history of the 18th century. Figures to be studied may include Descartes, Newton, Locke, Hume, Hobbes, Rousseau, Voltaire, Lavoisier, d’Holbach, and Blake.

IS 3204H, Honors: Ecological Health and the Sustainability of Common-Property Resources. (Env; 2 cr; prereq participation in Honors Program or #; fall, offered when feasible)
Exploration of “sustainability” from the perspective of economics and ecology. Examples might include ocean fisheries, the rain forest, the introduction of alien species, and the global climate.

IS 3206H, Honors: Introduction to Game Theory. (M/SR; 2 cr; [Econ 3014]; prereq participation in the Honors Program, high school higher algebra or #; fall, spring, offered when feasible)
Introduction to the formal theory of strategic interaction and to the intuitions behind the theory. Applications to a selection of problems in the natural and social sciences, such as biological evolution, tacit collusion in pricing, strategic behavior in international relations, and strategy in legislative voting.

IS 3207H, Honors: Utopia(s). (Hum; 2 cr; prereq participation in Honors Program or #; fall, offered when feasible)
The concept of utopia from an interdisciplinary and cross-cultural perspective, drawing from various traditions including literature, the visual arts, and the social sciences. Expertise of guest lecturers in these diverse areas included.

IS 3208H, Honors: Totalitarianism: Imagination, Theory, and Experience. (Hist; 2 cr; prereq participation in Honors Program or #; spring, offered when feasible)
The concept of totalitarianism as it has been theorized, analyzed, and written about in fiction and personal accounts. The approach is cross-cultural and interdisciplinary, and considers the evolution of the concept and experience of totalitarianism over the course of the 20th century.

IS 3209H, Honors: Apocalypse Now? The Science and Policy of Preparing for a Catastrophe. (Env; 2 cr; prereq participation in Honors Program or #; fall, spring, offered when feasible)
Popular visions, policy response, and scientific underpinnings of potentially catastrophic societal problems past and present. Do we worry about the right things? How do scientists, politicians, and purveyors of popular culture assess which threats warrant attention? (two 50-min lect/disc plus multiple evening film screenings)

IS 3212H, Honors: Global Encounters and the Making of the Contemporary World. 1450 to the Present. (Hist; 2 cr; prereq high school higher algebra, participation in Honors Program or #; spring, offered when feasible)
An exploration of the initial interaction among the indigenous people of Africa and the Americas with the people of Europe. Parallel immediate and long-term effects of these initial encounters are identified and discussed.
IS 321H, Honors: The Theory and Practice of Community Based Learning. (E/CR; 2-4 cr [max 4 cr]; prereq participation in Honors Program or #; spring, offered when feasible)
A study of critical pedagogy and social issues related to race and ethnicity in the United States and methods for conducting community-based research projects.

IS 321H, Honors: Evolution and Culture of Human Aggression. (Hum; 2 cr; prereq participation in Honors Program or #; fall, offered when feasible)
Exploration of aggression in medieval literature and culture and theorization about the adaptiveness of aggression. Group and individual aggression expressed by humans living under current conditions is explored from a cultural and evolutionary perspective.

IS 323H, Honors: Drama, Philosophy, and Politics in Classical Greece. (Hum; 2 cr; prereq participation in Honors Program or #; fall, spring, offered when feasible)
Examination of political and philosophical theories found in Plato and Aristotle as revealed in the dramatic works of Aeschylus and Euripides, among others.

IS 324H, Honors: Intersections of Art and Science. (FA; 2 cr; prereq participation in Honors Program or #; spring, offered when feasible)
Explores the intersection of scientific discovery and aesthetic innovation, especially the ways in which scientists and artists have influenced one another’s work. Examines the ways in which these different pursuits value notions of creativity.

IS 499H4. Senior Honors Project. (1-4 cr [max 8 cr]; prereq approved Honors project form, participation in Honors Program; fall, spring, every year)
A substantial scholarly or creative interdisciplinary work designed by the student working cooperatively with a project advisor. Upon completion, the project is defended before a panel of faculty from different disciplines. Successful completion of the senior honors project is one of the requirements for graduating from UMM “with honors.”

Humanities (Hum)

Division of the Humanities

Objectives—These interdisciplinary humanities courses are designed to introduce students to their cultural heritage. This interdisciplinary area explores the literatures and other art forms of the world. Advanced courses in the Division of the Humanities supplement the introductory courses.

Humanities Course Descriptions

Hum 1001. Contesting Visions of the American West. (HDiv; 4 cr; fall, offered when feasible)
Examines literary and cultural representations of the American West from a range of perspectives, including those of Asian and European immigrants, explorers, and American Indians.

Hum 1002. Norse Saga. (Hum; 4 cr; fall, spring, offered when feasible)
Study of medieval sagas, in translation, from Iceland and Norway, and the culture that produced them.

Hum 1003. The King James Bible. (Hum; 4 cr; fall, spring, offered when feasible)
Some of the ways that language and themes of the King James Bible have shaped the themes, language, and values in English and American literature.

Hum 1005. Myth and Literature. (Hum; 4 cr; fall, spring, offered when feasible)
How classical mythology has been used in literature, poetry, drama, and fiction.

Hum 1051. Greek Drama. (Hum; 4 cr; spring, offered when feasible)
Study of Greek drama.

Hum 1054. Backgrounds to Literature: Classical Mythology. (IP; 4 cr; fall, spring, offered when feasible)
A look at primary texts in Greek and Roman myth and at the ways English and American writers have made use of those myths from the Renaissance to the present.

Hum 1101. The European Novel. (Hum; 4 cr; fall, offered when feasible)
Readings in major continental novelists of the 19th and 20th centuries.

Hum 1104. Major Works of Italian Literature in Translation from the Middle Ages to the Present. (Hum; 3 cr; fall, spring, offered when feasible)
Survey of Italian literature from the Middle Ages to the present. Attention given to major works of narrative, poetry, and drama of various periods. This course is conducted in English. [Continuing Education course]

Hum 1105. Italian Cinema. (IP; 3 cr; fall, spring, offered when feasible)
Study of Italian cinema from the silent era to the present, focusing on significant genres and directors, as well as on critical approaches to film studies. Taught in English; all films have English subtitles. [Continuing Education course]

Hum 1552. Literature and History of Jewish and Muslim Spain. (IP; 4 cr; summer, offered when feasible)
Introduction to representative works of literature (taught in English and translated from Spanish, Hebrew, and Arabic) written by or about Spanish Jews and Muslims from the middle ages to the periods of the expulsion of these people from Spain (Jews in 1492 and Muslims in 1609). Comprehension of these works in light of their socio-historical contexts. [Continuing Education course]

Hum 1561. Hispanic Film. (IP; 4 cr; fall, offered when feasible)
Viewing, study, and discussion of the most representative Hispanic cinema coming out of Spain, the United States, and Latin America. The form of the cinema and its specific cultural and political context.

Hum 1993. Directed Study. (1-5 cr [max 10 cr]; prereq approved directed study form; fall, spring, every year)
An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum.

Hum 2011. On War: History, Ethics, and Representations of Modern Warfare. (Hum; 4 cr; prereq Engl 1011 or equiv; fall, offered when feasible)
Explores accounts of several 20th-century American wars. Includes a wide range of course materials (film, journalistic accounts, philosophical essays, and literary texts) and perspectives on war—from the generals to the “grunts” and nurses, from American and non-American perspectives, and from scholarship to oral narratives.

Hum 2301. Intercultural Understanding Through Film. (IP; 2 cr; fall, offered when feasible)
Exploration of how understanding of other cultures can be enhanced by viewing foreign films, with an emphasis on topics such as personal relationships, societal taboos, religion, and political leadership. [Continuing Education course]

Hum 2993. Directed Study. (1-5 cr [max 10 cr]; prereq approved directed study form; fall, spring, every year)
An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum.

Hum 3041. New German Cinema. (IP; 4 cr; = [Ger 3041]; fall, offered when feasible)
Same as Ger 3041. Traces the development of New German Cinema, which began in the 1960s, and continues in the post-unification period. Introduction to films by both East and West German directors who define this national cinema; the cultural, political, and economic context of its production; reference to theories and critiques to provide an overview of German film and culture of the period. Film presentations are in German with English subtitles. Readings and lectures are in English. Final papers are either in German (for German credit) or English (for Humanities credit).

Hum 3042. Weimar Film. (IP; 4 cr; = [Ger 3042]; spring, offered when feasible)
Same as Ger 3042. Development of the German film as expressionistic art form. Film as text, film as history, film as aesthetic expression. Film presentations are in German but with English subtitles in most cases. Readings and lectures are in English. Final papers either in German (for German credit) or English (for Humanities credit).

Hum 3051. Russian Literature. (Hum; 4 cr; spring, offered when feasible)
Study of Russian literature in translation. Special attention to the works of Dostoyevsky, Tolstoy, and Chekhov.

Hum 3501. Women’s Issues in Contemporary German Culture. (IP; 4 cr; = [Ger 3501]; spring, offered when feasible)
Same as Ger 3501. Focus is on the German women’s movement during the 20th century, historical relationship of gender and class, and lives of women from various ethnic backgrounds in Germany and Austria. Short stories, essays, and poems document the evolution of feminist literary theory in German studies. Readings and lectures are in English. Final papers either in German (for German credit) or English (for Humanities credit).
Interdisciplinary Studies (IS)

**Hum 3993. Directed Study.** (1-5 cr [max 10 cr]; prereq approved directed study form; fall, spring, every year)
An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum.

**Hum 4993. Directed Study.** (1-5 cr [max 10 cr]; prereq approved directed study form; fall, spring, every year)
An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum.

### Interdisciplinary Studies—Academic Dean

This is an interdisciplinary group of courses under the authority of the vice chancellor for academic affairs and dean.

**Objectives**—Through interdisciplinary studies, students may investigate subjects viewed from the perspectives of two or more traditional academic disciplines. Interdisciplinary studies may take the form of well-structured internships or regular classroom courses, or directed study projects that stimulate close student-faculty relationships.

Students interested in interdisciplinary internships or directed study projects should consult with their advisers and appropriate division chairs concerning a course prospectus, proposed study activities, and proposed criteria and methods for evaluating their work. In the case of internships, students should discuss their plans with the director of the Career Center, who assists with internship placements. A signed Directed Study Approval form or Internship Approval form (available on the Academic Affairs Web site) is required in order to register for an interdisciplinary directed study or internship. The approval of the vice chancellor for academic affairs and dean is necessary to register for an interdisciplinary studies directed study or internship.

### Interdisciplinary Studies Course Descriptions

**IS 1001. First-Year Seminar: Human Diversity.** (FYS; 2 cr; fall, every year)
This first-year course aims to facilitate students’ transition from high school to a collegiate environment. Special emphasis is placed on themes that help sensitize students to the spectrum of ideas within the academic setting as well as contemporary society. Includes an evening convocation in early September.

**IS 1036. From Avian Flu to Ebola Zaire: The Re-emerging Threat of Infectious Disease.** (2 cr; prereq admission to Summer Scholars Program; S-N only; summer, every year)
Exploration of infectious disease from a variety of topics ranging from the basic biology of pathogens (bacteria, viruses, protozoa, and prions) to the social cost of disease on a global scale. Other topics include immunology, antibiotic and vaccine development, epidemiology and public health. Laboratory component focusing on microbiological techniques and epidemiological modeling. [Continuing Education course]

**IS 1037. Unleashing Your Creativity: Words, Movement, and Images.** (2 cr; prereq admission to Summer Scholars Program; S-N only; summer, every year)
Exploration of the concept of creativity and how ideas are transformed into works of art in dance, writing and studio arts. Focus on internal and external sources of creativity and new ways to engage the creative process through collaboration in these three areas. [Continuing Education course]

**IS 1038. Talking About a Revolution: Dissent and Freedom of Expression in Today’s World.** (E/Cr; 2 cr; prereq admission to Summer Scholars Program; S-N only; summer, every year)
Examination of the evolution and current nature of dissent and free expression in the United States. Analysis of forms of dissent, legal definitions, acceptable or protected dissent, governmental response to dissent, and the impact of forces such as geography, language, and technology on dissent. Emphasis on the way contexts (national, legal, historical) shape expression and responses to it. [Continuing Education course]

**IS 1041. Health Sciences Terminology.** (2 cr; fall, spring, every year)
A self-study course that has been designed to provide students with a working knowledge of the terminology utilized in the health sciences. There are no formal class sessions. Students take four tests during the term. [Continuing Education course]

**IS 1042. Psychology of Excellence.** (SS; 4 cr; summer, offered when feasible)
Intervention strategies for enhancing performance in life settings as diverse as academics, career, athletics, performing arts, and interpersonal relations. Psychological theories and research pertaining to the strategies are also covered. [Continuing Education course]

**IS 1051. Introduction to College Learning Skills.** (4 cr; prereq participation in Gateway Program or S counts toward the 60-cr general ed requirements; S-N only; summer, every year)
Essential skills for success in higher education. Introduction to computing technology, writing, and math skills. Academic and social skills needed for transition from high school to college.

**IS 1061. Mastering Skills for College Success.** (2 cr; prereq S-N only; fall, spring, every year)
Basic learning and thinking skills: procedures for acquiring knowledge and conducting academic inquiry; formulating and evaluating ideas, arguments, and abstract principles. Introduction to elements of the learning process. Assessment of individual approaches and development of individual strategies for learning.

**IS 1071. Systematic Introduction to the Art and Science of Emergency Medical Care.** (4 cr; prereq registration with the Stevens County Ambulance Services; arrangements must be made by contacting them at 520-589-7421; S-N only; fall, spring, every year)
Introduction to emergency medical care. Develops skills and knowledge to respond appropriately to a medical emergency. (The Stevens County Ambulance Service sets and requires an independent fee.)

**IS 1091. Ethical and Social Implications of Technology.** (E/Cr; 2 cr; fall, spring, every year)
Description of appropriate technological advances. Historical development related to technology and its development cycle. Discussion of the ethical and social implications of technology.

**IS 1321. Study-Travel Programs Emphasizing Diversity.** (1 cr [max 2 cr]; summer, offered when feasible)
Short-term study/travel programs based upon the theme of human diversity. Locations vary, but emphasis is on travel to domestic or international sites that offer unique perspectives and direct contact with environments significantly different from the Midwest (in geography, ethnicity, history, culture, and values). [Continuing Education course]

**IS 1331. Disability in America: Politics, Art, and Culture(s).** (Hum; 4 cr; fall, spring, offered when feasible)
Examination of the history of the Disability Rights Movement, the social stigma and stereotypes that have hindered the lives of disabled Americans, and the formation of a disabled identity and its expression in literature and the arts. [Continuing Education course]

**IS 1341. Introduction to World Religions.** (HDIV; 3 cr; fall, spring, offered when feasible)
Introduction to the major religions of the world. Examination of the beliefs, practices, and social institutions of a variety of religions. [Continuing Education course]

**IS 1993. Directed Study.** (1-5 cr [max 10 cr]; prereq approved directed study form; fall, spring, every year)
An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum.
IS 2001H. Honors: Traditions in Human Thought. (Hum; 2 cr; prereq participation in the Honors Program or #; fall, every year) A study of a selection of significant works from history, literature, philosophy, science, and religion across centuries from the earliest writings to the present day. Critical reading, writing, and discussion in an interdisciplinary context are emphasized.

IS 2011. English Language Teaching Assistant Program. (IP; 6-13 cr [max 13 cr]; [IS 2011]; S-N only; fall, spring, summer, every year) Students assist teachers of English in countries where English is not the primary language. [Continuing Education course]

IS 2016. Practices in Public Speaking for the ESL Student. (4 cr; fall, offered when feasible) Activities, assignments, and exercises related to public speaking in a variety of speech settings designed to lessen the communication challenges for the ESL (English as a Second Language) student. [Continuing Education course]

IS 2035. Aging in Greece: Comparative Cultural Practices and Social Policy. (IP; 4 cr; summer, offered when feasible) International service-learning course in Athens and the island of Ikaria that explores cross-cultural differences between Greece and the United States in the meaning and experience of aging, as well as in the social and institutional supports for the aging population. Focus on the role of the community as an active sector in promoting optimal aging. [Continuing Education course]

IS 2037. China: Traditions and Transformations. (IP; 4 cr; summer, offered when feasible) Introduction to the rich history and culture of China. Investigation of changes in China due to recent economic development. Consideration of the impact of this development on other countries and on their lifestyle through exploration of international connections with China. A study abroad course. Required monthly meetings for six months prior to class departure. [Continuing Education course]

IS 2993. Directed Study. (1-5 cr [max 10 cr]; prereq approved directed study form; fall, spring, every year) An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum.

IS 3011. English Language Teaching Assistant Program for Majors. (IP; 6-13 cr [max 13 cr]; [IS 2011]; prereq Jr status; S-N only; fall, spring, summer, every year) Students assist teachers of English in countries where English is not the primary language. Cultural and school experiences are linked to a major area of study. Students are encouraged to consult with their adviser regarding how this course might fit within their major. Assignments require students to demonstrate how the ELTAP experience connects to the content major. [Continuing Education course]

IS 3020. Italy and Austria: Brunnenburg and Beyond. (IP; 4 cr [max 8 cr]; summer, offered when feasible) The focus of the course will be the Habsburg period of the Austro-Hungarian Empire (1848-1914) at Brunnenburg with possible travel to Vienna, Krakow, Budapest, or Prague for further cultural exploration. Open to students of all levels from all disciplines. [Continuing Education course]

IS 3110. Rural Community Field Project: Center for Small Towns. (SS; 1-6 cr [max 6 cr]; prereq #; SS [if taken for 2 or more cr]; S-N only; fall, spring, offered when feasible) An educational experience in a rural learning environment that focuses on rural issues of community life, demography, culture, environment, and policy. A collaborative effort between Center for Small Towns and a public rural entity provides a structured environment in which civic engagement objectives are achieved and grounded in a practical setting. Students gain a valuable understanding about the historical social structures of rural society and witness these structures firsthand. [Continuing Education course]

IS 3111H. Honors: The End of the World as We’ve Known It: The Apocalypse Then and Now. (SS; 2 cr; prereq participation in Honors Program or #; spring, offered when feasible) Exploration of the occasions and representations of apocalyptic views, focusing on the historical, political, and psychological implications. Antecedents and effects of end-of-the-world prophecies are explored through the use of popular culture (e.g. music, science fiction, other media), writings from across cultural and religious frames of reference, and various historical, political, and psychological resources.

IS 3122. Leadership in Today’s World. (E/CR; 4 cr; prereq soph status or #; counts as an elective cr for Human Resource track in Mgmt; summer, offered when feasible) Examination of leadership theories along with an overview of best practices in organizational administration and leadership. Course requirements include an internship or alternative practicum experience. [Continuing Education course]

IS 3203H. Honors: A Cross-Section of the Enlightenment. (Hist; 2 cr; prereq participation in Honors Program or #; fall, spring, offered when feasible) A cross-section of the cultural and intellectual history of the 18th century. Figures to be studied may include Dessartes, Newton, Locke, Hume, Hobbes, Rousseau, Voltaire, Lavoisier, d’Holbach, and Blake.

IS 3204H. Honors: Ecological Health and the Sustainability of Common-Property Resources. (Envt; 2 cr; prereq participation in Honors Program or #; fall, spring, offered when feasible) Exploration of “sustainability” from the perspective of economics and ecology. Examples might include ocean fisheries, the rain forest, the introduction of alien species, and the global climate.

IS 3206H. Honors: Introduction to Game Theory. (M/SR; 2 cr; [Econ 3014]; prereq participation in the Honors Program, high school higher algebra or #; fall, spring, offered when feasible) Introduction to the formal theory of strategic interaction and to the intuitions behind the theory. Applications to a selection of problems in the natural and social sciences, such as biological evolution, tacit collusion in pricing, strategic behavior in international relations, and strategy in legislative voting.

IS 3207H. Honors: Utopia(s). (Hum; 2 cr; prereq participation in Honors Program or #; fall, offered when feasible) The concept of utopia from an interdisciplinary and cross-cultural perspective, drawing from various traditions including literature, the visual arts, and the social sciences. Expertise of guest lecturers in these diverse areas included.

IS 3208H. Honors: Totalitarianism: Imagination, Theory, and Experience. (SS; 2 cr; prereq participation in Honors Program or #; spring, offered when feasible) The concept of totalitarianism as it has been theorized, analyzed, and written about in fiction and personal accounts. The approach is cross-cultural and interdisciplinary, and considers the evolution of the concept and experience of totalitarianism over the course of the 20th century.

IS 3209H. Honors: Apocalypse Now? The Science and Policy of Preparing for a Catastrophe. (Envt; 2 cr; prereq participation in Honors Program or #; fall, spring, offered when feasible) Popular visions, policy response, and scientific underpinnings of potentially catastrophic societal problems past and present. Do we worry about the right things? How do scientists, politicians, and purveyors of popular culture assess which threats warrant attention? (two 50-min lecture-discus plus multiple evening film screenings)

IS 3213H. Honors: Global Encounters and the Making of the Contemporary World, 1450 to the Present. (HDIV; 4 cr [max 4 cr]; prereq high school higher algebra, participation in Honors Program or #; spring, offered when feasible) An exploration of the initial interaction among the indigenous people of Africa and America with the people of Europe. Parallel immediate and long-term effects of these initial encounters are identified and discussed.

IS 3213H. Honors: The Theory and Practice of Community Based Learning. (E/CR; 2-4 cr [max 4 cr]; prereq participation in Honors Program or #; spring, offered when feasible) A study of critical pedagogy and social issues related to race and ethnicity in the United States and methods for conducting community-based research projects.

IS 3214H. Honors: Evolution and Culture of Human Aggression. (Hum; 2 cr; prereq participation in Honors Program or #; fall, offered when feasible) Exploration of aggression in medieval literature and culture and theorization about the adaptiveness of aggression. Group and individual aggression expressed by humans living under current conditions is explored from a cultural and evolutionary perspective.

IS 3233H. Honors: Drama, Philosophy, and Politics in Classical Greece. (Hum; 2 cr; prereq participation in Honors Program or #; fall, spring, offered when feasible) Examination of political and philosophical theories found in Plato and Aristotle as revealed in the dramatic works of Aeschylus and Euripides, among others.
Italian (Ital)

Division of the Humanities

The Italian discipline introduces students to the study of the language, literature, and culture of Italy. The courses satisfy foreign language and other general education requirements.

Objectives—The Italian discipline is designed to help students develop a number of skills in Italian, including comprehension and speaking, reading, and writing, in order to communicate effectively in Italian on a broad range of topics. The courses are designed to help students develop critical insight into the philosophy and values of another culture as they increase their competence in a second language.

Study Abroad

In light of today’s increasingly interdependent world, the UMM Italian discipline endorses study abroad as the most effective means by which to

• improve language abilities
• broaden academic horizons
• globalize one’s world view
• expand career opportunities
• advance cross-cultural and problem-solving skills
• gain confidence in oneself personally and professionally.

Italian Course Descriptions

Ital 1301. Beginning Italian I. (FL; 4 cr; fall, every year)
Introduction to Italian as it is presently spoken and written. Basic sounds, structures, and vocabulary of Italian. Understanding, reading, and writing the language and communicating in Italian about everyday situations.

Relationship between culture and language. [Continuing Education course]

Ital 1302. Beginning Italian II. (FL; 4 cr; prereq 1301 or placement #; spring, every year)
Continuation of 1301. [Continuing Education course]

Ital 1311. Modern Italy Through Literature and Film. (Hum; 3 cr; fall, spring, offered when feasible)
Examination of the political, social, and cultural transformations of Italy from its unification in the second half of the 19th century to contemporary issues of immigration and multiculturalism as reflected in literature and film. Topics include the unification and forging a new national identity; life under Fascism; the Resistance and post-war period; the “southern question”; the “economic miracle” of the 1960s; recent immigration and current cultural transformations. [Continuing Education course]

Ital 1321. Intermediate Italian I. (IP; 4 cr; prereq 1302 or #; fall, spring, offered when feasible)
Continued development of listening, reading, writing, and speaking skills; review of the fundamental elements of the Italian language. Emphasis on authentic cultural and literary texts appropriate to this level. [Continuing Education course]
ITAL 1331. The Eternal City: The Language and Culture of Rome I. (FL; 4 cr; summer, offered when feasible)
Beginning course for UMM study abroad in Rome, Italy. Four weeks of Italian language together with the art and literature of Rome. Emphasis on works of art, literature, and film belonging to several periods and addressing the history and character of the city. Excursions to relevant sites in and near Rome. No previous experience in Italian required. [Continuing Education course]
ITAL 1993. Directed Study. (1-5 cr [max 10 cr]; prereq approved directed study form; fall, spring, summer, every year)
An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum.
ITAL 2993. Directed Study. (1-5 cr [max 10 cr]; prereq approved directed study form; fall, spring, summer, every year)
An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum.
ITAL 3331. The Eternal City: The Language and Culture of Rome II. (IP; 4 cr; prereq 1302 or equiv; summer, offered when feasible)
Advanced course for UMM study abroad in Rome, Italy. Four weeks of Italian language together with the art and literature of Rome. Emphasis on works of art, literature, and film belonging to several periods and addressing the history and character of the city. Excursions to relevant sites in and near Rome. [Continuing Education course]
ITAL 3993. Directed Study. (1-5 cr [max 10 cr]; prereq approved directed study form; fall, spring, summer, every year)
An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum.
ITAL 4993. Directed Study. (1-5 cr [max 10 cr]; prereq approved directed study form; fall, spring, summer, every year)
An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum.

Latin American Area Studies (LAAS)

Interdisciplinary Studies—Academic Dean

Objectives—To provide a basic introduction to the cultures and societies of Latin America, to provide the means essential to gain an understanding of Latin America and its diverse peoples, and to place Latin America in a comparative perspective.

Latin American Area Studies Major

Program Requirements

Students are required to take 4 semester(s) of Spanish.

Students must enroll through the LAAS coordinator.

Students are encouraged to use elective credits to acquaint themselves with as many academic fields of Latin American studies as possible.

Students may have up to a two-course overlap with any other major. Additional overlap must be approved by the LAAS coordinator.

No grades below C- are allowed. Courses may not be taken S-N unless offered S-N only.

A minimum GPA of 2.00 is required in the major to graduate. The GPA includes all, and only, University of Minnesota coursework. Grades of “F” are included in GPA calculation until they are replaced.

Courses for the Program

Required Courses

After enrolling in the major and when in residence, 1 credit per semester in LAAS 3100; up to 4 credits can be applied to the major, and up to 4 credits can be applied to the 20-credit elective requirement.

Hist 1601—Latin American History: A Basic Introduction, IP (4 cr)
LAAS 3100—Contemporary Latin America (1 cr)
LAAS 3201—Bibliographical Tools and Journals in Latin American Area Studies (1 cr)

Take all of the following in the same term:
Hist 3601—Great Books in Latin American History, IP (4 cr)
LAAS 4101—Senior Tutorial in Latin American Area Studies (1–4 cr)

Elective Courses

These courses must come from at least three different academic disciplines. Courses and directed studies not listed below may be approved by the LAAS coordinator, provided the subject matter is appropriate for the major.

Take 20 or more credits(s) from the following:
Anth 3601—Social Justice and Human Rights in Latin America, IP (4 cr)
Anth 3602—Women in Latin America, IP (4 cr)
Anth 3603—Latin American Archaeology, SS (4 cr)
Hist 3608—The Cuban Revolution in Historical Perspective, Hist (4 cr)
LAAS 1311—Salvador Da Bahia, Brazil: Exploring Its African Identity, IP (2 cr)
LAAS 1993—Directed Study (1–5 cr)
LAAS 2993—Directed Study (1–5 cr)
LAAS 3993—Directed Study (1–5 cr)
LAAS 4993—Directed Study (1–5 cr)
Soc 3601—Social Justice and Human Rights in Latin America, IP (4 cr)
Soc 3602—Women in Latin America, IP (4 cr)
Span 2121—Associated Languages: Intensive Portuguese, IP (4 cr)
Span 3001—Spanish Composition and Conversation I, IP (4 cr)
Span 3002—Spanish Composition and Conversation II, IP (4 cr)
Span 3101—Introduction to Hispanic Literature, Hum (4 cr)
Span 3211—Literature and Culture of Latin America, Hum (4 cr)
Span 3212—Literature and Culture of Spain, Hum (4 cr)
Span 3621—Seminars: Confessions and Letters in Latin American Fiction, Hum (4 cr)
Span 3622—Seminars: Exile and Emigration in Latin American Fiction, IP (4 cr)
Span 3623—Seminars: Ecology and Nature in Latin American Literature, Envt (4 cr)
Span 3651—Seminars: Miguel de Cervantes Saavedra’s “El ingenioso hidalgo Don Quijote de la Mancha”, Hum (4 cr)
Span 3652—Seminars: Literary Minorities in Early Modern Spain, Hum (4 cr)
Span 3653—Seminars: Maria de Zayas: Literary Violence in Golden Age Spain, Hum (4 cr)
Span 3654—Seminars: Sex, Love, and Marriage in Golden Age Spanish Literature, Hum (4 cr)
Span 3671—Seminars: Origins of the Spanish Character, Hum (4 cr)
Span 3672—Seminars: Reform in Spain: The Saint and the Journalist, Hum (4 cr)
Span 3681—Seminars: Romanticism and Revolution in 19th-Century Spain, Hum (4 cr)
Span 3682—Seminars: Realism and Reform in 19th-Century Spain, Hum (4 cr)
Span 3683—Seminars: Modernity and Identity in Spain, 1900-1930, Hum (4 cr)
Span 4001—Research Symposium, Hum (4 cr)
Latin American Area Studies (LAAS)

Latin American Area Studies Course Descriptions

Anth 3601. Social Justice and Human Rights in Latin America. (IP; 4 cr; [Soc 3601]; prereq 1111 or 2103; spring, every year)
Same as Soc 3601. Examination of social, economic, and political transformations in Latin America with an emphasis on social justice and human rights. Critical approaches to understand U.S.-Latin American relations, labor struggles, rebellions to define alternative development, indigenous resistance to encroachment on resources and ways of life, civil war and genocide, and efforts to create a more environmentally and socially sustainable development.

Anth 3602. Women in Latin America. (IP; 4 cr; [Anth 3602]; prereq 1111 or Soc 1101 or #; fall, odd years)
Same as Soc 3602. Study of the social statuses of women in Latin American countries and the cultural norms influencing these statuses. Topics include class differences and the varied interests of women of different classes and ethnicities, women’s movements, economic and political conditions, religion and women, etc.

Anth 3603. Latin American Archaeology. (SS; 4 cr; prereq 1111 or 2103; spring, every year)
Latin America from the earliest human colonization to European contact. Includes societies from northern Mexico through Tierra del Fuego, as well as the Caribbean. Covers early hunting gathering societies, origins of agriculture, the rise of powerful states and empires, and their influence on later Colonial-period societies.

Hist 1601. Latin American History: A Basic Introduction. (IP; 4 cr; spring, even years)
Methods, themes, and problems in the study of Latin American history.

Hist 3601. Great Books in Latin American History. (IP; 4 cr; fall, every year)
A look at Latin American history through great books.

Hist 3608. The Cuban Revolution in Historical Perspective. (Hist; 4 cr; fall, spring, offered when feasible)
A survey of modern Cuban history with an emphasis on the Cuban Revolution. An introduction to a wide variety of perspectives.

LAAS 1311. Salvador Da Bahia, Brazil: Exploring Its African Identity. (IP; 2 cr; [Span 1311]; spring, offered when feasible)
Same as Span 1311. Focus on how Afro-Brazilian cultural identity is created and maintained in the face of globalization and immigration in Salvador da Bahia, a city in northeastern Brazil that embraces a vigorous and invigorating ethnic and cultural diversity. [Continuing Education course]

LAAS 1993. Directed Study. (1-5 cr [max 10 cr]; prereq approved directed study form; fall, spring, every year)
An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum.

LAAS 2993. Directed Study. (1-5 cr [max 10 cr]; prereq approved directed study form; fall, spring, every year)
An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum.

LAAS 3100. Contemporary Latin America. (1 cr [max 4 cr]; prereq LAAS major; to be repeated each sem a student is in residence; only 4 cr may apply to LAAS major; fall, spring, every year)
Opportunity for LAAS majors to read about and discuss in historical and cultural contexts the more important contemporary developments in Latin America.

LAAS 3201. Bibliographical Tools and Journals in Latin American Area Studies. (1 cr; prereq LAAS major; fall, spring, offered when feasible)
For the student new to the major. Introduction to the standard bibliographical tools and journals in Latin American area studies.

LAAS 3993. Directed Study. (1-5 cr [max 10 cr]; prereq approved directed study form; fall, spring, every year)
An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum.

LAAS 4010. Senior Tutorial in Latin American Area Studies. (1-4 cr [max 4 cr]; prereq 3201, sr LAAS major; fall, spring, offered when feasible)
Individual reading in subjects needing further development before completing the LAAS major. Subjects determined by LAAS faculty in consultation with the senior LAAS major.

LAAS 4993. Directed Study. (1-5 cr [max 10 cr]; prereq approved directed study form; fall, spring, every year)
An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum.

Soc 3601. Social Justice and Human Rights in Latin America. (IP; 4 cr; [Anth 3601]; prereq 1111 or Anth 1111 or #; spring, every year)
Same as Anth 3601. Examination of social, economic, and political transformations in Latin America with an emphasis on social justice and human rights. Critical approaches to understand U.S.-Latin American relations, labor struggles, rebellions to define alternative development, indigenous resistance to encroachment on resources and ways of life, civil war and genocide, and efforts to create a more environmental and socially sustainable development.

Soc 3602. Women in Latin America. (IP; 4 cr; [Anth 3602]; prereq 1111 or Anth 1111 or #; fall, odd years)
Same as Anth 3602. Study of the social statuses of women in Latin American countries and the cultural norms influencing these statuses. Topics include class differences and the varied interests of women of different classes and ethnicities, women’s movements, economic and political conditions, religion and women, etc.

Span 2311. Associated Languages: Intensive Portuguese. (IP; 4 cr; prereq 2002 or Fren 2002 or #; fall, spring, offered when feasible)
Intensive, accelerated study of the basic skills of Brazilian Portuguese (reading, writing, listening, and speaking) with emphasis on oral competency.

Span 3301. Spanish Composition and Conversation I. (IP; 4 cr; prereq 2002 or #; fall, every year)
Further review of the four skills in Spanish, with emphasis on: 1) development of greater competence and confidence in conversational Spanish; 2) greater precision and sophistication in written communication; and 3) analytical proficiency in reading selections from diverse literary and cultural contexts.

Span 3302. Spanish Composition and Conversation II. (IP; 4 cr; prereq 3300; spring, every year)
Continuation of the sequence beginning with 3301.

Span 3301. Introduction to Hispanic Literature. (Hum; 4 cr; prereq 3001; prereq or coreq 3002 for majors; spring, every year)
Study of a variety of literary genres representing the literature of Spain and Latin America; rudiments of literary analysis and interpretation. Students should demonstrate the ability to read and comprehend the literary works studied, analyze works critically while developing a sensitivity toward certain cultural aspects and literary nuances expressed therein; participate in and comprehend sustained class discussion with respect to certain topics or themes; write with accuracy in Spanish and show some degree of analytical proficiency at the short paper level.

Span 3321. Literature and Culture of Latin America. (Hum; 4 cr; prereq 3002, 3101; fall, offered when feasible)
Study of important exemplary works of Latin American literary and cultural production through major historical periods. Texts are examined in light of multiple contexts, such as artistic, political, historical, and philosophical.

Span 3321. Literature and Culture of Spain. (Hum; 4 cr; prereq 3002, 3101; fall, offered when feasible)
Study of important exemplary works of Spanish (peninsular) literary and cultural production through major historical periods. Texts are examined in light of multiple contexts, such as artistic, political, historical, and philosophical.

Span 3361. Seminar: Confessions and Letters in Latin American Fiction. (Hum; 4 cr; prereq 3002, 3101; spring, offered when feasible)
Study of confessions and letters in Latin American fiction. Fiction is seen as a combination of texts within other texts. The combination becomes part of the fictional game that imitates and enhances reality.

Span 3362. Seminar: Exile and Emigration in Latin American Fiction. (IP; 4 cr; prereq 3002, 3101; fall, offered when feasible)
Study of contemporary Latin American literary texts where characters face forms of exile, abandonment, and displacement as a result of emigration to Europe and the United States.

Span 3362. Seminar: Ecology and Nature in Latin American Literature. (Env; 4 cr; prereq 3002, 3101; fall, offered when feasible)
Study of Latin American texts where authors create characters that read or misread Nature and its preservation or extinction. How globalization is making this issue more relevant in the Latin American context.
Span 3651. Seminar: Miguel de Cervantes Saavedra’s “El ingenioso hidalgo Don Quijote de la Mancha.” (Hum; 4 cr; prereq 3002, 3101; fall, offered when feasible)
Study of Miguel de Cervantes Saavedra’s novel “El ingenioso hidalgo Don Quijote de la Mancha” in light of its socio-historical context.

Span 3652. Seminar: Literary Minorities in Early Modern Spain. (Hum; 4 cr; prereq 3002, 3101; fall, offered when feasible)
Study of the representative literary works written by or about Spanish Jewish and Muslim minorities in light of their respective socio-historical contexts.

Span 3653. Seminar: Maria de Zayas: Literary Violence in Golden Age Spain. (Hum; 4 cr; prereq 3002, 3101; fall, offered when feasible)
Study of the major works of 17th-century writer Maria de Zayas y Sotomayor, “The Enchantments of Love” (1637) and “The Disenchantments of Love” (1647), in light of their socio-historical contexts and the political issues surrounding the formation of literary canons.

Span 3654. Seminar: Sex, Love, and Marriage in Golden Age Spanish Literature. (Hum; 4 cr; prereq 3002, 3101; fall, offered when feasible)
The theme of sex, love, and marriage in Golden Age Spanish Literature through prose, poetry, and theatre of the Golden Age (XVI–XVII centuries) Spain. Consideration of the gender relations and gender politics reflected in the works and the socio-historical context in which these works were produced.

Span 3651. Seminar: Origins of the Spanish Character. (Hum; 4 cr; prereq 3002, 3101; fall, offered when feasible)
Analysis of the Medieval and Golden Age roots of many of the beliefs and attitudes of contemporary Spain. Themes common to Spain, explored in both traditional and modern contexts, may include honor, patriotism, religion, idealism, individuality, satire, love, pride, etc.

Span 3652. Seminar: Reform in Spain: The Saint and the Journalist. (Hum; 4 cr; prereq 3002, 3101; fall, offered when feasible)
Analyzing, comparing, and contrasting the lives and writings of St. Teresa of Avila (XVI Century) and Mariano Jose de Larra (XIX Century) as they worked toward a better Spain. Difficulties of religious and cultural reform as well as differences in traditional and enlightenment values are explored.

Span 3681. Seminar: Romanticism and Revolution in 19th-Century Spain. (Hum; 4 cr; prereq 3002, 3101; fall, offered when feasible)
Study of representative texts (prose and poetry) from the first half of the 19th century in Spain, with emphasis on the expression of the Romantic vision within the particular political context of the period, marked by tensions between liberal reform and traditional conservatism.

Span 3682. Seminar: Realism and Reform in 19th-Century Spain. (Hum; 4 cr; prereq 3002, 3101; fall, offered when feasible)
Study of representative texts (novels, stories, and essays) from the second half of the 19th century in Spain, with emphasis on the rise of realism as an exploration of the socio-political reality of the era and the need for reform. The focus is on general trends in Western cultures (e.g., industrialization, positivism, secularization).

Span 3683. Seminar: Modernity and Identity in Spain, 1900–1930. (Hum; 4 cr; prereq 3002, 3101; fall, offered when feasible)
Study of representative texts (prose and poetry) from the early decades of the 20th century in Spain with particular emphasis on their responses to changes brought by modernity: advancing technology, modern psychology, political experimentation, spiritual exploration, and artistic innovation.

Span 4001. Research Symposium. (Hum; 4 cr; prereq #; A-F only; spring, every year)
A capstone experience for majors, consisting of an introduction to research methods and critical approaches to literature, as well as development of an independent research project and presentation.

Liberal Arts for the Human Services (LAHS)

Division of the Social Sciences

Objectives—This program’s three main purposes are to provide a firm liberal arts basis for understanding individual human behavior in its social context; provide the liberal arts foundation for professional work in baccalaureate-level human services occupations such as counseling, casework, personnel work, criminal justice, and administration of human services in federal and state agencies, private businesses, or professional organizations; and prepare students for graduate work in the human services professions.

Liberal Arts for the Human Services Major

Program Requirements
Students develop a coherent program of study in consultation with their major advisers generally no later than the spring semester of their sophomore year. Advisers normally are faculty with a background or specialties related to the human services area (anthropology, psychology, sociology).

Because LAHS students pursue varied careers, they are advised to include in their programs courses appropriate to their career plans. In all instances, students should consult with their advisers when designing their programs.

Students should discuss the arrangement of their field experience with their LAHS adviser no later than the fall semester of their junior year. Information concerning specific field placements can be obtained from the directory of the Career Center or an LAHS adviser.

No grades below C- are allowed. Courses may not be taken S-N unless offered S-N only.

A minimum GPA of 2.00 is required in the major to graduate. The GPA includes all, and only, University of Minnesota coursework. Grades of F are included in GPA calculation until they are replaced.

Courses for the Program

Required Courses
Courses and directed studies not listed below may be approved by an LAHS adviser, provided the subject matter is appropriate for the student’s program of study.

Students should complete IS 4101 during the year before their internship (Psy 4896 or IS 3796 or IS 3996).

Anth 1111—Introductory Cultural Anthropology, SS (4 cr)
or Soc 1101—Introductory Sociology, SS (4 cr)
Take 4 or more credit(s) from the following:
IS 3796—Interdisciplinary Internship in the Helping Professions (1–16 cr)
IS 3996—Interdisciplinary Internship (1–16 cr)
Psy 4896—Field Experiences in Psychology, SS (1–4 cr)
IS 4101—Intro to Prof Conduct, Legal Constraints, Ethics in Human Services, E/CR (2 cr)
Psy 1051—Introduction to Psychology, SS (4 cr)
Stat 1601—Introduction to Statistics, M/SR (4 cr)
or Stat 2601—Statistical Methods, M/SR (4 cr)

Upper Division Anthropology/Sociology Electives
Take 16 or more credit(s) from the following:
Anth 2101—Physical Anthropology, Sci-L (4 cr)
Anth 2103—Archaeology, SS (4 cr)
Anth 2501—Medical Anthropology-An Overview, SS (4 cr)
Anth 3206—Ecological Anthropology, Env't (4 cr)
Anth 3402—Representations from the Field: American Indian Ethnography, HDiv (4 cr)
Anth 3451—Contemporary American Indians, HDiv (4 cr)
Anth 3452—American Indian Women, HDiv (4 cr)
Anth 3455—North American Archaeology, SS (4 cr)
Anth 3601—Social Justice and Human Rights in Latin America, IP (4 cr)
Anth 3603—Latin American Archaeology, SS (4 cr)
Anth 3602—Women in Latin America, IP (4 cr)

Take no more than 8 credit(s) from the following:

CMR 3421—Organizational Communication Theory and Research, SS (4 cr)
CMR 3401—Communication Theory, SS (4 cr)
CMR 3421—Organizational Communication Theory and Research, SS (4 cr)

Anth 2501. Medical Anthropology—An Overview. (SS; 4 cr; prereq 1111 or Soc 1101 or #; fall, even years)
Utilizes an ecological perspective to explore cultural understandings of health and illness in a variety of societies in North America and abroad. Examines the effects of cultural and physical adaptation, nutrition, culture contact, and modernization on the health and well being of people.

Anth 3402. Representations from the Field: American Indian Ethnography. (HDiv; 4 cr; prereq 1111 or Soc 1101; fall, offered when feasible)
An analysis of ethnographic and ethnographic materials focusing on specific American Indian cultures.

Anth 3451. Contemporary American Indians. (HDiv; 4 cr; [Soc 3451]; prereq 1111 or Soc 1101 or #; fall, odd years)
Same as Soc 3451. The cultures of contemporary Indian tribes in the United States. Government policies, gaming, urban populations, education, self-determination, and identity.

Anth 3452. American Indian Women. (HDiv; 4 cr; [Soc 3452]; prereq 1111 or Soc 1101 or #; fall, every year)
Same as Soc 3452. The role of Indian and mixed-blood women in a variety of North American Indian cultures, both traditional and contemporary, using ethnography, autobiography, life history, biography, and fiction. The interaction of Indian women and their cultures with the colonizing cultures of Western Europe and the United States.

Anth 3455. North American Archaeology. (SS; 4 cr; prereq 1111 or 2103; spring, every year)
The archaeology of the societies located in the current United States and Canada prior to European colonization. Includes the earliest human colonization of North America (circa 12,000 years ago), early hunting and gathering societies, the development of agriculture, and the formation of complex chiefdoms. Emphasis on the diversity of cultures, languages, economies, and environments found throughout precontact North America.

Anth 3601. Social Justice and Human Rights in Latin America. (IP; 4 cr; [Soc 3601]; prereq 1111 or Soc 1101 or #; spring, every year)
Same as Soc 3601. Examination of social, economic, and political transformations in Latin America with an emphasis on social justice and human rights. Critical approaches to understand U.S.-Latin American relations, labor struggles, rebellions to define alternative development, indigenous resistance to encroachment on resources and ways of life, civil war and genocide, and efforts to create a more environmentally and socially sustainable development.

Take 16 or more credit(s) from the following:

Psy 4960—Advanced Seminar in Health Psychology, SS (4 cr)
Psy 4950—Advanced Seminar in Social Psychology, SS (4 cr)
Psy 4940—Advanced Seminar in Developmental Psychology, SS (4 cr)
Psy 4930—Advanced Seminar in Personality or Clinical Psychology, SS (4 cr)
Psy 4920—Advanced Seminar in Biological or Comparative Psychology, SS (4 cr)
Psy 4910—Advanced Seminar in Cognitive Psychology, SS (4 cr)
Psy 4900—Advanced Seminar in Human Development, SS (4 cr)
Psy 4890—Advanced Seminar in Biological Psychology, SS (4 cr)
Psy 4860—Advanced Seminar in Health Psychology, SS (4 cr)

Additional Elective Courses

Take no more than 8 credit(s) from the following:

Liberal Arts for the Human Services (LAHS)

Anth 3602—Women in Latin America, IP (4 cr)
Anth 3603—Latin American Archaeology, SS (4 cr)
Soc 2101—Systems of Oppression, HDiv (4 cr)
Soc 3111—Sociology of Modernization, IP (4 cr)
Soc 3121—Sociology of Gender, HDiv (4 cr)
Soc 3122—Sociology of Childrens, HDiv (4 cr)
Soc 3131—World Population, Envt (4 cr)
Soc 3141—Sociology of Deviance, E/CR (4 cr)
Soc 3251—African Americans, HDiv (4 cr)
Soc 3252—Women in Muslim Society, IP (4 cr)
Soc 3451—Contemporary American Indians, HDiv (4 cr)
Soc 3452—American Indian Women, HDiv (4 cr)
Soc 3601—Social Justice and Human Rights in Latin America, IP (4 cr)
Soc 3602—Women in Latin America, IP (4 cr)

Upper Division Psychology Electives

Students who plan to enroll in Psy 4101 should complete the course before their internship or field experience.

Psy 2411—Introduction to Lifespan Developmental Psychology, SS (4 cr)
Psy 3051—The Psychology of Women and Gender, HDiv (4 cr)
Psy 3101—Learning Theory and Behavior Modification, SS (4 cr)
Psy 3112—Cognition, SS (4 cr)
Psy 3211—Biological Psychology, Sci-L (5 cr)
Psy 3221—Behavioral Biology of Women, Sci (2 cr)
Psy 3302—Personality, SS (4 cr)
Psy 3313—Psychopathology, SS (4 cr)
Psy 3401—Developmental Psychology I: Child Psychology, SS (4 cr)
Psy 3402—Developmental Psychology II: Adolescence, SS (2 cr)
Psy 3403—Developmental Psychology III: Adulthood and Aging, E/CR (4 cr)
Psy 3501—Social Psychology, SS (4 cr)
Psy 3513—Negotiation, SS (4 cr)
Psy 3521—Health Psychology, SS (4 cr)
Psy 3542—Multicultural Psychology, HDiv (4 cr)
Psy 3701—Organizational Behavior, SS (4 cr)
Psy 4011—Helping Relationships, SS (4 cr)
Psy 4010—Advanced Seminar in Cognitive Psychology, SS (4 cr)
Psy 4020—Advanced Seminar in Biological or Comparative Psychology, SS (4 cr)
Psy 4030—Advanced Seminar in Personality or Clinical Psychology, SS (4 cr)
Psy 4040—Advanced Seminar in Developmental Psychology, SS (4 cr)
Psy 4050—Advanced Seminar in Social Psychology, SS (4 cr)
Psy 4060—Advanced Seminar in Health Psychology, SS (4 cr)

Psy 3701—Social Psychology, SS (4 cr)
Psy 3513—Negotiation, SS (4 cr)
Psy 3521—Health Psychology, SS (4 cr)
Psy 3542—Multicultural Psychology, HDiv (4 cr)
Psy 3701—Organizational Behavior, SS (4 cr)
Psy 4011—Helping Relationships, SS (4 cr)
Psy 4010—Advanced Seminar in Cognitive Psychology, SS (4 cr)
Psy 4020—Advanced Seminar in Biological or Comparative Psychology, SS (4 cr)
Psy 4030—Advanced Seminar in Personality or Clinical Psychology, SS (4 cr)
Psy 4040—Advanced Seminar in Developmental Psychology, SS (4 cr)
Psy 4050—Advanced Seminar in Social Psychology, SS (4 cr)
Psy 4060—Advanced Seminar in Health Psychology, SS (4 cr)

Additional Elective Courses

Take no more than 8 credit(s) from the following:

CMR 2052—Legal Advocacy: Speaking in Appellate Forensic Situations, E/CR (4 cr)
CMR 3401—Communication Theory, SS (4 cr)
CMR 3421—Organizational Communication Theory and Research, SS (4 cr)
Econ 1111—Principles of Microeconomics, SS (4 cr)
Econ 1112—Principles of Macroeconomics, SS (4 cr)
Econ 3201—Microeconomic Theory, SS (4 cr)
Econ 3202—Macroeconomic Theory, SS (4 cr)
Hist 3704—Women in the Middle Ages, SS (4 cr)
Hist 3706—Women in Early Modern Europe, SS (4 cr)
Mgmt 3151—Human Resources Management I, E/CR (2 cr)
Mgmt 3152—Human Resources Management II, HDiv (2 cr)
Mgmt 3171—Leadership in Organizations, SS (2 cr)
Mgmt 3133—Negotiation, SS (4 cr)
Mgmt 3701—Organizational Behavior, SS (4 cr)
Pol 3201—Legislative Process, SS (4 cr)
Pol 3262—Minorities and Public Policy, HDiv (4 cr)

Mgmt 3171—Leadership in Organizations, SS (2 cr)
Mgmt 3133—Negotiation, SS (4 cr)
Mgmt 3701—Organizational Behavior, SS (4 cr)
Pol 3201—Legislative Process, SS (4 cr)
Pol 3262—Minorities and Public Policy, HDiv (4 cr)
Anth 3602. Women in Latin America. (IP; 4 cr; Soc 3602; prereq 1111 or Soc 1101 or #; fall, odd years)
Study of the social statuses of women in Latin American countries and the cultural norms influencing these statuses. Topics include class differences and the varied interests of women of different classes and ethnicities, women’s movements, economic and political conditions, religion and women, etc.

Anth 3603. Latin American Archaeology. (SS; 4 cr; prereq 1111 or 2103; spring, every year)
Latin America from the earliest human colonization to European contact. Includes societies from northern Mexico through Tierra del Fuego, as well as the Caribbean. Covers early hunting gathering societies, origins of agriculture, the rise of powerful states and empires, and their influence on later Colonial-period societies.

CMR 2052. Legal Advocacy: Speaking in Appellate Forensic Situations. (E/CR; 4 cr; fall, every year)
Detailed study of the theory and practice of speaking in legal settings. Students prepare and present appellate argument. The final presentation is before a mock Supreme Court.

CMR 3401. Communication Theory. (SS; 4 cr; prereq 1101 or #; fall, every year)
Detailed study of the theoretical tradition of human communication. Focuses on social scientific and humanities theories used to explain social interaction. Provides general foundation on various traditions of inquiry as well as qualitative and quantitative methods.

CMR 3421. Organizational Communication Theory and Research. (SS; 4 cr; prereq 1101 or #; spring, offered when feasible)
Study of organizational communication, including small group perspectives.

Econ 3111. Principles of Microeconomics. (SS; 4 cr; prereq high school algebra or #; fall, spring, every year)
Introduction to basic economic problems, concepts, and theoretical models. Use of economic institutions and the economic organization of society. The role of markets in the production and distribution of societal resources. Measurement of economic performance; national income, inflation, and unemployment; competing macroeconomic theories and stabilization policies.

Econ 3112. Principles of Macroeconomics. (SS; 4 cr; prereq high school algebra or #; fall, spring, every year)

Econ 3201. Microeconomic Theory. (SS; 4 cr; prereq 1111, Math 1101 or #; fall, every year)
Analytical approach to decision making by individual economic units in the output and input markets, under perfect and imperfect market conditions. Externalities and role of government.

Econ 3202. Macroeconomic Theory. (SS; 4 cr; prereq 1112, Math 1101 or #; spring, every year)
The theory of national income determination; inflation, unemployment, and economic growth in alternative models of the national economy.

Hist 3704. Women in the Middle Ages. (SS; 4 cr; spring, even years)
Analysis of the history of European women and gender systems as constructed during the Middle Ages (c. 500-1500).

Hist 3706. Women in Early Modern Europe. (SS; 4 cr; fall, spring, offered when feasible)
Examination of lives of women in Europe from about 1350 through the 18th century.

IS 4101. Intro to Prof Conduct, Legal Constraints, Ethics in Human Services. (E/CR; 2 cr; prereq jr, 10 cr 3xxx or 4xxx human services courses or #; fall, spring, every year)
Introduction to the functional areas of human resource management through the use of case studies. Topics include legal issues, planning, recruitment, training, evaluation, compensation, and benefits.

Mgmt 3151. Human Resources Management I. (E/CR; 2 cr; prereq 2101 or #; spring, every year)
An introduction to the functional areas of human resource management through the use of case studies. Topics include legal issues, planning, recruitment, training, evaluation, compensation, and benefits.

Mgmt 3152. Human Resources Management II. (HDiv; 2 cr; prereq 2101 or #; fall, offered when feasible)
Topics in human resource management: evaluating employee performance, training, safety, labor relations, international human resource management.

Mgmt 3711. Leadership in Organizations. (SS; 2 cr; prereq Stat 1601 or Stat 2601 or #; spring, every year)
Leadership is the ability to influence a group of people towards a goal. Examination of leadership qualities and theories as they apply to leading an organization. Ethics, social responsibility, team work, motivation, and conflict resolution skills from the perspective of a leader. International and culturally diverse aspects of leadership and leadership development. Students have the opportunity to practice leadership skills during the course.

Mgmt 3713. Negotiation. (SS; 4 cr; Psy 3513; prereq 3221 or Psy 3501 or Psy/Mgmt 3701; spring, even years)
Same as Psy 3513. Examines the theoretical and applied aspects of negotiation. Topics include negotiation theory, strategy, skills and tactics, communication processes, global negotiation, and ethics. Use of negotiation simulations.

Pol 3201. Legislative Process. (SS; 4 cr; prereq 1201 or #; Stat 1601 or Stat 2601 or #; fall, spring, offered when feasible)
The internal organization of Congress, with emphasis on how rules and organizational changes affect the policy process. Topics include the evolution of the modern Congress, the committee system, the role of party leadership, and competing theories of congressional organization. In addition, comparison-contrast charts are drawn from other legislatures in democracies around the world.

Pol 3262. Minorities and Public Policy. (HDiv; 4 cr; prereq 1201 or #; fall, even years)
Analysis of the ways race, ethnicity, and other factors shape political engagement; their implications for public policy and the policy process.

Pol 3268. Political Psychology. (SS; 4 cr; prereq 1201; Stat 1601 or # recommended; fall, odd years)
Examines the utility of concepts from personality and social psychology for conducting political analysis and understanding political behavior. Explores the role of the individual, group processes, and the political context in political decision making by both leaders and nonleaders.

Pol 4221. Judicial Politics. (SS; 4 cr; prereq 1201, 2001 or #; Stat 1601 or Stat 2601 recommended; fall, odd years)
Role of judges, police, attorneys, and interest groups within the political system, with analysis focusing on each as political actors. Areas of discretion in the legal system. Extra-legal predictors of judicial decision making and certiorari voting.

Pol 4264. American Political Culture. (Hist; 4 cr; prereq 1201, 2001 or #; spring, odd years)
A survey of the ideas shaping the U.S. political system and Americans’ political behavior. Examines the ways that U.S. political culture has shaped institutional development, policy outcomes, and the everyday political experiences within the political system.

Psy 1051. Introduction to Psychology. (SS; 4 cr; fall, spring, every year)
An introduction to the science of mind and behavior. Topics include history of psychology, research methods, biological bases for behavior, life span development, sensation and perception, learning, cognitive and social processes, personality, psychopathology, and applications of psychology. Includes laboratory/discussion sessions.

Psy 1071. Human Sexuality. (SS; 4 cr; fall, every year)
Survey of aspects of human sexuality, including intimacy and communication; male and female anatomy, physiology, and response; development of identity, sex role, and gender orientation; varieties of sexual expression; pregnancy and childbirth; contraception and disease prevention; sexual coercion and abuse; sexual dysfunctions and their treatment.

Psy 1081. Drugs and Human Behavior. (SS; 2 cr; spring, every year)
Survey of psychoactive drugs, their effects on mind and behavior, and prevention and treatment of drug abuse.
Programs and Course Descriptions

An overview of current concepts, theories, and methods in the study of Liberal Arts for the Human Services (LAHS)

Psy 2411. Introduction to Lifespan Developmental Psychology. (SS; 4 cr; prereq 1051; counts as elective cr for the Psy major or minor, and psy elective for the LAHS major; no cr for students who are concurrently enrolled in or have received cr for Psy 3401. Psy 3402, Psy 3403; fall, every year)
An introduction to theory, data, and research approaches in development from the prenatal period through childhood, adolescence, adulthood, and aging until the cessation of life. Includes physical, perceptual, cognitive, language, moral, personality, socio-emotional, family, and career development and changes over time, as well as issues of death, dying, and bereavement. Includes a multicultural focus. Students who intend a deeper focus in developmental psychology should consider 3401-3402-3403, an upper-division alternative to this course.

Psy 3051. The Psychology of Women and Gender. (HDiv; 4 cr; prereq 1051 or #; spring, every year)
Exploration of the interactive biological, psychological, and socio-cultural processes that shape the lives of women and the experience of gender. Topics include: the psychobiology of sex; the social construction of sex and gender; socialization and development; media representations; identity and sexuality; language and communication; motivation and personality; relationships; work and family lives; mental and physical health; mid- and later life development; victimization; therapy; intersections of race, class, and gender; and feminist approaches to teaching, learning, and knowing.

Psy 3101. Learning Theory and Behavior Modification. (SS; 4 cr; prereq 2001 or #; fall, every year)
Major theories of learning and their importance for understanding human and nonhuman behavior. Classical and operant conditioning, generalization, discrimination, stimulus control, animal cognition. Behavior modification theories and techniques and their application to clinical populations. Lab projects demonstrate learning and behavior modification theories, concepts, and techniques and illustrate research methods and theory testing. Includes lab.

Psy 3112. Cognition. (SS; 4 cr; prereq 2001 or #; spring, every year)
Empirical study of memory, language behaviors, representation of knowledge, judgment, decision making, problem solving, and creative thinking. Includes lab.

Psy 3211. Biological Psychology. (Sci-L; 5 cr; prereq [1051, 2001] or Biol 1101 or Biol 1111; fall, every year)
Brain organization and function; an emphasis on an understanding of the neural processes that underlie human and nonhuman behavior. Incorporates information from psychology, neuroscience, endocrinology, physiology, chemistry, neurology, and zoology to investigate the physiological basis of behavior. Topics include sensory processes, drugs and addiction, biological rhythms, sexual differentiation, reproduction, methods in neuroscience, neuropsychological disorders, and clinical assessment. Lab projects focus on neuroanatomical organization and function of the brain. (4 hrs lect, 1 hr lab)

Psy 3212. Behavioral Biology of Women. (Sci; 2 cr; prereq 3211 or Biol 2111 or #; fall, spring, offered when feasible)
Exploration of proximate and ultimate influences on female behavior in human and nonhuman species. Sexual differentiation, gender differences in cognition, biological basis of sexual orientation, female sexual selection, and dominance.

Psy 3302. Personality. (SS; 4 cr; prereq 1051 or #; spring, every year)
Nature of personality constructs and theories. Conscious vs. unconscious processes; emotion and motivation; nature and measurement of personal traits; their dimensional structure, stability, development, and heritability.

Psy 3313. Psychopathology. (SS; 4 cr; prereq 1051 or #; spring, every year)
Psychological disorders and their treatment, including anxiety, personality, affective, schizophrenic, and other recognized disorders of children and adults.

Psy 3401. Developmental Psychology I: Child Psychology. (SS; 4 cr; prereq 1051 or #; fall, every year)
Theory, data, and research in development from conception to adolescence. Prenatal and physical development as well as perceptual, cognitive, personality, and social development. Language acquisition and Piaget’s theory of cognitive development.

Psy 3402. Developmental Psychology II: Adolescence. (SS; 2 cr; prereq 1051 or #; spring, every year)
Theory, data, and research in adolescent development with emphasis on physical, cognitive, and social development.

Psy 3403. Developmental Psychology III: Adulthood and Aging. (E/CR; 4 cr; prereq 1051 or #; fall, every year)
An overview of current concepts, theories, and methods in the study of adult development and aging. Theoretical and methodological content is integrated with an applied-learning experience through a service learning component.

Psy 3501. Social Psychology. (SS; 4 cr; prereq 1051 or Soc 1101 or #; fall, every year)
Theories and research in the study of interpersonal behavior. Topics include aggression, prejudice, altruism, persuasion, group dynamics, and social influence.

Psy 3513. Negotiation. (SS; 4 cr; [Mgmt 3513]; prereq 3501 or Mgmt 3221 or Psy/Mgmt 3701; spring, even years)
Same as Mgmt 3513. Examines the theoretical and applied aspects of negotiation. Topics include negotiation theory, strategy, skills and tactics, communication processes, global negotiation, and ethics. Use of negotiation simulations.

Psy 3521. Health Psychology. (SS; 4 cr; prereq 1051; spring, every year)
Health implications of interactions among behavioral, environmental, and physiological states. Physiological bases of behavior and health; stress and coping; behavioral antecedents of disease; psychoneuroimmunology; disease prevention and health promotion.

Psy 3542. Multicultural Psychology. (HDIV; 4 cr; [Psy 3541]; prereq 1051; fall, every year)
Theoretical and methodological approaches to multicultural psychology. Multicultural psychology is the systematic study of behavior, cognition, and affect sets where people of different backgrounds interact. Exploration of these interactions both within and outside of the United States. Topics may include worldview, communications styles, acculturation, prejudice, white privilege, identity development, physical and mental health, and multicultural competencies.

Psy 3701. Organizational Behavior. (SS; 4 cr; [Mgmt 3701]; prereq Stat 1601 or Stat 2601, jr or sr; fall, offered when feasible)
Same as Mgmt 3701. Uses the theories and research of the behavioral sciences to understand how organizations function at the individual, group, and organizational levels. Topics include stress in the workplace; group dynamics; power, leadership, and attribution theory.

Psy 4101. Helping Relationships. (SS; 4 cr; prereq 3302 or 3313; fall, spring, every year)
Approaches to counseling and psychotherapy. Theories of helping relationships. Acquisition of helping skills, including attending behavior, reflection of feeling, paraphrasing, confrontation, and summarization. Major humanistic, cognitive, and behavioral approaches. Didactic instruction, observation of counseling and psychotherapeutic techniques, and practical experiences.

Psy 4896. Field Experiences in Psychology. (SS; 1-4 cr [max 4 cr]; prereq #, which normally requires 4101. Is 4101, other courses appropriate to field experience; SS [if taken for 2 or more cr]; only 4 cr may be applied to the BA or the Psy major; S-N only; fall, spring, every year)
Individually arranged, supervised observation of and assistance with activities of professional psychologists in schools, clinics, hospitals, and other field settings.

Psy 4910. Advanced Seminar in Cognitive Psychology. (SS; 4 cr; [Psy 4710]; prereq 2001, 3111 or 3112, sr status, #; A-F only; fall, every year)
Advanced seminar on selected topics in the area of Cognitive Psychology. Members of the seminar read and discuss primary source material on a topic of common interest. In addition, each student investigates a related topic in greater depth. The student writes a paper and gives a public presentation based on the in-depth investigation.

Psy 4920. Advanced Seminar in Biological or Comparative Psychology. (SS; 4 cr; [Psy 4720]; prereq 2001, 3201 or 3211, sr status, #; A-F only; spring, every year)
Advanced seminar on selected topics in the area of Biological and Comparative Psychology. Members of the seminar read and discuss primary source material on a topic of common interest. In addition, each student investigates a related topic in greater depth. The student writes a paper and gives a public presentation based on the in-depth investigation.

Psy 4930. Advanced Seminar in Personality or Clinical Psychology. (SS; 4 cr; [Psy 4730]; prereq 2001, 3302 or 3313, sr status, #; A-F only; spring, every year)
Advanced seminar on selected topics in the area of Personality or Clinical Psychology. Members of the seminar read and discuss primary source material on a topic of common interest. In addition, each student investigates a related topic in greater depth. The student writes a paper and gives a public presentation based on the in-depth investigation.
Information on courses and programs from the University of Minnesota Morris 2009-11 Catalog
Management (Mgmt)

2. are able to critically conceptualize business problems and to develop appropriate strategies for problem solving
3. understand and use a variety of quantitative analysis techniques appropriate for business
4. develop collaborative skills
5. be competent in written and oral communication
6. develop competence in computer skills
7. are prepared for professional careers in business or public service, or for graduate studies
8. are able to see relationships between management and other liberal arts disciplines.

Management Major

Program Requirements

Students intending on going to graduate school are strongly recommended to take Math 1101-1102. Students are also recommended to take Phil 2112, if not required to do so. Prospective majors should see a management faculty member before registering for classes. Consultation with an adviser is essential to program planning.

Requirements for a major include core requirements and requirements from a chosen sub-plan.

Grades of D or D+ in Mgmt 2101–2102, Econ 1111–1112, Stat 1601 or 2601 may not be used to meet the major requirements.

Up to 4 credits of other management coursework with a grade of D or D+ may be used to meet the major requirements if offset by an equivalent number of credits of A or B.

A minimum GPA of 2.00 is required in the major to graduate. The GPA includes all, and only, University of Minnesota coursework. Grades of “F” are included in GPA calculation until they are replaced.

Courses for the Program

Required Core Courses

These courses may not be taken S-N unless offered S-N only.

Students should complete all but Econ 3113, Econ 4501, and Mgmt 3123 during their first two years.

CSci 1251—Computational Data Management and Manipulation, M/ SR (4 cr)
Econ 1111—Principles of Microeconomics, SS (4 cr)
Econ 1112—Principles of Macroeconomics, SS (4 cr)
Econ 3113—Money, Banking, and Financial Markets, SS (4 cr)
Econ 4501—Senior Research Seminar in Economics and Management, SS (2 cr)
Mgmt 2101—Principles of Accounting I (4 cr)
Mgmt 2102—Principles of Accounting II (2 cr)
Mgmt 3123—Managerial Economics, SS (4 cr)
Stat 1601—Introduction to Statistics, M/ SR (4 cr) or Stat 2601—Statistical Methods, M/ SR (4 cr)

Elective Courses

Students must select courses, exclusive of those used to satisfy sub-plan requirements.

No more than 4 credits from each of the following can be applied to the major: Econ 4501—Senior Research Seminar in Economics and Management, Mgmt x993—Directed Study

Take 8 or more credit(s) from the following:

Econ 3003—Political Economy I, SS (2 cr)
Econ 3004—Political Economy II, SS (2 cr)
Econ 3005—Experimental and Behavioral Economics I, SS (2 cr)
Econ 3006—Experimental and Behavioral Economics II, SS (2 cr)
Econ 3007—Environmental and Natural Resource Economics I, Env (2 cr)
Econ 3008—Environmental and Natural Resource Economics II, Env (2 cr)
Econ 3014—Game Theory: The Theory of Strategic Behavior I, SS (2 cr)
Econ 3015—Game Theory: The Theory of Strategic Behavior II, SS (2 cr)
Econ 3121—Public Economics I, SS (2 cr)
Econ 3122—Public Economics II, SS (2 cr)
Econ 3131—Comparative Economic Systems, IP (2 cr)
Econ 3141—Economic Development and Growth I, IP (2 cr)
Econ 3142—Economic Development and Growth II, IP (2 cr)
Econ 3201—Microeconomic Theory, SS (4 cr)
Econ 3202—Macroeconomic Theory, SS (4 cr)
Econ 3211—History of Economic Thought I, Hist (2 cr)
Econ 3212—History of Economic Thought II, Hist (2 cr)
Econ 3351—Globalization: Examining India’s Social and Economic Development, IP (4 cr)
Econ 3501—Introduction to Econometrics, M/SR (4 cr)
Econ 3993—Directed Study (1–5 cr)
Econ 4101—Labor Economics I, HDiv (2 cr)
Econ 4102—Labor Economics II, SS (2 cr)
Econ 4111—Mathematical Economics I, M/SR (2 cr)
Econ 4112—Mathematical Economics II, M/SR (2 cr)
Econ 4121—International Trade Theory, SS (2 cr)
Econ 4131—International Finance, SS (2 cr)
Econ 4993—Directed Study (1–5 cr)
Mgmt 3101—Financial Management, SS (4 cr)
Mgmt 3133—Managerial Accounting (4 cr)
Mgmt 3141—Business Law I, SS (2 cr)
Mgmt 3142—Business Law II, SS (2 cr)
Mgmt 3151—Human Resources Management I, E/CR (2 cr)
Mgmt 3152—Human Resources Management II, HDiv (2 cr)
Mgmt 3161—Labor Management Relations I, E/CR (2 cr)
Mgmt 3162—Labor Management Relations II, SS (2 cr)
Mgmt 3171—Leadership in Organizations, SS (2 cr)
Mgmt 3201—Marketing Principles and Strategy, SS (4 cr)
Mgmt 3221—Management and Organization Theory, SS (4 cr)
Mgmt 3351—Globalization: Examining India’s Social and Economic Development, IP (4 cr)
Mgmt 3501—Applied Deterministic Modeling for Management Science, M/ SR (2 cr)
Mgmt 3502—Applied Probabilistic Modeling for Management Science, M/ SR (2 cr)
Mgmt 3513—Negotiation, SS (4 cr)
Mgmt 3601—Transnational Enterprise, IP (2 cr)
Mgmt 3701—Organizational Behavior, SS (4 cr)
Mgmt 3993—Directed Study (1–5 cr)
Mgmt 4101—Investment and Portfolio Analysis, SS (4 cr)
Mgmt 4201—The Economics of Corporate Strategy I, SS (2 cr)
Mgmt 4202—The Economics of Corporate Strategy II, SS (2 cr)
Mgmt 4501—Globalization and Business Strategy, IP (2 cr)
Mgmt 4502—Technological Change, Labor Market, and Skill Formation, IP (2 cr)
Mgmt 4601—Advanced Topics in Financial Economics, SS (2 cr)
Mgmt 4602—Long-Term Financing, SS (2 cr)
Mgmt 4603—Working Capital Management, SS (2 cr)
Mgmt 4896—Internship (1–4 cr)

Econ 3xxx, 4xxx
Mgmt 3xxx, 4xxx

Program Sub-plans

Students are required to complete one of the following sub-plans. (Note: The honors sub-plan does not meet this requirement. Honors students are required to complete one sub-plan plus the honors sub-plan.)
Financial Management Sub-plan

**Required Courses for the Sub-plan**
- Math 1101—Calculus I, M/SR (5 cr)
- Mgmt 3101—Financial Management, SS (4 cr)
- CMR 1052—Introduction to Public Speaking, E/CR (2 cr)
  or  CMR 4152—Advanced Public Speaking, Hum (4 cr)

**Elective Courses**
Take 4 or more credit(s) from the following:
- Econ 4131—International Finance, SS (2 cr)
- Mgmt 3133—Managerial Accounting (4 cr)
- Mgmt 3501—Applied Deterministic Modeling for Management Science, M/SR (2 cr)
- Mgmt 3502—Applied Probabilistic Modeling for Management Science, M/SR (2 cr)
- Mgmt 4101—Investment and Portfolio Analysis, SS (4 cr)
- Mgmt 4601—Advanced Topics in Financial Economics, SS (2 cr)
- Mgmt 4602—Long-Term Financing, SS (2 cr)
- Mgmt 4603—Working Capital Management, SS (2 cr)

Global Business Sub-plan

**Required Courses for the Sub-plan**
- Mgmt 3601—Transnational Enterprise, IP (2 cr)
- 8 credits of French, German, Spanish, or other approved language at 2xxx or above

**International Perspectives Requirement**
Credits must be from courses other than Econ or Mgmt, 3xxx or above, and carry the IP general education designator.

Take exactly 4 credit(s) from the following:
- Anth 3601—Social Justice and Human Rights in Latin America, IP (4 cr)
- Anth 3602—Women in Latin America, IP (4 cr)
- Fren 3041—Francophone Studies: Francophone Worlds, IP (4 cr)
- Fren 3042—Francophone Studies: Contes francophones, IP (4 cr)
- Fren 3043—Francophone Studies: Littérature migrante, IP (4 cr)
- Fren 4991—Independent Study in French Abroad, IP (4 cr)
- Ger 3501—Women’s Issues in Contemporary German Culture, IP (4 cr)
- IS 3020—Italy and Austria: Brunnenburg and Beyond, IP (4 cr)
- Pol 4453—Russian Politics and Foreign Policy, IP (4 cr)
- Pol 3461—Diplomatic Negotiations, IP (4 cr)
- Pol 4451—Comparative Foreign Policy, IP (4 cr)
- Pol 4452—International Relations, IP (4 cr)
- Pol 3503—Women in Politics Worldwide, IP (4 cr)
- Soc 3111—Sociology of Modernization, IP (4 cr)
- Soc 3252—Women in Muslim Society, IP (4 cr)
- Soc 3601—Social Justice and Human Rights in Latin America, IP (4 cr)
- Soc 3602—Women in Latin America, IP (4 cr)

**Elective Courses**
Take 4 or more credit(s) from the following:
- Econ 3131—Comparative Economic Systems, IP (2 cr)
- Econ 3141—Economic Development and Growth I, IP (2 cr)
- Econ 3142—Economic Development and Growth II, IP (2 cr)
- Econ 4121—International Trade Theory, SS (2 cr)
- Econ 4131—International Finance, SS (2 cr)
- Mgmt 4501—Globalization and Business Strategy, IP (2 cr)
- Mgmt 4502—Technological Change, Labor Market, and Skill Formation, IP (2 cr)
- Mgmt 3351—Globalization: Examining India’s Social and Economic Development, IP (4 cr)
  or  Econ 3351—Globalization: Examining India’s Social and Economic Development, IP (4 cr)

Organizations and Human Resources Sub-plan

**Required Courses for the Sub-plan**
- Mgmt 3701—Organizational Behavior, SS (4 cr)
- Phil 2112—Professional Ethics, E/CR (4 cr)
- CMR 1052—Introduction to Public Speaking, E/CR (2 cr)
  or  CMR 4152—Advanced Public Speaking, Hum (4 cr)

**Elective Courses**
Take 4 or more credit(s) from the following:
- Econ 4101—Labor Economics I, HDiv (2 cr)
- Econ 4102—Labor Economics II, SS (2 cr)
- Mgmt 3151—Human Resources Management I, E/CR (2 cr)
- Mgmt 3152—Human Resources Management II, HDiv (2 cr)
- Mgmt 3161—Labor Management Relations I, E/CR (2 cr)
- Mgmt 3162—Labor Management Relations II, SS (2 cr)
- Mgmt 3171—Leadership in Organizations, SS (2 cr)
- Mgmt 3221—Management and Organization Theory, SS (4 cr)
- Mgmt 3513—Negotiation, SS (4 cr)

Management Minor

**Minor Requirements**
Grades of D or D+ in Mgmt 2101-2102 or Econ 1111-1112 may not be used to meet minor requirements.

A minimum GPA of 2.00 is required in the minor to graduate. The GPA includes all, and only, University of Minnesota coursework. Grades of F are included in GPA calculation until they are replaced.

**Courses for the Program**

**Required Courses**
These courses may not be taken S-N unless offered S-N only.
- Econ 1111—Principles of Microeconomics, SS (4 cr)
- Econ 1112—Principles of Macroeconomics, SS (4 cr)
- Mgmt 2101—Principles of Accounting I (4 cr)
- Mgmt 2102—Principles of Accounting II (4 cr)

**Elective Courses**
No more than 4 credits from each of the following can be applied to the minor:
- Econ 4501—Senior Research Seminar in Economics and Management
- Mgmt x993—Directed Study

Take 12 or more credit(s) from the following:
- Mgmt 3101—Financial Management, SS (4 cr)
- Mgmt 3123—Managerial Economics, SS (4 cr)
- Mgmt 3133—Managerial Accounting (4 cr)
- Mgmt 3141—Business Law I, SS (2 cr)
- Mgmt 3142—Business Law II, SS (2 cr)
- Mgmt 3151—Human Resources Management I, E/CR (2 cr)
- Mgmt 3152—Human Resources Management II, HDiv (2 cr)
- Mgmt 3161—Labor Management Relations I, E/CR (2 cr)
- Mgmt 3162—Labor Management Relations II, SS (2 cr)
- Mgmt 3171—Leadership in Organizations, SS (2 cr)
- Mgmt 3201—Marketing Principles and Strategy, SS (4 cr)
- Mgmt 3221—Management and Organization Theory, SS (4 cr)
- Mgmt 3351—Globalization: Examining India’s Social and Economic Development, IP (4 cr)
- Mgmt 3501—Applied Deterministic Modeling for Management Science, M/SR (2 cr)
- Mgmt 3502—Applied Probabilistic Modeling for Management Science, M/SR (2 cr)
- Mgmt 3513—Negotiation, SS (4 cr)
Management Course Descriptions

Mgmt 2101. Principles of Accounting I. (4 cr; fall, every year)
An introductory course in accounting principles and practices. The students develop an understanding of the conceptual and procedural framework of the accounting processes. Emphasis is placed on the preparation and communication of accounting information and the financial statements for a proprietorship.

Mgmt 2102. Principles of Accounting II. (2 cr; prereq 2101; spring, every year)
A continuation of Principles of Accounting I. Students develop an understanding of the issues unique to partnerships, corporations, and organizational financing. Cash flow statements and performance analysis are also emphasized.

Mgmt 2103. Directed Study. (1-5 cr [max 10 cr]; prereq approved directed study form; fall, spring, every year)
An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum.

Mgmt 2101. Financial Management. (SS; 4 cr; prereq 2102, Econ 1111, Econ 1112, Stat 1601; fall, every year)

Mgmt 2102. Managerial Accounting. (4 cr; prereq 2102; fall, spring, offered when feasible)
Managerial accounting is designed to help managers assess needed information to carry out three essential functions in an organization: planning operations, controlling activities, and making decisions. Emphasis on cost behaviors, various product costing methods, cost-volume-profit relationships, budgeting and control through standard costs, and other quantitative techniques used by management.

Mgmt 3141. Business Law I. (SS; 2 cr; prereq 2101 or #; fall, spring, offered when feasible)
Law as it relates to the commercial world, including the legal environment, federal regulation, contracts, agency, sales.

Mgmt 3142. Business Law II. (SS; 2 cr; prereq 2101 or #; fall, spring, offered when feasible)
Law as it relates to the commercial world, including the legal environment, commercial paper, corporations, secured transactions, bankruptcy, anti-trust law, and selected employment statutes.

Mgmt 3151. Human Resources Management I. (E/CR; 2 cr; prereq 2101 or #; spring, every year)
An introduction to the functional areas of human resource management through the use of case studies. Topics include legal issues, planning, recruitment, training, evaluation, compensation, and benefits.

Mgmt 3152. Human Resources Management II. (HDiv; 2 cr; prereq 2101 or #; fall, spring, offered when feasible)
Topics in human resource management: evaluating employee performance, training, safety, labor relations, international human resource management.

Mgmt 3161. Labor Management Relations I. (E/CR; 2 cr; prereq Econ 1111 or #; fall, spring, offered when feasible)
Historical development of labor relations and the legal framework governing collective bargaining. Labor relations law reform. Case studies from labor relations law.

Mgmt 3162. Labor Management Relations II. (SS; 2 cr; prereq 3161 or #; spring, offered when feasible)
Issues in labor-management negotiation, grievances, wages and economic security plans, public policies toward collective bargaining. Case studies from labor arbitration.

Mgmt 3171. Leadership in Organizations. (SS; 2 cr; prereq Stat 1601 or Stat 2601 or #; spring, every year)
Leadership is the ability to influence a group of people towards a goal. Examination of leadership qualities and theories as they apply to leading an organization. Ethics, social responsibility, team work, motivation, and conflict resolution skills from the perspective of a leader. International and culturally diverse aspects of leadership and leadership development. Students have the opportunity to practice leadership skills during the course.

Mgmt 3201. Marketing Principles and Strategy. (SS; 4 cr; prereq 2102, Stat 1601 or #; spring, offered when feasible)
Basic factors affecting policy and strategy issues in marketing. Economic, legal, behavioral, environmental, competitive, and technological factors as they affect product, pricing, promotion, and marketing-channel decisions.

Mgmt 3211. Management and Organization Theory. (SS; 4 cr; prereq 2101, Econ 1111 or #; fall, spring, offered when feasible)

Mgmt 3351. Globalization: Examining India's Social and Economic Development. (IP; 4 cr; = [Econ 3351]; prereq Econ 1111 or Econ 1112 or #; spring, offered when feasible)
Same as Econ 3351. Observe and study the impact of globalization on the Indian economy. Examine the growing class divide between the middle and upper middle class and the lower class. Study the problem of mass poverty in India and its various ramifications such as child labor, lack of education and basic health care, and the inherent gender bias. Examine sustainable grass roots efforts to combat some of these problems. [Continuing Education course]

Mgmt 3501. Applied Deterministic Modeling for Management Science. (M/SR; 2 cr; = [Math 3501]; prereq 2102, Math 1101 or Stat 1601 or Stat 2601 or #; spring, every year)
Same as Math 3501. Formulations of real-world problems as Linear Programming or Integer Linear Programming models; graphical solutions of some LP-models. Linear Programming: the Simplex method, intuitive ideas behind the Simplex method. Using software to solve LP problems; interpreting optimal solutions; sensitivity analysis; duality. Network diagram representation; critical path method (CPM-PERT); transportation problem.

Mgmt 3502. Applied Probabilistic Modeling for Management Science. (M/SR; 2 cr; = [Math 3502]; prereq 2102, Math 1101 or Stat 1601 or Stat 2601 or #; spring, every year)
Same as Math 3502. Short review of probability and statistics; mean and variance of a data set; discrete and continuous random variables (especially the exponential distribution and the Poisson distribution). Decision and game theory. Decision trees, types of decision criteria. Queuing models, birth-and-death processes; Markovian or Poisson arrivals and exponential service times; M/M/k and M/M/8 queues; Statistical Quality Control; inventory control system.
Mgmt 3513. Negotiation. (SS; 4 cr; [Psy 3513]; prereq 3221 or Psy 3501 or Psy/Mgmt 3701; spring, every year)
Same as Psy 3513. Examines the theoretical and applied aspects of negotiation. Topics include negotiation theory, strategy, skills and tactics, communication processes, global negotiation, and ethics. Use of negotiation simulations.

Mgmt 3601. Transnational Enterprise. (IP; 2 cr; prereq 2102, Econ 1111, Econ 1112 or #; fall, every year)
Development and transformation of business enterprise within the global economy. Includes the basic impact of structural, institutional, and organizational change upon the dynamics of the firm and industry in the contemporary hyper-competitive, technology-driven, fast-paced, global environment.

Mgmt 3701. Organizational Behavior. (SS; 4 cr; [Psy 3701]; prereq Stat 1601 or Stat 2601, jr or sr; fall, spring, offered when feasible)
Same as Psy 3701. Uses the theories and research of the behavioral sciences to understand how organizations function at the individual, group, and organizational levels. Topics include stress in the workplace; group dynamics; power, leadership, and attribution theory.

Mgmt 3993. Directed Study. (1-5 cr [max 10 cr]; prereq approved directed study form; fall, spring, every year)
An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum.

Mgmt 4101. Investment and Portfolio Analysis. (SS; 4 cr; prereq 2101, 2102, 3101; spring, every year)
The institutional environment of investment, techniques used to price financial products, and how to design a portfolio of many assets.

Mgmt 4201. The Economics of Corporate Strategy I. (SS; 2 cr; prereq 3125 or #; fall, spring, offered when feasible)
Setting the horizontal boundaries (e.g., which lines of business) and vertical boundaries (whether to make or buy inputs and outputs) of the firm, considered as strategic decisions. The different types of competition associated with distinct market structures.

Mgmt 4202. The Economics of Corporate Strategy II. (SS; 2 cr; prereq 4201; fall, spring, offered when feasible)
Tools for analyzing business strategies: credible strategic commitments, pricing rivalries, entry and exit, Porter’s five forces framework, and the relationship between value creation and strategic market positioning.

Mgmt 4501. Globalization and Business Strategy. (IP; 2 cr; prereq 3601 or #; fall, spring, offered when feasible)
Review of the impact of increasing globalization of the corporate and economic environment; application of strategic methods to new business conditions.

Mgmt 4502. Technological Change, Labor Market, and Skill Formation. (IP; 2 cr; prereq 3601 or #; fall, spring, offered when feasible)
The change of technology in relation to the formation of skills and transformation of regional labor markets throughout the world. The intimate relationship between “skilling” and “deskilling” of labor and the transformation of technology.

Mgmt 4505. International Managerial Finance. (SS; 2 cr; prereq 3101 or #; spring, offered when feasible)
An introduction to the international dimensions of corporate financing, investment, and risk management decisions. Foreign exchange markets, international financial systems, foreign exchange rate determination, measuring/managing currency risk, multinational capital budgeting, cost of capital in emerging economies, international taxation policies, and transfer pricing.

Mgmt 4601. Advanced Topics in Financial Economics. (SS; 2 cr; prereq 3101 or #; fall, spring, offered when feasible)
Continuation of Mgmt 3101. Topics include dividend policy, hybrid financing, derivatives, and mergers.

Mgmt 4602. Long-Term Financing. (SS; 2 cr; prereq 3101 or #; fall, offered when feasible)
Application of the fundamental financial theories acquired in Mgmt 3101 to long-term financing in corporations. The primary focus is on issuing securities to the public, financial leverage, capital structure policy, dividend policy, and leasing.

Mgmt 4603. Working Capital Management. (SS; 2 cr; prereq 3101 or #; fall, offered when feasible)
Application of the fundamental financial theories acquired in Mgmt 3101 to working capital management in corporations. The primary focus is on financial planning, cash management, credit management, and risk management.

Mgmt 4896. Internship. (1-4 cr [max 4 cr]; prereq 2102, #; 2 cr may be applied to major or minor; S-N only; fall, spring, every year)
Supervised educational experience and field application relevant to student’s major. Written analysis appropriate to the application is required.

Mgmt 4993. Directed Study. (1-5 cr [max 10 cr]; prereq approved directed study form; fall, spring, every year)
An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum.

Mathematics (Math)

Division of Science and Mathematics

Objectives—The mission of the discipline is to advance knowledge of mathematics: by teaching mathematics and its processes, by research in mathematics and mathematical pedagogy, and by dissemination of this knowledge to students and the community we serve.

Historically, the study of mathematics has been central to a liberal arts education. The mathematics curriculum serves as an integral part of students’ active pursuit of a liberal arts education. The mathematics program serves students who major or minor in mathematics, seek secondary mathematics teaching licensure, major or minor in programs that require a mathematical background, or wish to fulfill components of a general education.

The mathematics curriculum is designed to help students develop competence in mathematical techniques and methods; to sharpen students’ mathematical intuition and abstract reasoning as well as their reasoning from numerical data; to encourage and stimulate the type of independent thinking required for research beyond the confines of the textbook; and to provide students with the basic knowledge and skills to make mathematical contributions to modern society. The program seeks to enable students to see and communicate how the development of mathematics has been part of the development of several civilizations and is intimately interwoven with the cultural and scientific development of these societies. The curriculum prepares students to enter graduate school, pursue careers in applied mathematics, or teach mathematics.

Mathematics Major

Program Requirements

A minimum GPA of 2.00 is required in the major to graduate. The GPA includes all, and only, University of Minnesota coursework. Grades of F are included in GPA calculation until they are replaced. Courses may not be taken S-N unless offered S-N only. Up to 5 credits of coursework with a grade of D or D+ may be used to meet the major requirements if offset by an equivalent number of credits of B- or above in courses at or above 2xxx. Exceptions to requirements may be granted on an individual basis, after consulting with the math faculty.

Majors should begin with Math 1012—Precalculus I or Math 1013—Precalculus II or Math 1101—Calculus I. Students with questions about placement are encouraged to discuss them with members of the mathematics faculty.
Recommended electives for students planning to pursue graduate work in pure mathematics:

- Math 4201—Complex Analysis
- Math 4211—Real Analysis
- Math 4221—Topology
- Math 4231—Abstract Algebra II
- Math 4241—Number Theory
- Math 4252—Differential Geometry
- Math 4253—Combinatorics

Recommended electives for students planning to work or pursue graduate work in applied mathematics or related fields:

- Math 2401—Differential Equations
- Math 3401—Operations Research
- Math 4401—Numerical Methods With Applications in Mathematical Modeling
- Math 4452—Mathematical Modeling

**Courses for the Program**

**Required Courses**

- Math 1101—Calculus I, M/SR (5 cr)
- Math 1102—Calculus II, M/SR (5 cr)
- Math 2101—Calculus III, M/SR (4 cr)
- Math 2111—Linear Algebra, M/SR (4 cr)
- Math 2201—Mathematical Perspectives, M/SR (4 cr)
- Math 3211—Abstract Algebra I, M/SR (4 cr)
- Math 4901—Senior Seminar, M/SR (2 cr)

Take 1 or more course(s) from the following:

- Math 2401—Differential Equations, M/SR (4 cr)
- Math 3401—Operations Research, M/SR (4 cr)
- Math 3411—Discrete and Combinatorial Mathematics, M/SR (4 cr)
- Math 4401—Numerical Methods With Applications in Mathematical Modeling, M/SR (4 cr)
- Math 4452—Mathematical Modeling, M/SR (4 cr)

Take 4 or more credit(s) from the following:

- Math 2xxx, 3xxx, 4xxx

Take 1 or more course(s) from the following:

- CSci 1201—Introduction to Digital Media Computation, M/SR (4 cr)
- CSci 1301—Problem Solving and Algorithm Development, M/SR (4 cr)

Or take both of the following:

- CSci 1001—Introduction to the Computing World, M/SR (2 cr)
- CSci 1101—Dynamic Web Programming, M/SR (2 cr)

**Mathematical Applications Course**

Take 1 or more course(s) from the following:

- Chem 3501—Physical Chemistry I, Sci (4 cr)
- Econ 3201—Microeconomic Theory, SS (4 cr)
- Econ 3202—Macroeconomic Theory, SS (4 cr)
- Econ 3501—Introduction to Econometrics, M/SR (4 cr)
- Econ 4111—Mathematical Economics I, M/SR (2 cr)
- Econ 4112—Mathematical Economics II, M/SR (2 cr)
- Geol 3501—Hydrology, Sci (4 cr)
- Geol 3401—Geophysics, M/SR (4 cr)
- Math 3501—Applied Deterministic Modeling for Management Science, M/SR (2 cr)
- Math 3502—Applied Probabilistic Modeling for Management Science, M/SR (2 cr)
- NSci 3201—Relativity and Cosmology, Sci (4 cr)
- Phys 1101—General Physics I, Sci-L (5 cr)
- Phys 1102—General Physics II, Sci-L (5 cr)
- Phys 2101—Modern Physics, Sci-L (5 cr)
- Phys 3101—Classical Mechanics, Sci (4 cr)
- Math 2401—Differential Equations, M/SR (4 cr)
- Phys 4101—Electromagnetism, Sci (4 cr)
- Phys 4201—Quantum Mechanics, Sci (4 cr)
- Stat 2601—Statistical Methods, M/SR (4 cr)
- CSci 2101—Data Structures, M/SR (5 cr)
- CSci 3401—Models of Computing Systems, M/SR (5 cr)
- CSci 3501—Algorithms and Computability, M/SR (5 cr)
- CSci 3601—Software Design and Development, M/SR (5 cr)
- Phil 2101—Introduction to Symbolic Logic, M/SR (4 cr)
- Stat 3601—Data Analysis, M/SR (4 cr)
- Stat 3611—Multivariate Statistical Analysis, M/SR (4 cr)
- Stat 4601—Biostatistics, M/SR (4 cr)

**Mathematics Minor**

**Minor Requirements**

Courses may not be taken S-N unless offered S-N only. Up to 5 credits of coursework with a grade of D or D+ may be used to meet the minor requirements if offset by an equivalent number of credits of B- or above in courses at or above the 2xxx level.

The GPA in these courses must be at least 2.00.

**Courses for the Program**

**Required Courses**

- Math 1101—Calculus I, M/SR (5 cr)
- Math 1102—Calculus II, M/SR (5 cr)
- Math 2111—Linear Algebra, M/SR (4 cr)

Take 12 or more credit(s) from the following:

- Math 2401—Differential Equations, M/SR (4 cr)
- Math 3401—Operations Research, M/SR (4 cr)
- Math 3411—Discrete and Combinatorial Mathematics, M/SR (4 cr)
- Math 4401—Numerical Methods With Applications in Mathematical Modeling, M/SR (4 cr)
- Math 4452—Mathematical Modeling, M/SR (4 cr)
- Math 2xxx, 3xxx, 4xxx

Or take both of the following:

- CSci 1201—Introduction to Digital Media Computation, M/SR (4 cr)
- CSci 1301—Problem Solving and Algorithm Development, M/SR (4 cr)

**Elective Courses**

Take 12 or more credit(s) from the following:

- Math 2101—Calculus III, M/SR (4 cr)
- Math 2202—Mathematical Perspectives, M/SR (4 cr)
- Math 2211—History of Mathematics (4 cr)
- Math 2401—Differential Equations, M/SR (4 cr)
- Math 2501—Probability and Stochastic Processes, M/SR (4 cr)
- Math 3211—Geometry, M/SR (4 cr)
- Math 3221—Analysis, M/SR (4 cr)
- Math 3231—Abstract Algebra I, M/SR (4 cr)
- Math 3401—Operations Research, M/SR (4 cr)
- Math 3411—Discrete and Combinatorial Mathematics, M/SR (4 cr)
- Math 3501—Applied Deterministic Modeling for Management Science, M/SR (2 cr)
- Math 3502—Applied Probabilistic Modeling for Management Science, M/SR (2 cr)
- Math 4201—Complex Analysis, M/SR (2 cr)
- Math 4211—Real Analysis, M/SR (2 cr)
- Math 4221—Topology, M/SR (2 cr)
- Math 4231—Abstract Algebra II, M/SR (2 cr)
- Math 4241—Number Theory, M/SR (2 cr)
- Math 4252—Differential Geometry, M/SR (2 cr)
- Math 4253—Combinatorics, M/SR (2 cr)
- Math 4401—Numerical Methods With Applications in Mathematical Modeling, M/SR (4 cr)
- Math 4452—Mathematical Modeling, M/SR (4 cr)

One of the courses below can be chosen to fulfill 4 elective credits for the math minor.

- Stat 2601—Statistical Methods, M/SR (4 cr)
- or Stat 2611—Mathematical Statistics, M/SR (4 cr)

**Teacher Preparation Requirements**

Students seeking teaching licensure in mathematics 5–12 should refer to the **Education, Secondary (SeEd)** section of this catalog.
Mathematics Course Descriptions

Math 0991. Basic Algebra. (0 cr; max 4 cr; 0 cr toward graduation, 4 cr toward financial aid; fall, every year)
Sets, absolute values, linear equations and inequalities, functions and graphs, arithmetic of complex numbers, quadratics, radicals, exponents and logarithms, and linear systems of equations.

Math 1001. Survey of Math. (M/SR; 4 cr; prereq 2 yrs high school math; spring, every year)
Introductory topics in mathematics, such as number system, geometry, algebra, discrete mathematics, statistics, and the history of mathematics, including applications in today's world.

Math 1012. PreCalculus I. Functions. (4 cr; prereq placement; fall, spring, every year)
Linear and quadratic functions, power functions with modeling; polynomial functions of higher degree with modeling; real zeros of polynomial functions; rational functions; solving equations in one variable; solving systems of equations; exponential and logarithmic functions, and the graphs of these functions.

Math 1013. PreCalculus II: Trigonometry. (M/SR; 2 cr; prereq placement; fall, spring, every year)
Angles and their measures; trigonometric functions; the circular functions of trigonometry; graphs of sine, cosine, tangent, cosecant, secant, and cotangent functions; algebra of trigonometric functions; inverse trigonometric functions; solving problems with trigonometry; analytic trigonometry; fundamental trig identities; proving trigonometric identities; sum and difference identities; multiple-angle identities; the Law of Sines; the Law of Cosines.

Math 1021. Survey of Calculus. (M/SR; 4 cr; prereq 1012 or placement; fall, every year)
Short course for students in social sciences, biological sciences, and other areas requiring a minimal amount of calculus. Topics include basic concepts of functions, derivatives and integrals, exponential and logarithmic functions, maxima and minima, partial derivatives; applications.

Math 1101. Calculus I. (M/SR; 5 cr; prereq 1012, 1015 or placement; fall, spring, every year)
Limits and continuity; the concepts, properties, and some techniques of differentiation, antidifferentiation, and definite integration and their connection by the Fundamental Theorem. Partial differentiation. Some applications. Students learn the basics of a computer algebra system.

Math 1102. Calculus II. (M/SR; 5 cr; prereq 1101; fall, spring, every year)

Math 1993. Directed Study. (1-5 cr [max 10 cr]; prereq approved directed study form; fall, spring, every year)
An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum. In particular, students are encouraged to take at least one credit of a directed study in problem solving in mathematics. Such courses, at different levels, are available each term.

Math 2101. Calculus III. (M/SR; 4 cr; prereq 1101 or #; fall, spring, every year)
Multivariable and vector calculus. Three-dimensional analytic geometry; partial differentiation; multiple integration; gradient, divergence, and curl; line and surface integrals; divergence theorem; Green and Stokes theorems; applications.

Math 2111. Linear Algebra. (M/SR; 4 cr; prereq 1101 or #; fall, spring, every year)
Matrix algebra, systems of linear equations, finite dimensional vector spaces, linear transformations, determinants, inner-product spaces, characteristic values and polynomials, eigenspaces, minimal polynomials, diagonalization of matrices, related topics; applications.

Math 2202. Mathematical Perspectives. (M/SR; 4 cr; prereq 1101; spring, every year)
Introduction to the methodology and subject matter of modern mathematics. Logic, sets, functions, relations, cardinality, and induction. Introductory number theory. Roots of complex polynomials. Other selected topics.

Math 2211. History of Mathematics. (4 cr; prereq Math course above 1100 or #; fall, every year)
Historical development of various areas in mathematics and important figures in mathematics from ancient to modern times.

Math 2401. Differential Equations. (M/SR; 4 cr; prereq 1102 or #; fall, every year)
First-order and second-order differential equations with methods of solution and applications. Laplace transforms, systems of equations, series solutions, existence and uniqueness theorems, the qualitative theory of differential equations.

Math 2501. Probability and Stochastic Processes. (M/SR; 4 cr; Stat 2501; prereq 1101 or #; fall, every year)

Math 2993. Directed Study. (1-5 cr [max 25 cr]; prereq approved directed study form; fall, spring, every year)
An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum. In particular, students are encouraged to take at least one credit of a directed study in problem solving in mathematics. Such courses, at different levels, are available each term.

Math 3211. Geometry. (M/SR; 4 cr; prereq Math course above 1100; fall, odd years)
Synthetic approach to Euclidean and non-Euclidean geometries. Selected topics from affine, hyperbolic, spherical, projective geometries. Possible comparisons of analytic and synthetic approaches. May include other related topics or use of computer software for geometry.

Math 3221. Analysis. (M/SR; 4 cr; prereq 1102, 2202 or #; fall, every year)
Introduction to real and complex analysis. The main topics of calculus-convergence, continuity, differentiation, integration, and series-applied and extended in advanced settings with emphasis on precise statements and rigorous proofs. Concept of metric space. Other topics and applications.

Math 3231. Abstract Algebra I. (M/SR; 4 cr; prereq 2111, 2202 or #; spring, every year)
Systematic study of groups and rings, making use of linear algebra. Groups as codifying symmetry throughout mathematics and its applications. The Euclidean algorithm and its consequences, both for integers and polynomials. Other selected topics and applications.

Math 3401. Operations Research. (M/SR; 4 cr; prereq 1100 or higher or #; spring, every year)
Topics include, but not limited to, linear and integer linear programming formulations, sensitivity analysis and duality, network models and applications.

Math 3411. Discrete and Combinatorial Mathematics. (M/SR; 4 cr; prereq 1100 or higher or #; fall, every year)
Propositional logic; equivalence relations; recurrence equations; structures and properties of undirected and directed graphs; applications of the aforementioned topics.

Math 3501. Applied Deterministic Modeling for Management Science. (M/SR; 2 cr; =Mgmt 3501; prereq 1101 or Stat 1601 or Stat 2611, Mgmt 2102 or #; spring, every year)
Same as Mgmt 3501. Formulations of real-world problems as Linear Programming or Integer Linear Programming models; graphical solutions of some LP models. Linear Programming: the Simplex method, intuitive ideas behind the Simplex method. Using software to solve LP problems; interpreting optimal solutions; sensitivity analysis; duality. Network diagram representation; critical path method (CPM-PERT); transportation problem.

Math 3502. Applied Probabilistic Modeling for Management Science. (M/SR; 2 cr; =Mgmt 3502; prereq 1101 or Stat 1601 or Stat 2611, Mgmt 2102 or #; spring, every year)
Same as Mgmt 3502. Short review of probability and statistics; mean and variance of a data set; discrete and continuous random variables (especially the exponential distribution and the Poisson distribution). Decision and game theory. Decision trees, types of decision criteria. Queuing models, birth-and-death processes; Markovian or Poisson arrivals and exponential service times; M/M/1 and M/M/8 queues; Statistical Quality Control; inventory control system.
Music (Mus)

Math 3993. Directed Study. (1-5 cr [max 25 cr]; prereq approved directed study form; fall, spring, every year)
An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum. In particular, students are encouraged to take at least one credit of a directed study in problem solving in mathematics. Such courses, at different levels, are available each term.

42xx Courses: The following courses numbered 42xx can include a variety of topics in mathematics. Each year the mathematics discipline will decide which courses to offer, taking student preferences into account.

Math 4201. Complex Analysis. (M/SR; 2 cr; prereq 3221 or #; fall, spring, offered when feasible)
Differentiable and analytic functions of a complex variable. Contour integral theorems. Laurent expansions. Other topics optional.

Math 4211. Real Analysis. (M/SR; 2 cr; prereq 3221 or #; fall, spring, offered when feasible)
Differentiation of functions of several variables. The extension of integration to other forms of integrals. Introduction to measure theory. Other optional topics.

Math 4221. Topology. (M/SR; 2 cr; prereq 2202 or #; fall, spring, offered when feasible)
Selected topics from point set topology and/or algebraic topology.

Math 4231. Abstract Algebra II. (M/SR; 2 cr; prereq 3231 or #; fall, spring, offered when feasible)
Selected topics from the theory of finite groups, Galois theory of fields, and/or the theory of rings.

Math 4241. Number Theory. (M/SR; 2 cr; prereq 2202 or #; fall, spring, offered when feasible)
Selected topics from modular congruences, theory of primes, classical Diophantine equations, and the connections with algebraic curves.

Math 4252. Differential Geometry. (M/SR; 2 cr; prereq #; fall, spring, offered when feasible)
Geometry of curves and surfaces. Frames, curvature, torsion, orientation, differential forms, topological properties of surfaces. The notion of differentiable manifold. Selected applications.

Math 4253. Combinatorics. (M/SR; 2 cr; prereq #; fall, spring, offered when feasible)
Selected topics from graph theory, the theory of ordered sets, and/or enumerative combinatorics.

Math 4401. Numerical Methods with Applications in Mathematical Modeling. (M/SR; 4 cr; prereq 2111, 2401 or #; fall, spring, offered when feasible)
Finite differences; interpolation; numerical integration; numerical solutions of differential, algebraic, and transcendental equations; continuous mathematical models.

Math 4451. Mathematical Modeling. (M/SR; 4 cr; prereq #; fall, spring, offered when feasible)
Mathematical topics include, but are not limited to, differential and difference equations, discrete and continuous dynamical systems, predator-prey models, discrete and continuous optimization models, probabilistic models, stochastic and Poisson processes, and queueing models. Applications are drawn from different areas in the sciences and social sciences.

Math 4901. Senior Seminar. (M/SR; 2 cr; prereq sr; full year course begins fall sem; fall, every year)
This is a full-year course, required for all mathematics majors in their senior year. Students must attend year round and present one of the seminars.

Math 4993. Directed Study. (1-5 cr [max 25 cr]; prereq approved directed study form; fall, spring, every year)
An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum. In particular, students are encouraged to take at least one credit of a directed study in problem solving in mathematics. Such courses, at different levels, are available each term.

Music Major

Program Requirements

No grades below C- are allowed. Courses may not be taken S-N unless offered S-N only.
A minimum GPA of 2.00 is required in the major to graduate. The GPA includes all, and only, University of Minnesota coursework. Grades of F are included in GPA calculation until they are replaced.

Courses for the Program

Required Courses

Music theory courses (1101, 1102, 2101, 2102) are taken concurrently with piano lessons until the piano proficiency test is passed.
Students must enroll in Mus 0100 seven times.

Mus 0100—Concert Attendance (0 cr)
Mus 1101—Core Studies I: Music Theory I, M/SR (4 cr)
Mus 1102—Core Studies I: Music Theory II, M/SR (4 cr)
Mus 2101—Core Studies II: Music Theory III, Hum (4 cr)
Mus 2102—Core Studies II: Music Theory IV, Hum (4 cr)
Mus 3101—Core Studies III: Medieval, Renaissance, and Baroque Music, Hist (4 cr)
Mus 3102—Core Studies III: Classical, Romantic, and 20th-Century Music, FA (4 cr)
Mus 4901—Senior Project (1 cr)
Piano proficiency
7 credits in individual performance studies in the applied area, of which a minimum of two semesters must be in the Mus 32xx—Advanced Individual Performance Studies series.

Elective Courses

Take 6 or more credit(s) from the following:
Mus 3051—Piano Pedagogy I, ArtP (2 cr)
Mus 3052—Piano Pedagogy II, ArtP (2 cr)
Mus 3061—Guitar Pedagogy, ArtP (2 cr)
Mus 3065—Introduction to Creative Guitar Repertoire, ArtP (1 cr)
Mus 3301—Instrumental Techniques—Woodwind (1 cr)
Mus 3302—Instrumental Techniques—Brass and Percussion (1 cr)
Mus 3303—Instrumental Techniques—Strings (1 cr)
Mus 3304—Vocal Techniques (1 cr)
Mus 3311—Conducting Techniques (2 cr)
Mus 3321—Instrumental Conducting and Materials (2 cr)
Mus 3331—Choral Conducting and Materials (2 cr)
Teacher Preparation Requirements

A minimum GPA of 2.00 is required in the minor to graduate. The GPA includes all, and only, University of Minnesota Courses for the Program. Grades of F are included in GPA calculation until they are replaced.

Courses for the Program

Required Courses

Music theory courses (1101, 1102) are taken concurrently with piano lessons until the piano proficiency test is passed. Students must enroll in Mus 0100 four times.

Mus 0100—Concert Attendance (0 cr)
Mus 1101—Core Studies I: Music Theory I, M/SR (4 cr)
Mus 1102—Core Studies I: Music Theory II, M/SR (4 cr)
Mus 3101—Core Studies III: Medieval, Renaissance, and Baroque Music, Hist (4 cr)
Mus 3102—Core Studies III: Classical, Romantic, and 20th-Century Music, FA (4 cr)
4 credits in Individual Performance Studies in the applied area.

Piano Proficiency

Teacher Preparation Requirements

Students seeking teaching licensure in instrumental music K–12 or vocal music K-12 should refer to the Education, Secondary (SeEd) section of this catalog.

Music Course Descriptions

Mus 0100. Concert Attendance. (0 cr; prereq major or minor; S-N only; fall, spring, every year)
Encourages concert attendance as an important aspect of learning about music-the literature, various media, performance practice, and related topics. Satisfactory completion is attendance at a minimum of 15 listed concert offerings each semester.

Mus 1041. Introduction to Music. (FA; 4 cr; fall, every year)
Survey emphasizing development of an intelligent understanding and appreciation of music. For non-music majors.

Mus 1042. Fundamentals of Music. (FA; 4 cr; spring, even years)
The rudiments of music including note and rhythmic reading, scales, chords, beginning chord progressions, and practical keyboard work in the piano lab.

Mus 1043. American Jazz Styles. (FA; 4 cr; fall, spring, offered when feasible)
Development and analysis of the New Orleans Dixieland, ragtime, stride, boogie-woogie, Chicago Dixieland, swing, bop, cool, funky, progressive, third-stream, free form, and fusion jazz styles. Introductory course to help non-music majors become familiar with and appreciate this art form.

Mus 1044. Class Piano. (ArtP; 1 cr; special fee required; fall, spring, every year)
Introduction to piano performance for students with no previous piano training. Students will learn basic keyboard skills including note reading, fingering, and counting. Study beginning piano technique and learn to perform elementary-level solos and ensembles.
Music (Mus)

Mus 1221. Guitar. 
Mus 1223. Composition.

Mus 1300. UMM Symphonic Winds. (ArtP; 1 cr; max 8 cr; fall, spring, every year)
Rehearsals and concerts cover standard and contemporary wind ensemble literature with emphasis on concert performance. Several concerts annually in addition to concert tours.

Mus 1310. University Choir. (ArtP; 1 cr; max 8 cr; fall, spring, every year)
Preparation of choral works for at least one public concert each semester and other special events. Emphasis on basic choral singing techniques.

Mus 1320. Concert Choir. (ArtP; 1 cr; max 8 cr; prereq #; fall, spring, every year)
Preparation of choral works from all major periods of music literature with emphasis on concert performance. Several public concerts and appearances scheduled each semester in addition to a spring concert tour.

Mus 1350. Jazz Ensemble. (ArtP; 1 cr; max 8 cr; fall, spring, every year)
Rehearsals and concerts cover the literature for this medium.

Mus 1340. Orchestra. (ArtP; 1 cr; max 8 cr; fall, spring, every year)
The study and preparation of standard orchestral works for performance at several public concerts and appearances each semester in addition to a concert tour. The study of basic orchestral procedure.

Mus 1350. UMM Campus Community Band. (ArtP; 1 cr; max 8 cr; fall, spring, every year)
Rehearsals and concerts cover standard and contemporary wind ensemble literature. Several concerts annually. Open to everybody on the UMM campus as well as interested community members in Morris and beyond.

Mus 1401. English, Italian, German, and French Diction for Singers. (ArtP; 1 cr; A-F only; spring, odd years)
The sounds and symbols of the International Phonetic Alphabet, rules for correct English, Italian, German, and French lyric diction. Transactions of German Lieder, French Melodie, Italian Arias, and English Songs into International Phonetic Alphabet. German, French, Italian, and English songs performed in class for critique.

Mus 2101. Core Studies II: Music Theory III. (Hum; 4 cr; prereq 1102, major or minor or #; concurrent enrollment in piano lessons until the piano proficiency test is passed; fall, every year)
Chromatic harmony of the Classical Period: borrowed chords, Neapolitan and augmented sixths; harmonic and formal analysis of scores including variation, sonata, and rondo forms.

Mus 2102. Core Studies II: Music Theory IV. (Hum; 4 cr; prereq 2101, major or minor or #; concurrent enrollment in piano lessons until the piano proficiency test is passed; spring, every year)
Extended chromatic harmony of the Romantic and later eras—nineteenth, twentieth, and thirteenth chords; altered dominants and chromatic mediant; analysis of scores including nonfunctional harmony; and twelve-tone techniques.

Mus 3051. Piano Pedagogy I. (ArtP; 2 cr; prereq 1200 or #; fall, even years)
This course is a study, demonstration, and discussion about the various elements of piano teaching methods, techniques, and materials for elementary and early intermediate levels. This includes analysis of various piano courses and piano literature, discussion of technical regimes, ideas for private and group lessons, and planning for the practical business aspect of teaching. Recommended for piano majors. [Continuing Education course]

Mus 3052. Piano Pedagogy II. (ArtP; 2 cr; prereq 1200 or #; fall, odd years)
This course covers much intermediate literature from each of the four major periods of music with practical ideas to put into immediate use by current teachers. Piano literature to motivate and retain students, as well as the study of performance practices as they relate to each musical style are emphasized. [Continuing Education course]

Mus 3061. Guitar Pedagogy. (ArtP; 2 cr; prereq 1201 or #; fall, spring, every year)
Discussions and readings on guitar pedagogy, private and group lessons, instructing young students, practice methods and business issues associated with self-employment in teaching music. Instruction of beginners in a one-on-one situation and classroom presentation of lessons. [Continuing Education course]

Mus 3065. Introduction to Creative Guitar Repertoire. (ArtP; 1 cr; max 2 cr; prereq 1221 or #; fall, offered when feasible)
Exploration of guitar styles and genres. Rather than master each style, students write original pieces or arrangements based on each style. Professional musicians present guest lectures and give private lessons.

Mus 3101. Core Studies III: Medieval, Renaissance, and Baroque Music. (Hist; 4 cr; prereq 1102, major or minor or #; fall, every year)
Historical development of Western music and representative literature of the various periods and styles.

Mus 3102. Core Studies III: Classical, Romantic, and 20th-Century Music. (FA; 4 cr; prereq 1102, major or minor or #; spring, every year)
Historical development of Western music and representative literature of the various periods and styles.

Mus 3200–3223. Advanced Individual Performance Studies. (ArtP; 1 cr max 6 cr per sem for each; prereq #; fall, spring, every year)
Private instruction in the major performance area for music students at an advanced level of performance. For listing of performance areas, see Mus 1200 above. Note: Applied music instructors are not expected to make up sessions for absences from scheduled lessons.

Mus 3301. Instrumental Techniques—Woodwind. (1 cr; prereq major or minor or #; fall, offered when feasible)
Practical study to develop elementary skills as well as a basic teaching knowledge and understanding of performance problems of the woodwind instruments.

Mus 3302. Instrumental Techniques—Brass and Percussion. (1 cr; prereq major or minor or #; spring, offered when feasible)
Practical study to develop elementary skills as well as a basic teaching knowledge and understanding of performance problems of the brass and percussion instruments.

Mus 3303. Instrumental Techniques—Strings. (1 cr; prereq major or minor or #; fall, offered when feasible)
Practical study to develop elementary skills as well as a basic teaching knowledge and understanding of performance problems of the string instruments.

Mus 3304. Vocal Techniques. (1 cr; prereq major or minor or #; spring, even years)
Practical study to develop elementary skills as well as a basic teaching knowledge and understanding of performance problems of the voice.

Mus 3311. Conducting Techniques. (2 cr; prereq major or minor or #; fall, every year)
Development of basic ensemble conducting skills.

Mus 3321. Instrumental Conducting and Materials. (2 cr; prereq 3311, major or minor or #; spring, every year)
Specialization of instrumental conducting and a survey of ensemble materials for various levels of ability and maturity.

Mus 3331. Choral Conducting and Materials. (2 cr; prereq 3311, major or minor or #; spring, every year)
Specialization of choral conducting and a survey of ensemble materials for various levels of ability and maturity.

Mus 3351. Instrumental Arranging. (ArtP; 2 cr; prereq 1102 or #; A-F only; spring, offered when feasible)
Theoretical study of orchestral and band instruments and special problems of scoring and arranging for small and large instrumental ensembles.

Mus 3352. Choral Arranging. (ArtP; 2 cr; prereq 1102 or #; A-F only; spring, offered when feasible)
Practical study of arranging for vocal ensembles and for vocal ensembles with instruments; exercises dealing with special problems and limitations of different age and ability groups.

Mus 3400. Vocal Performance Workshop. (ArtP; 1 cr; max 4 cr; prereq #; spring, every year)
Practical introduction to vocal performance. Students become familiar with a number of operas and musical comedies and perform selections emphasizing ensemble work.

Mus 3993. Directed Study. (1-5 cr; max 10 cr; prereq approved directed study form; fall, spring, every year)
An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum.
Mus 4101. Form and Analysis. (4 cr; prereq 1102, major or minor or #; spring, odd years)
Analysis of musical forms, including harmonic and melodic structure of the phrase, the binary principle, the ternary principle, sonata allegro, rondo, and later alterations of the forms.

Mus 4102. Counterpoint. (FA; 4 cr; prereq 2102 or #; spring, even years)
Contrapuntal techniques of the 18th century with references to earlier 16th century species counterpoint.

Mus 4901. Senior Project. (1 cr; prereq major, #; S-N only; fall, spring, every year)
Culminating activity that allows a graduating student to demonstrate competence as a musician. Projects may take the form of a solo recital, lecture-recital, research paper, chamber music recital, or other major study. Project should be determined in the student’s junior year and approved by the music faculty. Majors taking Mus 3200 through 3223 normally satisfy this requirement with a senior recital.

Natural Science (NSci)
Division of Science and Mathematics
Objectives — Courses in this group give students the opportunity to study scientific topics that reach across the boundaries of the traditional disciplines.

Natural Science Course Descriptions

NSci 1051. The State of the Planet. (Envt; 4 cr; spring, offered when feasible)
An investigation of the present physical state of the soil, water, and atmosphere of the earth and how these important systems are changing. Soil generation and erosion, desertification, the hydrologic cycle, global climate change, ozone depletion.

NSci 1061. Salmon in Endangered Ecosystems. (Envt; 4 cr; includes an intensive 2.5 week field component; summer, offered when feasible)
The natural history of salmon and the rivers they inhabit. Examination of how practices such as timber harvest, grazing of domestic livestock, and construction of hydropower dams have impacted river ecosystems and have contributed to the historic decline of salmon populations in the Pacific Northwest. There is an intensive field component to this course (about 2.5 weeks) in addition to in-class preparation and introduction of relevant concepts and background material.

NSci 2061. Arctic Field Ecology and Geology. (Envt; 4 cr; summer, offered when feasible)
Interdisciplinary study of the ecological systems and geologic processes of arctic and alpine environments, including discussion of the human ecology of the arctic and the response of biological and physical systems to global climate change. Taught in northern Sweden. [Continuing Education course]

NSci 2102. Field Experience in Natural History: The Italian Alps. (Sci; 4 cr; summer, offered when feasible)
Study of the ecology, soils, vegetation, and glaciers of the Italian Alps. Understanding the geologic history, Paleozoic evolution and extinction, mountain building, climate change; the “iceman” and early human habitation of the region; influence of the natural setting on humans and environmental problems associated with human development.

NSci 3100. Scientific Biography and Autobiography. (2 cr [max 4 cr]; prereq #; fall, spring, offered when feasible)
The life, work, and times of eminent scientists through biography and autobiography.

NSci 3201. Relativity and Cosmology. (Sci; 4 cr; prereq Math 1102, Phys 1102 or #; fall, spring, offered when feasible)

Philosophy (Phil)
Division of the Humanities
The philosophy program provides an environment in which students receive rich, well-rounded instruction in philosophy whose pursuit is essential to a liberal arts education.

Objectives — The philosophy program offers students the opportunity to study the works of significant figures in philosophy; investigate the fundamental problems and systems of thought that frame philosophical inquiry; develop the ability to think and write critically and effectively; and cultivate the logical, analytical, and conversational skills necessary for stimulating and fruitful philosophical inquiry.

Philosophy Major
Program Requirements
No grades below C- are allowed. Courses may not be taken S-N unless offered S-N only.
A minimum GPA of 2.00 is required in the major to graduate. The GPA includes all, and only, University of Minnesota coursework. Grades of F are included in GPA calculation until they are replaced.

Courses for the Program

Required Courses
Phil 1101—Introduction to Philosophy, Hum (4 cr)
Phil 2101—Introduction to Symbolic Logic, M/SR (4 cr)
Phil 2111—Introductory Ethics, Hum (4 cr)
Phil 4901—Senior Philosophical Defense (2 cr)

Core Courses
Take 12 or more credit(s) from the following:
Phil 3101—Metaphysics, Hum (4 cr)
Phil 3121—Political Philosophy, SS (4 cr)
Phil 3141—The Theory of Knowledge, Hum (4 cr)
Phil 3151—History of Ancient Philosophy, Hist (4 cr)
Phil 3171—History of Modern Philosophy, Hist (4 cr)
Phil 4111—Ethical Theory, Hum (4 cr)

Elective Courses
Take 8 or more credit(s) from the following:
Phil 2112—Professional Ethics, E/CR (4 cr)
Phil 2113—International and Biomedical Ethics, Hum (4 cr)
Phil 2121—Philosophy of Religion, Hum (4 cr)
Phil 2141—Analytic Feminism, Hum (4 cr)
Phil 2151—Philosophy of Mind, Hum (4 cr)
Phil 3131—Philosophy of Law, SS (4 cr)
Phil 4000—History of Philosophy Seminar, Hist (4 cr)
Phil 4002—Existentialism, Hist (4 cr)
Phil 4100—Moral Issues and Theories, Hum (4 cr)
Phil 4121—Philosophy of Language, Hum (4 cr)
Phil 4130—Contemporary Issues in Philosophy, Hum (4 cr)
Phil 4131—Personal Identity, Proper Names, and Essences, Hum (4 cr)

Additional 4xxx Elective
One additional 4xxx course exclusive of those used to meet other major requirements or electives.
Take 4 or more credit(s) from the following:
Phil 4xxx
## Philosophy Minor

### Minor Requirements

No grades below C- are allowed. Courses may not be taken S-N unless offered S-N only.

A minimum GPA of 2.00 is required in the minor to graduate. The GPA includes all, and only, University of Minnesota coursework. Grades of F are included in GPA calculation until they are replaced.

### Courses for the Program

#### Required Courses

Take 8 or more credit(s) from the following:

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit(s)</th>
<th>Term(s)</th>
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<tr>
<td>Phil 1101</td>
<td>Introduction to Philosophy, Hum (4 cr)</td>
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<td>fall, spr</td>
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<tr>
<td>Phil 2101</td>
<td>Introduction to Symbolic Logic, M/SR (4 cr)</td>
<td>4</td>
<td>fall, spr</td>
</tr>
<tr>
<td>Phil 2111</td>
<td>Introductory Ethics, Hum (4 cr)</td>
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<td>Phil 3101</td>
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<tr>
<td>Phil 3171</td>
<td>History of Modern Philosophy, Hist (4 cr)</td>
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<tr>
<td>Phil 4111</td>
<td>Ethical Theory, Hum (4 cr)</td>
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#### Elective Courses

Take 8 or more credit(s) from the following:

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<th>Course Title</th>
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<th>Term(s)</th>
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<tr>
<td>Phil 2122</td>
<td>Professional Ethics, E/CR (4 cr)</td>
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<tr>
<td>Phil 2123</td>
<td>International and Biomedical Ethics, Hum (4 cr)</td>
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<td>Phil 2121</td>
<td>Philosophy of Religion, Hum (4 cr)</td>
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<td>Phil 2141</td>
<td>Analytic Feminism, Hum (4 cr)</td>
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<td>Phil 2151</td>
<td>Philosophy of Mind, Hum (4 cr)</td>
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<tr>
<td>Phil 4000</td>
<td>History of Philosophy Seminar, Hist (4 cr)</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Phil 4002</td>
<td>Existentialism, Hist (4 cr)</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Phil 4100</td>
<td>Moral Issues and Theories, Hum (4 cr)</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Phil 4121</td>
<td>Philosophy of Language, Hum (4 cr)</td>
<td>4</td>
<td></td>
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<tr>
<td>Phil 4130</td>
<td>Contemporary Issues in Philosophy, Hum (4 cr)</td>
<td>4</td>
<td></td>
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<tr>
<td>Phil 4131</td>
<td>Personal Identity, Proper Names, and Essences, Hum (4 cr)</td>
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</tbody>
</table>

### Philosophy Course Descriptions

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit(s)</th>
<th>Term(s)</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phil 1101</td>
<td>Introduction to Philosophy. (Hum; 4 cr; fall, spr)</td>
<td>4</td>
<td></td>
<td>1101 or 2101 or 2111 or #</td>
</tr>
<tr>
<td>Phil 2101</td>
<td>Introduction to Symbolic Logic. (M/SR; 4 cr; fall, every year)</td>
<td>4</td>
<td>fall, every year</td>
<td>1101 or 2101 or 2111 or #</td>
</tr>
<tr>
<td>Phil 2111</td>
<td>Introductory Ethics. (Hum; 4 cr; spr, every year)</td>
<td>4</td>
<td></td>
<td>1101 or 2101 or 2111 or #</td>
</tr>
<tr>
<td>Phil 3101</td>
<td>Metaphysics, Hum (4 cr)</td>
<td>4</td>
<td></td>
<td>1101 or 2101 or 2111 or #</td>
</tr>
<tr>
<td>Phil 3121</td>
<td>Political Philosophy, SS (4 cr)</td>
<td>4</td>
<td></td>
<td>1101 or 2101 or 2111 or #</td>
</tr>
<tr>
<td>Phil 3141</td>
<td>The Theory of Knowledge, Hum (4 cr)</td>
<td>4</td>
<td></td>
<td>1101 or 2101 or 2111 or #</td>
</tr>
<tr>
<td>Phil 3151</td>
<td>History of Ancient Philosophy, Hist (4 cr)</td>
<td>4</td>
<td></td>
<td>1101 or 2101 or 2111 or #</td>
</tr>
<tr>
<td>Phil 3171</td>
<td>History of Modern Philosophy, Hist (4 cr)</td>
<td>4</td>
<td></td>
<td>1101 or 2101 or 2111 or #</td>
</tr>
<tr>
<td>Phil 4111</td>
<td>Ethical Theory, Hum (4 cr)</td>
<td>4</td>
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<td>1101 or 2101 or 2111 or #</td>
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</tbody>
</table>

These courses provide an introduction to fundamental philosophical problems in areas such as metaphysics, epistemology, ethics, and the nature of human knowledge. Topics include experiential versus a priori knowledge, the nature of belief, skepticism, and different theories of justification.

<table>
<thead>
<tr>
<th>Course Code</th>
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<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phil 2122</td>
<td>Professional Ethics. (E/CR; 4 cr; fall, every year)</td>
<td>4</td>
<td>fall, every year</td>
<td>1101 or 2101 or 2111 or #</td>
</tr>
<tr>
<td>Phil 2123</td>
<td>International and Biomedical Ethics, Hum (4 cr)</td>
<td>4</td>
<td></td>
<td>1101 or 2101 or 2111 or #</td>
</tr>
<tr>
<td>Phil 2121</td>
<td>Philosophy of Religion, Hum (4 cr)</td>
<td>4</td>
<td></td>
<td>1101 or 2101 or 2111 or #</td>
</tr>
<tr>
<td>Phil 2141</td>
<td>Analytic Feminism, Hum (4 cr)</td>
<td>4</td>
<td></td>
<td>1101 or 2101 or 2111 or #</td>
</tr>
<tr>
<td>Phil 2151</td>
<td>Philosophy of Mind, Hum (4 cr)</td>
<td>4</td>
<td></td>
<td>1101 or 2101 or 2111 or #</td>
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</tbody>
</table>

These courses provide an introduction to several problems in the philosophy of mind, such as the mind/body problem, consciousness, and psychological explanation.

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<tr>
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<th>Credit(s)</th>
<th>Term(s)</th>
<th>Prerequisites</th>
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</thead>
<tbody>
<tr>
<td>Phil 3101</td>
<td>Metaphysics. (Hum; 4 cr; prereq 1101 or 2101 or 2111 or #; spring, even years)</td>
<td>4</td>
<td>fall, every year</td>
<td>1101 or 2101 or 2111 or #</td>
</tr>
<tr>
<td>Phil 3121</td>
<td>Political Philosophy. (SS; 4 cr; prereq 1101 or 2101 or 2111 or #; fall, even years)</td>
<td>4</td>
<td>fall, every year</td>
<td>1101 or 2101 or 2111 or #</td>
</tr>
</tbody>
</table>

These courses provide an introduction to fundamental metaethical issues such as the nature of reality, the notion of personal identity, the relationship between language, thought, and the world. Philosophical works of both classic and contemporary philosophers such as Plato, Aristotle, Quine, Putnam, and Kripke are discussed.

<table>
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<tr>
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<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phil 3151</td>
<td>History of Ancient Philosophy. (Hist; 4 cr; prereq 1101 or 2101 or 2111 or #; fall, even years)</td>
<td>4</td>
<td>fall, every year</td>
<td>1101 or 2101 or 2111 or #</td>
</tr>
<tr>
<td>Phil 3162</td>
<td>The Scottish Enlightenment: Text and Contexts. (IP; 4 cr; Hist 3162; summer, offered when feasible)</td>
<td>4</td>
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<td>1101 or 2101 or 2111 or #</td>
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</table>

These courses provide an introduction to the philosophy of law, especially questions regarding the justification of punishment.

<table>
<thead>
<tr>
<th>Course Code</th>
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<th>Credit(s)</th>
<th>Term(s)</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phil 3171</td>
<td>History of Modern Philosophy. (Hist; 4 cr; prereq 1101 or 2101 or 2111 or #; spring, even years)</td>
<td>4</td>
<td></td>
<td>1101 or 2101 or 2111 or #</td>
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</tbody>
</table>

These courses provide a critical examination of theoretical and practical normative issues in the philosophy of law.
Phil 3993. Directed Study. (1–5 cr [max 10 cr]; prereq approved directed study form; fall, spring, every year)
An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum.

Phil 4000. History of Philosophy Seminar. (Hist; 4 cr [max 8 cr]; prereq 1101 or 2101 or 2111 or #; fall, every year)
Intensive investigation of a particular philosophical problem, area, or work of a philosopher. Topics vary.

Phil 4002. Existentialism. (Hist; 4 cr; prereq any 1xxx or 2xxx or #; fall, spring, offered when feasible)
Examination of some prominent thinkers often classified as “existentialists”: Kierkegaard, Dostoevsky, Nietzsche, Sartre, and Camus. Topics include what human freedom is, what makes a life authentic (or inauthentic), what role passion and choice should play in acquiring our beliefs and values, and what difference (if any) God’s existence or non-existence makes on the significance of our lives.

Phil 4100. Moral Issues and Theories. (Hum; 4 cr [max 8 cr]; prereq 2111 or #; fall, every year)
Intensive investigation of a particular problem, area, issue, or theory in moral philosophy. Possible topics include moral responsibility, autonomy, weakness of will, and self-deception. Topics vary.

Phil 4111. Ethical Theory. (Hum; 4 cr; prereq 2111 or #; spring, even years)
This course in metaethics focuses on the nature of moral obligation. Topics include: Can moral obligations change with the passage of time? Are genuine moral dilemmas possible? Does “ought” imply “can”? Is moral obligation overriding? Is there a genuine distinction between “subjective” and “objective” moral obligation?

Phil 4121. Philosophy of Language. (Hum; 4 cr; prereq 2101 or #; spring, odd years)
Traditional and contemporary discussions of philosophical problems such as the nature of language, its relationships to the world, to human thought, and to truth; the nature of logical reasoning; metalogical problems. Readings from philosophers such as Frege, Russell, Quine, Putnam, Goodman, Wittgenstein, and Kripke.

Phil 4130. Contemporary Issues in Philosophy. (Hum; 4 cr [max 8 cr]; prereq 1101 or 2101 or 2111 or #, fall, odd years)
Exposure to, and critical examination of, philosophical issues of special contemporary interest. Topics may include the nature of analytic philosophy and its relationship to other philosophical traditions such as continental or feminist philosophy, the debate on realism and anti-realism, the notion of objectivity.

Phil 4131. Personal Identity, Proper Names, and Essences. (Hum; 4 cr; prereq 1101 or 2101 or 2111 or #; fall, spring, offered when feasible)
A seminar primarily devoted to the discussion of readings, i.e., Naming and Necessity by Saul Kripke and Reasons and Persons by Derek Parfit. Questions such as: How do proper names function? Are there essential features of persons or objects? What makes each of us the same particular individual over time?

Phil 4191. Senior Philosophical Defense. (2 cr; prereq phil major; A-F only; fall, spring, every year)
Writing and defending a senior philosophical thesis is the culminating experience for UMM philosophy majors. Majors develop a piece of their philosophical writing, producing multiple drafts in response to comments from a variety of philosophical viewpoints, and then orally defend their thesis.

Phil 4993. Directed Study. (1–5 cr [max 10 cr]; prereq approved directed study form; fall, spring, every year)
An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum.

Physics (Phys)

Division of Science and Mathematics

Objectives—The physics program is designed to help students understand the concepts of classical and modern physics while also developing their ability to solve quantitative problems in these areas. It provides the opportunity for students to acquire the skills necessary to perform experimental work. The program develops students’ ability to communicate, in form and content, both orally and in writing, the results of scientific work.

The physics program offers a background suitable for students planning to pursue graduate study or careers in industry, research, or teaching. It also provides a solid foundation for any career requiring analytical reasoning.

Physics Major

Program Requirements

Courses may not be taken S-N. A minimum GPA of 2.00 is required in the major to graduate. The GPA includes all, and only, University of Minnesota coursework. Grades of F are included in GPA calculation until they are replaced. No grades below C- are allowed.

Courses for the Program

Required Courses

- Phys 1101—General Physics I, Sci-L (5 cr)
- Phys 1102—General Physics II, Sci-L (5 cr)
- Phys 2101—Modern Physics, Sci-L (5 cr)
- Phys 3101—Classical Mechanics, Sci (4 cr)
- Phys 4101—Electromagnetism, Sci (4 cr)
- Phys 4201—Quantum Mechanics, Sci (4 cr)
- Phys 4901—Senior Thesis (1 cr)
- Math 1101—Calculus I, M/SR (5 cr)
- Math 1102—Calculus II, M/SR (5 cr)
- Math 2101—Calculus III, M/SR (5 cr)
- Math 2401—Differential Equations, M/SR (4 cr)

Elective Courses

Take exactly 3 course(s) totaling exactly 12 credit(s) from the following:

- Phys 2201—Circuits and Electronic Devices, Sci-L (4 cr)
- Phys 2301—Atmospheric Physics, Env (4 cr)
- Phys 2401—Optics, Sci-L (4 cr)
- Phys 3001—Astrophysics, Sci (4 cr)
- Phys 3002—Biological and Medical Physics, Sci (4 cr)
- Phys 3003—Computer Modeling of Materials, Sci (4 cr)
- Phys 3201—Mathematical Methods in Physics, Sci (4 cr)
- Phys 3401—Experimental Physics, Sci-L (4 cr)
- Phys 3501—Statistical Physics, Sci (4 cr)
- Phys 3993—Directed Study (1–5 cr)
- Phys 4993—Directed Study (1–5 cr)

Physics Minor

Minor Requirements

Courses may not be taken S-N. The GPA in these courses must be at least 2.00. Courses with a grade lower than C- may not be used to meet the minor requirements.

Physical Education and Athletics

(See Wellness and Sport Science.)
Courses for the Program

Minor Requirements
- Phys 1101—General Physics I, Sci-L (5 cr)
- Phys 1102—General Physics II, Sci-L (5 cr)
- Phys 2101—Modern Physics, Sci-L (5 cr)
- Math 1101—Calculus I, M/SR (5 cr)
- Math 1102—Calculus II, M/SR (5 cr)
- Math 2101—Calculus III, M/SR (4 cr)

Elective Courses
Take 4 or more credit(s) from the following:
- Phys 2201—Circuits and Electronic Devices, Sci-L (4 cr)
- Phys 2301—Atmospheric Physics, Env (4 cr)
- Phys 2401—Optics, Sci-L (4 cr)
- Phys 2993—Directed Study (1-5 cr)
- Phys 3001—Astrophysics, Sci (4 cr)
- Phys 3002—Biological and Medical Physics, Sci (4 cr)
- Phys 3101—Classical Mechanics, Sci (4 cr)
- Phys 3201—Mathematical Methods in Physics, Sci (4 cr)
- Phys 3401—Experimental Physics, Sci-L (4 cr)
- Phys 3501—Statistical Physics, Sci (4 cr)
- Phys 3993—Directed Study (1-5 cr)
- Phys 4101—Electromagnetism, Sci (4 cr)
- Phys 4201—Quantum Mechanics, Sci (4 cr)
- Phys 4993—Directed Study (1-5 cr)

Teacher Preparation Requirements
Students seeking teaching licensure in physics 9–12 should refer to the Education, Secondary (SeEd) section of this catalog.

Physics Course Descriptions

Phys 1005. Journal Club I. (1 cr [max 2 cr]; S-H only; fall, every year)
Exposes freshman and sophomore students to current physics research topics. Students participate at presentations via discussion and are evaluated on a pass/fail basis only.

Phys 1052. The Solar System. (Sci-L; 5 cr; no cr for students who have received cr for Phys 1053; fall, every year)
History of astronomy; motions of celestial objects; gravity and electromagnetic radiation; the Earth and Moon; the planets and their moons; meteors and asteroids; the Sun; telescopes and other astronomical instruments. Stars and constellations of the fall sky. Night viewing sessions required. (4 hrs lect, 2 hrs lab)

Phys 1053. Introduction to Stars, Galaxies, and Cosmology. (Sci; 4 cr; spring, every year)
Gravity and electromagnetic radiation; nuclear physics; stellar properties; stellar evolution; galaxies; quasars; and cosmology. Stars and constellations of the winter sky. Night viewing sessions required. (4 hrs lect)

Phys 1061. Physics of Sound and Music. (Sci; 4 cr; fall, every year)
Wave characteristics, sound properties, resonance, the human voice and hearing, basic musical instruments, analysis and synthesis of complex waves, acoustics.

Phys 1062. Light and Color. (Sci; 4 cr; fall, offered when feasible)
Introduction to the modern understanding of light and color. The wave and particle nature of light, light in modern physics (spectra, lasers, holography), atmospheric optics (blue sky, rainbows, ice crystal displays, etc.), the camera and photography, simple optical instruments (lenses, mirrors, eyeglasses, telescopes, binoculars), the human eye and vision, illusions, color, color perception and color theory. (4 hrs lect)

Phys 1063. Physics of Weather. (Env; 4 cr; fall, odd years)
Structure and dynamics of the atmosphere, global energy balance, various atmospheric phenomena from the global scale to the local scale including global wind systems, cyclones, fronts and air masses, thunderstorms, tornadoes, past and present climate, weather forecasting, problems concerning the interaction between civilization and the atmosphere. Some observation and field work required.

Phys 1091. Principles of Physics I. (Sci-L; 5 cr; prereq high school higher algebra; fall, every year)
Introduction to physics without the use of calculus. Vectors, kinematics, Newton’s laws of motion, work and energy, momentum, torque, fluids, thermal physics, laws of thermodynamics, oscillations and waves. (4 hrs lect, 2 hrs lab)

Phys 1092. Principles of Physics II. (Sci-L; 5 cr; prereq 1091; spring, every year)
Coulomb’s law, electric fields, electric potential, capacitance, electric current, resistance, DC circuits, magnetism, induction, reflection and refraction of light, mirrors and lenses, interference and diffraction, optical instruments, radioactivity (4 hrs lect, 2 hrs lab)

Phys 1101. General Physics I. (Sci-L; 5 cr; prereq Math 1101 or #; spring, every year)
An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum.

Phys 2101. Modern Physics. (Sci-L; 5 cr; prereq 1102, Math 2401 or #; spring, every year)
Special relativity, quantum nature of matter and radiation, Bohr-Sommerfeld atom, atomic spectra, uncertainty principle, Schrodinger equation, hydrogen atom, electron spin, Pauli principle, periodic table, radioactivity, fission and fusion of nuclei, properties of nuclei. (4 hrs lect, 3 hrs lab)

Phys 2102. Circuits and Electronic Devices. (Sci-L; 4 cr; prereq 1102 or #; spring, every year)
A hands-on practical course in electronics. Analog electronics including AC and DC circuit analysis, passive circuit elements, junctions, transistors, and op-amp circuits. Digital electronics including combinational logic, sequential logic, memory, CPU, and assembly programming. (3 hrs lect, 3 hrs lab)

Phys 2201. Atmospheric Physics. (Env; 4 cr; prereq 1092 or 1102, Math 1102; spring, even years)
Introduction to atmospheric physics with an emphasis on thermodynamics. Atmospheric thermodynamics including gas laws, phase transitions, laws of thermodynamics, two-component systems, atmospheric stability; radiative transfer including atmospheric optics and remote sensing; some aspects of atmospheric chemistry such as aerosols, chemical cycles, trace gases; cloud microphysics including nucleation and growth; and atmospheric dynamics including equations of motion for fluid flow; applications to weather systems. (4 hrs lect)

Phys 2401. Optics. (Sci-L; 4 cr; prereq 1102; spring, even years)
Light as a wave phenomenon, electromagnetic nature of light, Huygens’ principle, interference, diffraction—Fraunhofer and Fresnel, polarization, dispersion, absorption and scattering. (4 hrs lect, lab TBA)

Phys 2993. Directed Study. (1-5 cr [max 10 cr]; prereq approved directed study form; fall, spring, every year)
An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum.

Phys 3001. Astrophysics. (Sci; 4 cr; prereq 2101; fall, spring, offered when feasible)
Topics may include but need not be restricted to spectroscopy, radiative transfer, solar system evolution and dynamics, stars and stellar evolution, galaxies, and cosmology. (4 hrs lect)

Phys 3002. Biological and Medical Physics. (Sci; 4 cr; prereq 1101, 1102; recommended: fall, spring, offered when feasible)
Selected topics in biophysics with an emphasis on modern medical imaging techniques. Biophysical topics include fluid flow in cardiovascular systems, molecular transport, and the nervous system. Physics techniques covered include electrocardiography, microscopy, x-ray imaging, magnetic resonance imaging, ultrasound imaging, computer tomography, and image reconstruction.
Phys 3003. Computer Modeling of Materials. (Sci; 4 cr; prereq 1101, 1102; spring, offered when feasible)
The description of materials as assemblies of microscopic particles. The various approximations for interparticle forces and their use in order to gain insight into the behavior of the macroscopic system. Aspects of molecular dynamics simulations and Monte Carlo simulations in various statistical ensembles. Projects include questions from experimental research.

Phys 3005. Journal Club II. (1 cr [max 2 cr]; prereq 1101, 1102; A-F only; fall, every year)
Introduction to current physics research topics not typically found in the standard physics curriculum. Investigation into one of these topics and a short public presentation. Exposes students investigating physics as a possible major or minor to presentation and literature searching techniques and helps build skills necessary for senior seminar.

Phys 3101. Classical Mechanics. (Sci; 4 cr; prereq 2101, Math 2101 or #; fall, every year)
Kinematics and dynamics of a particle, oscillations, central-force motion, systems of particles, rigid-body rotations, gravitation, non-inertial coordinate systems, Lagrangian and Hamiltonian formulations, dynamics of rigid bodies. (4 hrs lect)

Phys 3201. Mathematical Methods in Physics. (Sci; 4 cr; prereq Math 2101; fall, every year)
Complex analytic functions, Taylor and Laurent series, calculus of residues, Fourier series and integrals, series solutions of differential equations, partial differential equations, special functions, applications to physics. (4 hrs lect)

Phys 3401. Experimental Physics. (Sci-L; 4 cr; prereq 2101; fall, odd years)
An introduction to modern experimental methods. (3 hrs lect, 3 hrs lab)

Phys 3501. Statistical Physics. (Sci; 4 cr; prereq 2101; spring, odd years)
Probability distributions, statistical ensembles, statistical thermodynamics, ideal gases, quantum statistics, kinetic theory of transport phenomena. (4 hrs lect)

Phys 3993. Directed Study. (1-5 cr [max 10 cr]; prereq approved directed study form; fall, spring, every year)
An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum.

Phys 4101. Electromagnetism. (Sci; 4 cr; prereq 2101, Math 2101 or #; fall, odd years)
Vector calculus, electrostatics, Laplace and Poisson equations, dielectrics, magnetostatics, magnetic properties of matter, electromagnetic induction, Maxwell’s equations, electrodynamics, electromagnetic waves. (4 hrs lect)

Phys 4201. Quantum Mechanics. (Sci; 4 cr; prereq 2101, Math 2101 or #; spring, every year)
Uncertainty principle, Schroedinger equation, commutation relations, momentum space wave functions, Dirac notation, applications to problems in one dimension and the hydrogen atom, angular momentum. (4 hrs lect)

Phys 4991. Senior Thesis. (1 cr; prereq sr; course begins in fall and runs all year; fall, every year)
Capstone experience in physics. Investigation of a selected topic of current interest in physics. Presentation of results orally and in writing.

Phys 4993. Directed Study. (1-5 cr [max 10 cr]; prereq approved directed study form; fall, spring, every year)
An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum.

Political Science (Pol)

Division of the Social Sciences

Objectives—Political science is the study of the political world in a comprehensive sense, including the behaviors, organizations, institutions and philosophical foundations of political life from the level of individuals to the international setting in both contemporary and historical contexts. In addition, political science makes the connection between theory and practice at the ground level by preparing students for active lifelong participation and leadership in democratic society. The political science major curriculum stresses the development of strong analytical skills and critical thinking and prepares students for further academic training in political science, law, public administration and other graduate programs as well as for work in public affairs, business, journalism, interest groups and a wide range of other careers. Students who complete the political science major are able to critically analyze and interpret political processes, problems and challenges; understand, synthesize and contribute imaginatively to the major research and theoretical debates prevalent in the study of American and comparative politics, international relations and political thought; present their evidence and arguments in clear, precise language; and participate thoughtfully, knowledgeably and ethically in civic life.

Political Science Major

Program Requirements

The political science discipline strongly recommends that students take advantage of opportunities in internships, field studies, and study abroad. Students are also strongly encouraged to take advantage of courses in other disciplines such as economics, history, psychology, philosophy, and statistics that will complement and enrich their political science coursework.

No grades below C- are allowed.

A minimum GPA of 2.00 is required in the major to graduate. The GPA includes all, and only, University of Minnesota coursework. Grades of “I” are included in GPA calculation until they are replaced.

Courses for the Program

Required Courses

These courses may not be taken S-N unless offered S-N only. 

Take 2 or more course(s) from the following:

- Pol 1101—Introduction to Political Theory, E/CR (4 cr)
- Pol 1201—American Government and Politics, E/CR (4 cr)
- Pol 1401—World Politics, IP (4 cr)
- Pol 2001—Political Science Research Methods, SS (4 cr)
- Pol 4905—Senior Research Seminar in Political Science, SS (2 cr)
- Stat 1601—Introduction to Statistics, M/SR (4 cr)
- Stat 2601—Statistical Methods, M/SR (4 cr)

Electives

Of the 24 additional credits, at least one course must be at the 4xxx level. Directed studies and field studies may count toward the 24 credits, but they do not replace the requirement to take at least one course from each area. No more than 12 credits can be directed studies and field studies.

Take 24 or more credit(s) from the following:

American Politics

Take 4 or more credit(s) from the following:

- Pol 3201—Legislative Process, SS (4 cr)
- Pol 3211—The American Presidency, SS (4 cr)
- Pol 3221—Constitutional Law: Civil Liberties and Civil Rights, HDiv (4 cr)
- Pol 3232—Constitutional Law: Governmental Powers and Constraints, SS (4 cr)
- Pol 3262—Minorities and Public Policy, HDiv (4 cr)
- Pol 3263—Political Psychology, SS (4 cr)
- Pol 4221—Judicial Politics, SS (4 cr)
- Pol 4251—Political Participation and Voting Behavior, SS (4 cr)
Political Science (Pol)

Pol 4264—American Political Culture, Hist (4 cr)
Pol 4266—Media and Politics, SS (4 cr)

International and Comparative Politics
Take 4 or more credit(s) from the following:
- Pol 3401—U.S. Foreign Policy, SS (4 cr)
- Pol 3411—International Law, E/CR (4 cr)
- Pol 3421—Diplomatic Negotiations, IP (4 cr)
- Pol 3501—Government and Politics of Asia, SS (4 cr)
- Pol 3502—Government and Politics of Europe, SS (4 cr)
- Pol 3503—Women in Politics Worldwide, IP (4 cr)
- Pol 4451—Comparative Foreign Policy, IP (4 cr)
- Pol 4452—International Relations, IP (4 cr)

Political Theory
Take 4 or more credit(s) from the following:
- Pol 3351—Ancient and Medieval Political Thought, Hum (4 cr)
- Pol 3352—Modern Political Thought, Hum (4 cr)
- Pol 3354—Political Ethics, E/CR (4 cr)
- Pol 3355—Environmental Political Theory, Envt (4 cr)
- Pol 4301—Contemporary Political Thought, Hum (4 cr)
- Pol 4302—International Comparative Political Theory, IP (4 cr)

4xxx-Level Elective
Take 4 or more credit(s) from the following:
- Pol 4xx

Political Science Minor

Minor Requirements
No grades below C- are allowed. A minimum GPA of 2.00 is required in the minor to graduate. The GPA includes all, and only, University of Minnesota coursework. Grades of F are included in GPA calculation until they are replaced.

Courses for the Program

Required Courses
Required courses may not be taken S-N unless offered S-N only.
- Take 1 or more course(s) from the following:
  - Pol 1101—Introduction to Political Inquiry: Thinking about Politics, E/CR (4 cr)
  - Pol 1201—American Government and Politics, E/CR (4 cr)
  - Pol 1401—World Politics, IP (4 cr)

Elective Courses
Take no more than 8 credit(s) from the following:
- Pol 1101—Introduction to Political Inquiry: Thinking about Politics, E/CR (4 cr)
- Pol 1201—American Government and Politics, E/CR (4 cr)
- Pol 1401—World Politics, IP (4 cr)
- Pol 1xxx, 2xxx

Take 8 or more credit(s) from the following:
- Pol 3201—Legislative Process, SS (4 cr)
- Pol 3211—The American Presidency, SS (4 cr)
- Pol 3231—Constitutional Law: Civil Liberties and Civil Rights, HDiv (4 cr)
- Pol 3232—Constitutional Law: Governmental Powers and Constraints, SS (4 cr)
- Pol 3262—Minorities and Public Policy, HDiv (4 cr)
- Pol 3263—Political Psychology, SS (4 cr)
- Pol 3351—Political Thought: Ancient and Middle Ages, Hum (4 cr)
- Pol 3352—Political Thought: Modern, Hum (4 cr)
- Pol 3354—Political Ethics, E/CR (4 cr)
- Pol 3355—Environmental Political Theory, Envt (4 cr)
- Pol 3401—U.S. Foreign Policy, SS (4 cr)
- Pol 3411—International Law, E/CR (4 cr)
- Pol 3461—Diplomatic Negotiations, IP (4 cr)

Political Science Course Descriptions

Pol 1101. Introduction to Political Theory. (E/CR; 4 cr; fall, every year)
An introduction to key political concepts, questions, and ideologies through the writings of major thinkers of Western political theory and examination of contemporary debates about political life.

Pol 1201. American Government and Politics. (E/CR; 4 cr; fall, spring, every year)
Analysis of principles, organization, procedures, and powers of government in the United States. The federal system, national constitution, civil and political rights, party system; nature, structure, powers, and procedures of legislative, executive, and judicial departments of the national government.

Pol 1401. World Politics. (IP; 4 cr; fall, every year)
The contemporary international system, including nationalism, international political economy, foreign policy formulation, and global concerns such as the environment and conflict. North/South debate, definitions of power, the new world order, regional vs. global conflicts, and avenues of cooperation.

Pol 1993. Directed Study. (1-5 cr [max 10 cr]; prereq approved directed study form; fall, spring, every year)
An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum.

Pol 2001. Political Science Research Methods. (SS; 4 cr; prereq any 1xxx-level UMM Pol course, major or minor or #; fall, every year)
Students conceive and develop research questions and hypotheses; collect and critically review published research on their topic; gather and analyze empirical evidence; and write clearly, forcefully, and logically about their research and findings. Examination of the philosophy and critiques of social-scientific methods.

Pol 2993. Directed Study. (1-5 cr [max 10 cr]; prereq approved directed study form; fall, spring, every year)
An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum.

Pol 3201. Legislative Process. (SS; 4 cr; prereq 1201 or #; Stat 1601 or Stat 2601 recommended; fall, every year)
The internal organization of Congress, with emphasis on how rules and organizational changes affect the policy process. Topics include the evolution of the modern Congress, the committee system, the role of party leadership, and competing theories of congressional organization. In addition, comparisons/contrasts are drawn from other legislatures in democracies around the world.

Pol 3311. The American Presidency. (SS; 4 cr; prereq 1201 or #; Stat 1601 or Stat 2601 recommended; spring, odd years)
Traces the development of the American presidency over time. Major theories of presidential behavior and success are examined, as well as the literature on presidential popularity and executive/congressional relations.
Programs and Course Descriptions

Political Science (Pol)

Pol 3231. Constitutional Law: Civil Liberties and Civil Rights. (HDiv; 4 cr; prereq 1201 or #; spring, even years)
Examination of major Supreme Court opinions in the areas of freedom of religion, speech, assembly, and the press. Topics include the definitions of obscenity and libel, the Court’s struggle with the right to privacy, and civil rights.

Pol 3232. Constitutional Law: Governmental Powers and Constraints. (SS; 4 cr; prereq 1201 or #; spring, odd years)
Examination of major Supreme Court opinions in the areas of congressional, executive, and jurisdictional powers, nation-state relations, and economic liberties. Topics include substantive vs. procedural due process, the Takings Clause, the contract clause, and the powers to tax and spend.

Pol 3262. Minorities and Public Policy. (HDiv; 4 cr; prereq 1201 or #; fall, even years)
Analysis of the ways race, ethnicity, and other factors shape political engagement; their implications for public policy and the policy process.

Pol 3265. Political Psychology. (SS; 4 cr; prereq 1201; Psy 1051 or # recommended; fall, odd years)
Examination of the role of the individual, group processes, and the political context of public decision making by both leaders and nonleaders.

Pol 3351. Ancient and Medieval Political Thought. (Hum; 4 cr; prereq 1101 or #; spring, even years)
A survey of Western social and political thought from 5th century BCE through the 15th century.

Pol 3352. Modern Political Thought. (Hum; 4 cr; prereq 1101 or #; spring, odd years)
A survey of Western social and political thought from the 16th through the 19th centuries.

Pol 3354. Political Ethics. (E/CR; 4 cr; prereq 1101 or #; fall, even years)
Examination of the strengths, weaknesses, and implications of moral arguments in political decision making. Ethical frameworks drawn from theoretical readings are applied to a range of contemporary U.S. case studies such as state use of violence, interrogation in times of war, governmental secrecy and deceit, official disobedience, health-care access, welfare reform, and environmental regulation and protection.

Pol 3355. Environmental Political Theory. (Envt; 4 cr; fall, odd years)
Examination of environmental conceptions of sustainability, citizenship, and democracy, analyzing various formulations of what a “green citizen” and “ecological democracy” might mean. Readings and extensive discussion provide critical insight on contemporary debates about environmental decision-making, sustainability, and education on the individual, social, national, and international levels.

Pol 3401. U.S. Foreign Policy. (SS; 4 cr; prereq 1401 or #; fall, every year)
Institutions and processes of American foreign policy. Major factors to be considered and levels of analysis that allow for the examination and dissection of foreign policy decisions. Case study analysis, e.g., Cuban Missile Crisis, Vietnam, Iran/Contra-gate.

Pol 3411. International Law. (E/CR; 4 cr; prereq 1401 or #; spring, every year)
Relations of international law to individuals, states, the international community, jurisdictional problems, survey of principles developed by diplomatic agents and consuls, treaties, arbitration, treatment of aliens, pacific settlement. War and hostile measures short of war, military occupation, war crimes, neutrality, collective security sanctions.

Pol 3461. Diplomatic Negotiations. (IP; 4 cr; summer, offered when feasible)
This course focuses on the origins and nature of modern diplomacy and the art of diplomatic negotiations. The course consists of three components: (1) the theory and practice of diplomatic negotiation; (2) negotiating styles; and (3) simulation of diplomatic negotiations (bilateral and multilateral negotiations, international conference, summity, and mediation). This course is unique in that almost half of the course will be devoted to simulations/mock conferences and that students will gain first-hand knowledge of and valuable insights into diplomacy and negotiation through simulation. [Continuing Education course]

Pol 3501. Government and Politics of Asia. (SS; 4 cr; prereq 1301 or #; spring, offered when feasible)
Examination of governments, political and leadership changes, and economic developments in China, Japan, and Korea. Modernization, democratization, political pluralism, revolution, authoritarianism, and civil-military relations.

Pol 3502. Government and Politics of Europe. (SS; 4 cr; prereq 1301 or #; fall, even years)
This comparative study of contemporary government/polities in Europe. Emphasizes influence of economic, cultural, and other factors. Parties, bureaucracy, legislatures, executives: way in which they reflect and contribute to political life.

Pol 3503. Women in Politics Worldwide. (IP; 4 cr; prereq 1201 or #; spring, even years)
Examines the role of women历women’s involvement in political life.

Pol 3993. Directed Study. (1-5 cr [max 10 cr]; prereq approved directed study form; fall, spring, every year)
An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum.

Pol 3996. Field Study in Political Science. (1-16 cr [max 16 cr]; prereq 3993; max of 4 cr may be applied to the major or minor; fall, spring, every year)
Field study of governmental organization; internship with legislature, a state or local administrative office, lobbying group, or other position involving direct experience with government, governmental officials, or political organizations and environment.

Pol 4221. Judicial Politics. (SS; 4 cr; prereq 1201, 2001 or #; Stat 1601 or Stat 2601 recommended; fall, odd years)
Role of judges, police, attorneys, and interest groups within the political system, with analysis focusing on each as political actors. Areas of discretion in the legal system. Extra-legal predictors of judicial decision making and certiorari voting.

Pol 4251. Political Participation and Voting Behavior. (SS; 4 cr; prereq 1201 or #; fall, even years)
A broad overview of factors influencing the political behavior of groups and individuals both within and outside institutions. Particular emphasis on examining issues such as voter turnout, economic influences on voting patterns, and social movement mobilization.

Pol 4264. American Political Culture. (Hist; 4 cr; prereq 1201, 2001 or #; spring, odd years)
A survey of the ideas shaping the U.S. political system and Americans’ political behavior. Examines the ways that U.S. political culture has shaped institutional development, policy outcomes, and the everyday political experiences within the political system.

Pol 4266. Media and Politics. (SS; 4 cr; prereq 1201, 2001 or #; spring, even years)

Pol 4301. Contemporary Political Thought. (Hum; 4 cr; prereq 1101, 2001 or #; spring, even years)
A survey of political and policy thought in the 20th and 21st centuries.

Pol 4302. International Comparative Political Theory. (IP; 4 cr; prereq 1101, 2001 or #; spring, odd years)
Examination of international political thought beyond the canon of Western political theory. Topics include modernity, democracy, legitimacy, justice, nonviolence, and nationalism, with an emphasis on the Islamic world, the Indian subcontinent, sub-Saharan Africa, and East Asia.

Pol 4451. Comparative Foreign Policy. (IP; 4 cr; prereq 1401; 2001 or #; spring, every year)
Comparative examinations of foreign policies of selected countries, i.e., the United States, China, and Russia (the Soviet Union). The rise and fall of the Cold War; the triangular relationship between Washington, Beijing, and Moscow; Russia’s new foreign policy; and U.S. foreign and security policy in the post-Cold War era.

Pol 4452. International Relations. (IP; 4 cr; prereq 1401, 2001 or #; fall, spring, offered when feasible)
Theory and practice of contemporary international relations. Realism and idealism, national power, systems theory, integration theory, war and peace, conflict resolution, and the world government.
Division of the Social Sciences

The psychology curriculum focuses on understanding scientific methods and applying them to the problems of the behavioral sciences and individual and social human behavior. It provides students with basic methodological skills, practice in applying these skills, and an introduction to core areas of psychology. The courses meet the needs of liberal arts students as well as students planning to specialize in one of the fields of psychology at the graduate level.

Objectives:
• awareness of the range of knowledge in psychology
• competency in translating behavioral questions into the terms of scientific inquiry
• competency in reading and critically synthesizing the technical literature in psychology
• competency in quantifying and statistically analyzing behavior
• awareness of ethical issues in psychology

Psychology Major

Program Requirements
No grades below C- are allowed. Courses may not be taken S-N unless offered S-N only.

A minimum GPA of 2.00 is required in the major to graduate. The GPA includes all, and only, University of Minnesota coursework. Grades of F are included in GPA calculation until they are replaced.

Courses for the Program

Required Courses
Psy 1051—Introduction to Psychology, SS (4 cr)
Psy 2001—Research Methods in Psychology, SS (4 cr)
Stat 1601—Introduction to Statistics, M/SR (4 cr)
or Stat 2601—Statistical Methods, M/SR (4 cr)

Learning and Cognition
Take 1 or more course(s) from the following:
Psy 3101—Learning Theory and Behavior Modification, SS (4 cr)
Psy 3111—Sensation and Perception, SS (4 cr)
Psy 3112—Cognition, SS (4 cr)

Biological and Comparative Psychology
Take 1 or more course(s) from the following:
Psy 3201—Comparative Psychology, Sci-L (4 cr)
Psy 3211—Biological Psychology, Sci-L (5 cr)
Psy 3221—Behavioral Biology of Women, Sci (2 cr)
Psy 3521—Health Psychology, SS (4 cr)

Personality and Clinical Psychology
Take 1 or more course(s) from the following:
Psy 3302—Personality, SS (4 cr)
Psy 3313—Psychopathology, SS (4 cr)
Psy 4101—Helping Relationships, SS (4 cr)

Developmental Psychology
Take 1 or more course(s) from the following:
Psy 2411—Introduction to Lifespan Developmental Psychology, SS (4 cr)
Psy 3051—The Psychology of Women and Gender, HDiv (4 cr)
Psy 3401—Developmental Psychology I: Child Psychology, SS (4 cr)
Psy 3402—Developmental Psychology II: Adolescence, SS (2 cr)
Psy 3403—Developmental Psychology III: Adulthood and Aging, E/CR (4 cr)

Social and Applied Psychology
Take 1 or more course(s) from the following:
Pol 3263—Political Psychology, SS (4 cr)
Psy 3501—Social Psychology, SS (4 cr)
Psy 3513—Negotiation, SS (4 cr)
Psy 3542—Multicultural Psychology, HDiv (4 cr)
Psy 3701—Organizational Behavior, SS (4 cr)

Advanced Seminar in Psychology
Take exactly 1 course(s) from the following:
Psy 4910—Advanced Seminar in Cognitive Psychology, SS (4 cr)
Psy 4920—Advanced Seminar in Biological or Comparative Psychology, SS (4 cr)
Psy 4930—Advanced Seminar in Personality or Clinical Psychology, SS (4 cr)
Psy 4940—Advanced Seminar in Developmental Psychology, SS (4 cr)
Psy 4950—Advanced Seminar in Social Psychology, SS (4 cr)
Psy 4960—Advanced Seminar in Health Psychology, SS (4 cr)

Elective Courses
Additional elective credits to total at least 42 credits in the major (including required courses). Electives may be selected from any category above (except advanced seminars), and the following:

Take 1 or more course(s) from the following:
IS 3800—Practicum in Social Sciences (1–2 cr)
IS 401—Intro to Prof Conduct, Legal Constraints, Ethics in Human Services, E/CR (2 cr)
Psy 2993—Directed Study (1–5 cr)
Psy 3611—History and Philosophy of Psychology, Hist (2 cr)
Psy 3800—Research Practicum (1–6 cr)
Psy 3993—Directed Study (1–5 cr)
Psy 4896—Field Experiences in Psychology, SS (1–4 cr)
Psy 4993—Directed Study (1–5 cr)
Stat 3601—Data Analysis, M/SR (4 cr)
Stat 3611—Multivariate Statistical Analysis, M/SR (4 cr)
Psychology Minor

Minor Requirements
No grades below C- are allowed. Courses may not be taken S-N unless offered S-N only.
A minimum GPA of 2.00 is required in the minor to graduate.
The GPA includes all, and only, University of Minnesota coursework. Grades of F are included in GPA calculation until they are replaced.

Courses for the Program

Required Courses
Psy 1051—Introduction to Psychology, SS (4 cr)
Psy 2001—Research Methods in Psychology, SS (4 cr)
Stat 1601—Introduction to Statistics, M/SMR (4 cr)
or Stat 2601—Statistical Methods, M/SMR (4 cr)
At least one course from four of the five following areas. One must be a designated lab course.

Learning and Cognition
Take 0–1 course(s) from the following:
Psy 3101—Learning Theory and Behavior Modification, SS (4 cr)
Psy 3111—Sensation and Perception, SS (4 cr)
Psy 3121—Cognition, SS (4 cr)

Biological and Comparative Psychology
Take 0–1 course(s) from the following:
Psy 3201—Comparative Psychology, Sci-L (4 cr)
Psy 3211—Biological Psychology, Sci-L (5 cr)
Psy 3221—Behavioral Biology of Women, Sci (2 cr)
Psy 3521—Health Psychology, SS (4 cr)

Personality and Clinical Psychology
Take 0–1 course(s) from the following:
Psy 3302—Personality, SS (4 cr)
Psy 3313—Psychopathology, SS (4 cr)
Psy 401—Helping Relationships, SS (4 cr)

Developmental Psychology
Take 0–1 course(s) from the following:
Psy 2401—Introduction to Lifespan Developmental Psychology, SS (4 cr)
Psy 3051—The Psychology of Women and Gender, HDiv (4 cr)
Psy 3401—Developmental Psychology I: Child Psychology, SS (4 cr)
Psy 3402—Developmental Psychology II: Adolescence, SS (2 cr)
Psy 3403—Developmental Psychology III: Adulthood and Aging, EC/CR (4 cr)

Social and Applied Psychology
Take 0–1 course(s) from the following:
Pol 3263—Political Psychology, SS (4 cr)
Psy 3501—Social Psychology, SS (4 cr)
Psy 3513—Negotiation, SS (4 cr)
Psy 3542—Multicultural Psychology, HDiv (4 cr)
Psy 3701—Organizational Behavior, SS (4 cr)

Elective Courses
Additional elective credits to total at least 30 credits in the minor (including required courses). Electives may be selected from any category above and the following:
Take 1 or more course(s) from the following:
IS 3800—Practicum in Social Sciences (1–2 cr)
IS 4101—Intro to Prof Conduct, Legal Constraints, Ethics in Human Services, E/CR (2 cr)
Psy 2993—Directed Study (1–5 cr)
Psy 3611—History and Philosophy of Psychology, Hist (2 cr)
Psy 3800—Research Practicum (1–6 cr)
Psy 3993—Directed Study (1–5 cr)

Psy 4896—Field Experiences in Psychology, SS (1–4 cr)
Psy 4993—Directed Study (1–5 cr)
Stat 3601—Data Analysis, M/SMR (4 cr)
Stat 3611—Multivariate Statistical Analysis, M/SMR (4 cr)

Teacher Preparation Requirements
Students seeking teaching licensure in social studies 5–12 should refer to the Education, Secondary (SeEd) section of this catalog.

Psychology Course Descriptions

Psy 1051. Introduction to Psychology. (SS; 4 cr; fall, spring, every year)
An introduction to the science of mind and behavior. Topics include history of psychology, research methods, biological bases for behavior, life span development, sensation and perception, learning, cognitive and social processes, personality, psychopathology, and applications of psychology. Includes laboratory/discussion sessions.

Psy 1061. Introduction to the Development of the Child and Adolescents. (SS; 4 cr; prereq 1051 or #; spring, every year)
Classy, data, and research approaches in development from birth through adolescence. Prenatal and physical development as well as perceptual, cognitive, language, personality and social development. Multicultural/global perspective. Designed for students aiming for teacher certification, who receive priority in registration. Does not count for elective credit for the 16-credit psychology component of the LAHS major or for the psychology major or minor. Does count toward the 8-credit “other” category for the LAHS major. A more in-depth alternative to this course is Psy 3401 and Psy 3402. Students double majoring in education and psychology should consider the Psy 3401 and 3402 alternative to this course.

Psy 1071. Human Sexuality. (SS; 4 cr; fall, every year)
Survey of aspects of human sexuality, including intimacy and communication; male and female anatomy, physiology, and response; development of identity, sex role, and gender orientation; varieties of sexual expression; pregnancy and childbirth; contraception and disease prevention; sexual coercion and abuse; sexual dysfunctions and their treatment.

Psy 1081. Drugs and Human Behavior. (SS; 2 cr; spring, every year)
Survey of psychoactive drugs, their effects on mind and behavior, and prevention and treatment of drug abuse.

Psy 1301. Psychology and Film. (SS; 4 cr; summer, offered when feasible)
The application of psychological theories and principles, with emphasis on social psychology, to film. Examination of how films apply to social issues (e.g., media violence) and how audiences impact upon movie viewing. Class activities include watching films and then analyzing them from a psychological perspective. [Continuing Education course]

Psy 1993. Directed Study. (1–5 cr [max 10 cr]; prereq approved directed study form; fall, spring, every year)
An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum.

Psy 2001. Research Methods in Psychology. (SS; 4 cr; prereq 1051, Stat 1601 or #; fall, spring, every year)
Design, analysis, and interpretation of research in psychology. Instruction on different research techniques and ethics in research. Students conduct, analyze, and evaluate empirical research and gain experience preparing APA-style research reports. Includes laboratory/discussion sessions.

Psy 2411. Introduction to Lifespan Developmental Psychology. (SS; 4 cr; prereq 1051; counts as elective cr for the Psy major or minor, and psy elective for the LAHS major; no cr for students who are concurrently enrolled in or have received cr for Psy 3401, Psy 3402, Psy 3403; fall, every year)
An introduction to theory, data, and research approaches in development from the prenatal period through childhood, adolescence, adulthood, and aging until the cessation of life. Includes physical, perceptual, cognitive, language, moral, personality, socio-emotional, family, and career development and changes over time, as well as issues of death, dying, and bereavement. Includes a multicultural focus. Students who intend a deeper focus in developmental psychology should consider 3401-3402-3403, an upper-division alternative to this course.

Psy 2993. Directed Study. (1–5 cr [max 10 cr]; prereq approved directed study form; fall, spring, every year)
An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum.

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Psy 3051. The Psychology of Women and Gender. (HDIV; 4 cr; prereq 1051 or #; fall, every year) Exploration of the interactive biological, psychological, and socio-cultural processes that shape the lives of women and the experience of gender. Topics include: the psychobiology of sex; the social construction of sex and gender; socialization and development; media representations; identity and sexuality; language and communication; motivation and personality; relationships; work and family lives; mental and physical health; mid- and later life development; victimization; therapy; intersections of race, class, and gender; and feminist approaches to teaching, learning, and knowing.

Psy 3101. Learning Theory and Behavior Modification. (SS; 4 cr; prereq 2001 or #; fall, every year) Major theories of learning and their importance for understanding human and nonhuman behavior. Classical and operant conditioning, generalization, discrimination, stimulus control, animal cognition. Behavior modification theories and techniques and their application to clinical populations. Lab projects demonstrate learning and behavior modification theories, concepts, and techniques and illustrate research methods and theory testing. Includes lab.

Psy 3111. Sensation and Perception. (SS; 4 cr; prereq 2001 or #; fall, every year) Empirical study of sensory processes and perceptual organization with emphasis on vision and audition. Anatomy and physiology of sense organs, psychophysics, signal detection, attention, attentional perceptual and perceptual-motor coordination. Includes lab.

Psy 3122. Cognition. (SS; 4 cr; prereq 2001 or #; spring, every year) Phylogenetic comparison of animal behavior emphasizing mechanisms of adaptation. Mechanisms of speculation, behavior genetics, evolution and ontogeny of the central nervous system, ethological determinants of behavior and learning. Includes lab.

Psy 3211. Biological Psychology. (Sci-L; 5 cr; prereq 1051, 2001) or Biol 1111; spring, every year) Brain organization and function; an emphasis on an understanding of the neural processes that underlie human and nonhuman behavior. Incorporates information from psychology, neuroscience, endocrinology, physiology, chemistry, neurology, and zoology to investigate the physiological basis of behavior. Topics include sensory processes, drugs and addiction, biological rhythms, sexual differentiation, reproduction, methods in neuroscience, neuropsychological disorders, and clinical assessment. Lab projects focus on neuroanatomical organization and function of the brain. (4 hrs lect, 1 hr lab)

Psy 3221. Behavioral Biology of Women. (Sci; 2 cr; prereq 3211 or Biol 2111 or #; fall, spring, offered when feasible) Exploration of proximate and ultimate influences on female behavior in human and nonhuman species. Sexual differentiation, gender differences in cognition, biological basis of sexual orientation, female sexual selection, and gender; and feminist approaches to teaching, learning, and knowing.

Psy 3302. Personality. (SS; 4 cr; prereq 1051 or #; spring, every year) Nature of personality constructs and theories. Conscious vs. unconscious processes; emotion and motivation; nature and measurement of personal traits; their dimensional structure, stability, development, and heritability.

Psy 3313. Psychopathology. (SS; 4 cr; prereq 1051 or #; spring, every year) Psychological disorders and their treatment, including anxiety, personality, affective, schizophrenic, and other recognized disorders of children and adults.

Psy 3401. Developmental Psychology I: Child Psychology. (SS; 4 cr; prereq 1051 or #; fall, every year) Theory, data, and research in development from conception to adolescence. Prenatal and physical development as well as perceptual, cognitive, personality, and social development. Language acquisition and Piaget’s theory of cognitive development.

Psy 3402. Developmental Psychology II: Adolescence. (SS; 2 cr; prereq 1051 or #; spring, every year) Theory, data, and research in adolescent development with emphasis on physical, cognitive, and social development.

Psy 3403. Developmental Psychology III: Adulthood and Aging. (E/CR; 4 cr; prereq 1051 or #; fall, every year) An overview of current concepts, theories, and methods in the study of adult development and aging. Theoretical and methodological content is integrated with an applied-learning experience through a service learning component.

Psy 3501. Social Psychology. (SS; 4 cr; prereq 1051 or Soc 1101 or #; fall, every year) Theories and research in the study of interpersonal behavior. Topics include aggression, prejudice, altruism, persuasion, group dynamics, and social influence.

Psy 3513. Negotiation. (SS; 4 cr; [Mgmt 3513]; prereq 3501 or Mgmt 3221 or Psy 3701; spring, every year) Same as Mgmt 3513. Examines the theoretical and applied aspects of negotiation. Topics include negotiation theory, strategy, skills and tactics, communication processes, global negotiation, and ethics. Use of negotiation simulations.

Psy 3521. Health Psychology. (SS; 4 cr; prereq 1051; spring, every year) Health implications of interactions among behavioral, environmental, and physiological states. Physiological bases of behavior and health; stress and coping; behavioral antecedents of disease; psychoneuro-immunology; disease prevention and health promotion.

Psy 3542. Multicultural Psychology. (HDIV; 4 cr; [Psy 3541]; prereq 1051; fall, every year) Theoretical and methodological approaches to multicultural psychology. Multicultural psychology is the systematic study of behavior, cognition, and affect settings where people of different backgrounds interact. Exploration of these interactions both within and outside of the United States. Topics may include worldviews, communication styles, acculturation, prejudice, white privilege, identity development, physical and mental health, and multicultural competencies.

Psy 3611. History and Philosophy of Psychology. (Hist; 2 cr; prereq 1051; spring, offered when feasible) Historical roots and comparative features of major theoretical systems in psychology, including their viewpoints on scientific methodology, research interests, and techniques. Component variables, hypotheses, and laws of structural, functional, behavioralist, Gestalt, psychoanalytic, and existential movements and their modern syntheses.

Psy 3701. Organizational Behavior. (SS; 4 cr; [Mgmt 3701]; prereq Stat 1601 or Stat 2601, jr or sr; fall, offered when feasible) Same as Mgmt 3701. Uses the theories and research of the behavioral sciences to understand how organizations function at the individual, group, and organizational levels. Topics include stress in the workplace; group dynamics; power, leadership, and attribution theory.

Psy 3800. Research Practicum. (1-6 cr; max 6 cr; prereq #; fall, spring, every year) Research activity carried out under the supervision of a psychology faculty member.

Psy 3993. Directed Study. (1-5 cr; max 10 cr; prereq approved directed study form; fall, spring, every year) An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum.

Psy 4101. Helping Relationships. (SS; 4 cr; prereq 3302 or 3313; fall, spring, every year) Approaches to counseling and psychotherapy. Theories of helping relationships. Acquisition of helping skills, including attending behavior, reflection of feeling, paraphrasing, confrontation, and summarization. Major humanistic, cognitive, and behavioral approaches. Didactic instruction, observation of counseling and psychotherapeutic techniques, and practical experiences.

Psy 4896. Field Experiences in Psychology. (SS; 1-4 cr; max 4 cr; prereq #, which normally requires 4101. IS 4101, other courses appropriate to field experience; SS [if taken for 2 or more cr]; only 4 cr may be applied to the BA or the Psy major; S-N only; fall, spring, every year) Individually arranged, supervised observation of and assistance with activities of professional psychologists in schools, clinics, hospitals, and other field settings.

Psy 4910. Advanced Seminar in Cognitive Psychology. (SS; 4 cr; [Psy 4710]; prereq 2001, 3111 or 3112, sr status, #, A-F only; fall, every year) Advanced seminar on selected topics in the area of Cognitive Psychology. Members of the seminar read and discuss primary source material on a topic of common interest. In addition, each student investigates a related topic in greater depth. The student writes a paper and gives a public presentation based on the in-depth investigation.
Advanced seminar on selected topics in the area of Biological and Comparative Psychology. Members of the seminar read and discuss primary source material on a topic of common interest. In addition, each student investigates a related topic in greater depth. The student writes a paper and gives a public presentation based on the in-depth investigation.

Advanced seminar on Social Psychology. Members of the seminar read and discuss primary source material on a topic of common interest. In addition, each student investigates a related topic in greater depth. The student writes a paper and gives a public presentation based on the in-depth investigation.

Advanced seminar on Developmental Psychology. Members of the seminar read and discuss primary source material on a topic of common interest. In addition, each student investigates a related topic in greater depth. The student writes a paper and gives a public presentation based on the in-depth investigation.

Advanced seminar on Personality or Clinical Psychology. Members of the seminar read and discuss primary source material on a topic of common interest. In addition, each student investigates a related topic in greater depth. The student writes a paper and gives a public presentation based on the in-depth investigation.

Advanced seminar on Biological and Comparative Psychology. Members of the seminar read and discuss primary source material on a topic of common interest. In addition, each student investigates a related topic in greater depth. The student writes a paper and gives a public presentation based on the in-depth investigation.

Students must be on file with the Social Sciences Division Office by the completion of a student’s junior year. No grades below C- are allowed. Courses for the major and in the sub-plan may not be taken S-N unless offered S-N only.

A minimum GPA of 2.00 is required in the major to graduate. The GPA includes all, and only, University of Minnesota coursework. Grades of “F” are included in GPA calculation until they are replaced.

Courses for the Program

Required Courses

While the programs of individual students may vary, based upon arrangements approved by the divisional committee for the social science major, the minimum competencies required for each discipline normally may be achieved by completion of the following courses and a sub-plan:

- Anth 1111—Introductory Cultural Anthropology, SS (4 cr)
- Econ 1112—Principles of Macroeconomics, SS (4 cr)
- Econ 1951—Seminar for Social Science Majors (1 cr)
- Geographic 2001—Problems in Geography, Env (4 cr)
- Hist 1301—Introduction to U.S. History, Hist (4 cr)
- Pol 1201—American Government and Politics, E/CR (4 cr)
- Psy 1051—Introduction to Psychology, SS (4 cr)
- Soc 1101—Introductory Sociology, SS (4 cr)
- Stat 1601—Introduction to Statistics, M/SMR (4 cr)

or equivalent proficiency in statistics approved by the divisional committee for the social science major.

Program Sub-plans

Students are required to complete one of the following sub-plans. (Note: The honors sub-plan does not meet this requirement. Honors students are required to complete one sub-plan plus the honors sub-plan.)

Anthropology Sub-plan

This sub-plan requires a total of 20 credits.

Required Courses for the Anthropology sub-plan

- Anth 2101—Physical Anthropology, Sci-L (4 cr)
- Anth 2103—Archaeology, SS (4 cr)
- Anth 3411—Seminar in Anthropological Methodology, E/CR (4 cr)

Elective Courses

An additional 8 credits (exclusive of those used to complete required courses) in anthropology and sociology; 4 of which must be from courses above 1xxx. No more than 4 credits can be from Soc courses.

Take no more than 4 credit(s) from the following:

Anth 1xxx

Soc 1xxx

Take 4 or more credit(s) from the following:

Anthropology Electives

Take 4 or more credit(s) from the following:

- Anth 2501—Medical Anthropology-An Overview, SS (4 cr)
- Anth 3204—Culture, Food, and Agriculture, Env (4 cr)
- Anth 3206—Ecological Anthropology, Env (4 cr)
- Anth 3402—Representations from the Field: American Indian Ethnography, HDiv (4 cr)
- Anth 3451—Contemporary American Indians, HDiv (4 cr)
- Anth 3452—American Indian Women, HDiv (4 cr)
- Anth 3455—North American Archaeology, SS (4 cr)
- Anth 3601—Social Justice and Human Rights in Latin America, IP (4 cr)
- Anth 3602—Women in Latin America, IP (4 cr)
- Anth 3603—Latin American Archaeology, SS (4 cr)
- Anth 2xx, 3xx, 4xx

Sociology Electives

Take no more than 4 credit(s) from the following:

Soc 2101—Systems of Oppression, HDiv (4 cr)
- Soc 3101—Qualitative Research Methodology (4 cr)
Social Science Major

Economics Sub-plan

This sub-plan requires a total of 23 credits.

Required Courses for the Economics sub-plan
- Econ 1111—Principles of Microeconomics, SS (4 cr)
- Econ 3202—Microeconomic Theory, SS (4 cr)
- Econ 3202—Macroeconomic Theory, SS (4 cr)
- Math 1101—Calculus I, M/SR (5 cr)

Elective Courses

Take 6 or more credit(s) from the following:
- Econ x993—Directed Study
- Econ 4501—Senior Research Seminar in Economics and Management

This sub-plan requires a total of 20 credits.

History Sub-plan

Required Courses for the History sub-plan
- Hist 1101—Introduction to World History to 1500, Hist (4 cr)
or Hist 1102—Introduction to World History Since 1500, Hist (4 cr)

Elective Courses

Take 12 or more credits from the following:
- Hist 2001—The Study of History: Schools, Rules, and Tools, Hist (4 cr)
- Hist 3001—Families Through the Prism of Memory, Genealogy, and History, Hist (4 cr)
- Hist 3008—The Making of the Islamic World, HDiv (4 cr)
- Hist 3009—Microhistory, Hist (4 cr)
- Hist 3012—History of Ancient Greece and Rome, Hist (4 cr)
- Hist 3010—Renaissance and Reformation, Hist (4 cr)
- Hist 3012—Early Modern Europe, Hist (4 cr)
- Hist 3013—Medieval Europe, Hist (4 cr)
- Hist 3015—Medieval Europe, Hist (4 cr)
- Hist 3016—or Modern German Intellectual History, Hist (4 cr)
- Hist 3016—The Enlightenment, Hist (4 cr)
- Hist 3020—Nazi Germany, Hist (4 cr)
- Hist 3027—The Crusades, IP (4 cr)
- Hist 3029—Modern Germany, Hist (4 cr)
- Hist 3020—Popular Religion, Heresy, and Inquisition in the Middle Ages, Hist (4 cr)
- Hist 3021—Modern France, Hist (4 cr)
- Hist 3301—Red, White, and Black: Race/Culture in Early America, HDiv (4 cr)
- Hist 3303—Creation of the American Republic, Hist (4 cr)
- Hist 3351—The U.S. Presidency Since 1900, SS (4 cr)
- Hist 3352—The U.S. 1960s, Hist (4 cr)
- Hist 3353—World War II, Hist (4 cr)
- Hist 3355—United States in Transition, 1877-1920, Hist (4 cr)
- Hist 3356—Civil Rights Movements, 1954-1974, Hist (4 cr)
- Hist 3358—Civil War and Reconstruction, Hist (4 cr)
- Hist 3359—Native Strategies for Survival, 1880-1920, HDiv (4 cr)
- Hist 3361—An Environmental and Geographic History of the United States, Envt (4 cr)
- Hist 3451—Facing West, HDiv (4 cr)
- Hist 3452—Minnesota History, Hist (4 cr)
- Hist 3453—The American Presidency, 1789-1900, Hist (4 cr)
- Hist 3455—American Immigration, Hist (4 cr)
- Hist 3456—History of Religion in America, Hist (4 cr)
- Hist 3457—American Biography and Autobiography, Hist (4 cr)
- Hist 3459—Lewis and Clark: An American Odyssey, Hist (4 cr)
- Hist 3551—Modern Japan, Hist (4 cr)
- Hist 3552—History of Modern China, Hist (4 cr)
- Hist 3554—Korean History, Hist (4 cr)
- Hist 3601—Great Books in Latin American History, IP (4 cr)
- Hist 3608—The Cuban Revolution in Historical Perspective, Hist (4 cr)

Social Science Major

Economics Sub-plan

This sub-plan requires a total of 23 credits.

Required Courses for the Economics sub-plan
- Econ 1111—Principles of Microeconomics, SS (4 cr)
- Econ 3202—Microeconomic Theory, SS (4 cr)
- Econ 3202—Macroeconomic Theory, SS (4 cr)
- Math 1101—Calculus I, M/SR (5 cr)

Elective Courses

Take 6 or more credit(s) from the following:
- Econ x993—Directed Study
- Econ 4501—Senior Research Seminar in Economics and Management

This sub-plan requires a total of 20 credits.

History Sub-plan

Required Courses for the History sub-plan
- Hist 1101—Introduction to World History to 1500, Hist (4 cr)
or Hist 1102—Introduction to World History Since 1500, Hist (4 cr)

Elective Courses

Take 12 or more credits from the following:
- Hist 2001—The Study of History: Schools, Rules, and Tools, Hist (4 cr)
- Hist 3001—Families Through the Prism of Memory, Genealogy, and History, Hist (4 cr)
- Hist 3008—The Making of the Islamic World, HDiv (4 cr)
- Hist 3009—Microhistory, Hist (4 cr)
- Hist 3012—History of Ancient Greece and Rome, Hist (4 cr)
- Hist 3010—Renaissance and Reformation, Hist (4 cr)
- Hist 3012—Early Modern Europe, Hist (4 cr)
- Hist 3013—Medieval Europe, Hist (4 cr)
- Hist 3015—Medieval Europe, Hist (4 cr)
- Hist 3016—or Modern German Intellectual History, Hist (4 cr)
- Hist 3016—The Enlightenment, Hist (4 cr)
- Hist 3020—Nazi Germany, Hist (4 cr)
- Hist 3027—The Crusades, IP (4 cr)
- Hist 3029—Modern Germany, Hist (4 cr)
- Hist 3020—Popular Religion, Heresy, and Inquisition in the Middle Ages, Hist (4 cr)
- Hist 3021—Modern France, Hist (4 cr)
- Hist 3301—Red, White, and Black: Race/Culture in Early America, HDiv (4 cr)
- Hist 3303—Creation of the American Republic, Hist (4 cr)
- Hist 3351—The U.S. Presidency Since 1900, SS (4 cr)
- Hist 3352—The U.S. 1960s, Hist (4 cr)
- Hist 3353—World War II, Hist (4 cr)
- Hist 3355—United States in Transition, 1877-1920, Hist (4 cr)
- Hist 3356—Civil Rights Movements, 1954-1974, Hist (4 cr)
- Hist 3358—Civil War and Reconstruction, Hist (4 cr)
- Hist 3359—Native Strategies for Survival, 1880-1920, HDiv (4 cr)
- Hist 3361—An Environmental and Geographic History of the United States, Envt (4 cr)
- Hist 3451—Facing West, HDiv (4 cr)
- Hist 3452—Minnesota History, Hist (4 cr)
- Hist 3453—The American Presidency, 1789-1900, Hist (4 cr)
- Hist 3455—American Immigration, Hist (4 cr)
- Hist 3456—History of Religion in America, Hist (4 cr)
- Hist 3457—American Biography and Autobiography, Hist (4 cr)
- Hist 3459—Lewis and Clark: An American Odyssey, Hist (4 cr)
- Hist 3551—Modern Japan, Hist (4 cr)
- Hist 3552—History of Modern China, Hist (4 cr)
- Hist 3554—Korean History, Hist (4 cr)
- Hist 3601—Great Books in Latin American History, IP (4 cr)
- Hist 3608—The Cuban Revolution in Historical Perspective, Hist (4 cr)
Hist 3704—Women in the Middle Ages, SS (4 cr)
Hist 3706—Women in Early Modern Europe, SS (4 cr)
Hist 3707—Gender in East Asia, HDiv (4 cr)
Hist 3708—European Women's History, 1600-Present, IP (4 cr)
Hist 3993—Directed Study (1-5 cr)
Hist 4993—Directed Study (1-5 cr)
Hist 2xxx, 3xxx, 4xxx

Management
This sub-plan requires a total of 22 credits.

**Required Courses for the Management sub-plan**
Econ 1111—Principles of Microeconomics, SS (4 cr)
Mgmt 2101—Principles of Accounting I (4 cr)
Mgmt 2102—Principles of Accounting II (2 cr)

**Elective Courses**
No more than 4 credits from each of the following can be applied to the sub-plan:
Econ 4501—Senior Research Seminar in Economics
Mgmt x993—Directed Study

Take 12 or more credit(s) from the following:
Mgmt 3101—Financial Management, SS (4 cr)
Mgmt 3123—Managerial Economics, SS (4 cr)
Mgmt 3133—Managerial Accounting (4 cr)
Mgmt 3141—Business Law I, SS (2 cr)
Mgmt 3142—Business Law II, SS (2 cr)
Mgmt 3151—Human Resources Management I, E/CR (2 cr)
Mgmt 3152—Human Resources Management II, HDiv (2 cr)
Mgmt 3161—Labor Management Relations I, E/CR (2 cr)
Mgmt 3162—Labor Management Relations II, SS (2 cr)
Mgmt 3171—Leadership in Organizations, SS (2 cr)
Mgmt 3201—Marketing Principles and Strategy, SS (4 cr)
Mgmt 3221—Management and Organization Theory, SS (4 cr)
Mgmt 3351—Globalization: Examining India’s Social and Economic Development, IP (4 cr)
Mgmt 3501—Applied Deterministic Modeling for Management Science, M/SR (2 cr)
Mgmt 3502—Applied Probabilistic Modeling for Management Science, M/SR (2 cr)
Mgmt 3513—Negotiation, SS (4 cr)
Mgmt 3601—Transnational Enterprise, IP (2 cr)
Mgmt 3701—Organizational Behavior, SS (4 cr)
Mgmt 3993—Directed Study (1-5 cr)
Mgmt 4101—Investment and Portfolio Analysis, SS (4 cr)
Mgmt 4201—The Economics of Corporate Strategy I, SS (2 cr)
Mgmt 4202—The Economics of Corporate Strategy II, SS (2 cr)
Mgmt 4501—Globalization and Business Strategy, IP (2 cr)
Mgmt 4502—Technological Change, Labor Market, and Skill Formation, IP (2 cr)
Mgmt 4601—Advanced Topics in Financial Economics, SS (2 cr)
Mgmt 4602—Long-Term Financing, SS (2 cr)
Mgmt 4603—Working Capital Management, SS (2 cr)
Mgmt 4896—Internship (1-4 cr)
Mgmt 4993—Directed Study (1-5 cr)
Mgmt 3xxx, 4xxx

Psychology Sub-plan
This sub-plan requires a total of 22 credits.

**Required Courses for the Psychology sub-plan**
In addition to Psy 2001, students must complete at least one course from four of the five areas. One must be a designated lab course.
Psy 2001—Research Methods in Psychology, SS (4 cr)

**Learning and Cognition**
Take 0 or more course(s) from the following:
Psy 3101—Learning Theory and Behavior Modification, SS (4 cr)
Psy 3111—Sensation and Perception, SS (4 cr)
Psy 3112—Cognition, SS (4 cr)

**Biological and Comparative Psychology**
Take 0 or more course(s) from the following:
Psy 3201—Comparative Psychology, Sci-L (4 cr)
Psy 3211—Biological Psychology, Sci-L (5 cr)
Psy 3221—Behavioral Biology of Women, Sci (2 cr)
Psy 3521—Health Psychology, SS (4 cr)

**Personality and Clinical Psychology**
Take 0 or more course(s) from the following:
Psy 3302—Personality, SS (4 cr)
Psy 3313—Psychopathology, SS (4 cr)
Psy 4101—Helping Relationships, SS (4 cr)

**Developmental Psychology**
Take 0 or more course(s) from the following:
Psy 2411—Introduction to Lifespan Developmental Psychology, SS (4 cr)
Psy 3051—The Psychology of Women and Gender, HDiv (4 cr)
Social Science Major

Psy 3401—Developmental Psychology I: Child Psychology, SS (4 cr)
Psy 3402—Developmental Psychology II: Adolescence, SS (2 cr)
Psy 3403—Developmental Psychology III: Adulthood and Aging, E/CR (4 cr)

Social and Applied Psychology

Take 0 or more course(s) from the following:
- Pol 3263—Political Psychology, SS (4 cr)
- Psy 3501—Social Psychology, SS (4 cr)
- Psy 3513—Negotiation, SS (4 cr)
- Psy 3542—Multicultural Psychology, HDiv (4 cr)
- Psy 3701—Organizational Behavior, SS (4 cr)

Elective Courses

Additional elective credits to total at least 22 credits in the psychology sub-plan (including required courses). Electives may be selected from any category above and the following:

Take 0 or more course(s) from the following:
- IS 3800—Practicum in Social Sciences (1-2 cr)
- IS 4101—Intro to Prof Conduct, Legal Constraints, Ethics in Human Services, E/CR (2 cr)
- Psy 2993—Directed Study (1-5 cr)
- Psy 3611—History and Philosophy of Psychology, Hist (2 cr)
- Psy 3800—Research Practicum (1-6 cr)
- Psy 3993—Directed Study (1-5 cr)
- Psy 4896—Field Experiences in Psychology, SS (1-4 cr)
- Psy 4993—Directed Study (1-5 cr)
- Stat 3601—Data Analysis, M/SR (4 cr)
- Stat 3611—Multivariate Statistical Analysis, M/SR (4 cr)

Sociology Sub-plan

This sub-plan requires a total of 20 credits.

Required Courses for the Sociology sub-plan

Soc 3101—Qualitative Research Methodology (4 cr)
Soc 3102—Quantitative Research Methodology, SS (4 cr)
Soc 3401—Classical Sociological Theory, SS (4 cr)
Soc 3402—Contemporary Sociological Theory, SS (4 cr)

Elective Courses

No more than 4 credits of the 12 elective credits required for the sub-plan can be from Anth courses. Soc 4901 and Soc 4902 are highly recommended.

Take no more than 4 credit(s) from the following:
- Anth 2101—Physical Anthropology, Sci-L (4 cr)
- Anth 2103—Archaeology, SS (4 cr)
- Anth 2501—Medical Anthropology-An Overview, SS (4 cr)
- Anth 3204—Culture, Food, and Agriculture, Envt (4 cr)
- Anth 3206—Ecological Anthropology, Envt (4 cr)
- Anth 3402—Representations from the Field: American Indian Ethnography, HDiv (4 cr)
- Anth 3411—Seminar in Anthropological Methodology, E/CR (4 cr)
- Anth 3451—Contemporary American Indians, HDiv (4 cr)
- Anth 3452—American Indian Women, HDiv (4 cr)
- Anth 3455—North American Archaeology, SS (4 cr)
- Anth 3601—Social Justice and Human Rights in Latin America, IP (4 cr)
- Anth 3602—Women in Latin America, IP (4 cr)
- Anth 3603—Latin American Archaeology, SS (4 cr)
- Anth 3xx, 3xxx, 4xxx

Take 8 or more credit(s) from the following:
- Soc 2101—Systems of Oppression, HDiv (4 cr)
- Soc 3111—Sociology of Modernization, IP (4 cr)
- Soc 3121—Sociology of Gender, HDiv (4 cr)
- Soc 3122—Sociology of Childhoods, HDiv (4 cr)
- Soc 3313—World Population, Envt (4 cr)
- Soc 3411—Sociology of Deviance, E/CR (4 cr)
- Soc 3204—Culture, Food, and Agriculture, Envt (4 cr)
- Soc 3251—African Americans, HDiv (4 cr)
- Soc 3252—Women in Muslim Society, IP (4 cr)
- Soc 3451—Contemporary American Indians, HDiv (4 cr)
- Soc 3452—American Indian Women, HDiv (4 cr)
- Soc 3601—Social Justice and Human Rights in Latin America, IP (4 cr)
- Soc 3602—Women in Latin America, IP (4 cr)
- Soc 4901—Independent Project Seminar I (1 cr)
- Soc 4902—Independent Project Seminar II, SS (3 cr)
- Soc 2xxx, 3xxx, 4xxx

Gender, Women, and Sexuality Studies Sub-plan

This sub-plan requires a total of 24 credits.

Required Courses for the Gender, Women, and Sexuality Studies sub-plan

GWSS 1101—Introduction to Gender, Women, and Sexuality Studies, HDiv (4 cr)

Elective Courses

An additional 16 or more credits from primary GWSS content courses, and up to 4 credits from partial GWSS content courses. Courses must be from at least three different disciplines.

Primarily Gender, Women, and Sexuality Content

Take 16 or more credit(s) from the following:
- Anth 3451—American Indian Women, HDiv (4 cr)
- Anth 3602—Women in Latin America, IP (4 cr)
- ArtH 3281—Women and Art, FA (4 cr)
- ArtS 3006—Media Studies: Feminist Art: A Studio Perspective, ArtP (3 cr)
- Engl 2032—Sex, the City, and Literature, HDiv (4 cr)
- Engl 4025—Research Seminar: The Elizabeth Mystique, Hum (4 cr)
- Fren 1304—French Women Authors for Non-Majors, IP (4 cr)
- Fren 3028—Early Modern Studies: Female Authorship and Medieval Canon Fodder, Hum (4 cr)
- Fren 3035—Modern Studies: French Women Authors, IP (4 cr)
- Ger 3501—Women’s Issues in Contemporary German Culture, IP (4 cr)
- GWSS 4101—Feminist Theory, HDiv (4 cr)
- Hist 1402—Women in U.S. History, HDiv (4 cr)
- Hist 3704—Women in the Middle Ages, SS (4 cr)
- Hist 3706—Women in Early Modern Europe, SS (4 cr)
- Hist 3707—Gender in East Asia, HDiv (4 cr)
- Hist 3708—European Women’s History, 1600-Present, IP (4 cr)
- Hum 3501—Women’s Issues in Contemporary German Culture, IP (4 cr)
- Phil 2141—Analytic Feminism, Hum (4 cr)
- Pol 3503—Women in Politics Worldwide, IP (4 cr)
- Psy 1071—Human Sexuality, SS (4 cr)
- Psy 3051—The Psychology of Women and Gender, HDiv (4 cr)
- Psy 3221—Behavioral Biology of Women, Sci (2 cr)
- Soc 3252—Women in Muslim Society, IP (4 cr)
- Soc 3452—American Indian Women, HDiv (4 cr)
- Soc 3602—Women in Latin America, IP (4 cr)
- Span 3653—Seminar: Maria de Zayas: Literary Violence in Golden Age Spain, Hum (4 cr)
- Span 3654—Seminar: Sex, Love, and Marriage in Golden Age Spanish Literature, Hum (4 cr)

Partial Gender, Women, and Sexuality Content

Take no more than 4 credit(s) from the following:
- Anth 2501—Medical Anthropology-An Overview, SS (4 cr)
- Econ 3351—Globalization: Examining India’s Social and Economic Development, IP (4 cr)
- Econ 4101—Labor Economics I, HDiv (2 cr)
- Engl 3142—The Rise of the Novel, Hum (4 cr)
- Engl 3154—19th-Century British Fiction, Hum (4 cr)
An introduction to the science of mind and behavior. Topics include history
Analysis of principles, organization, procedures, and powers of government
Varieties and range of human behavior as revealed through the comparative
(Stat; 4 cr; prereq Math 1101 or Math 1021; fall, every year)
Descriptive statistics, elementary probability theory; laws of probability, random variables, discrete and continuous probability models, functions of random variables, mathematical expectation. Statistical inference; point estimation, interval estimation, tests of hypotheses. Other statistical methods; linear regression and correlation, ANOVA, nonparametric statistics, statistical quality control, use of statistical computer packages.
Sociology Major
Program Requirements
Students develop a coherent program of study in consultation with their major adviser generally no later than the spring semester of their sophomore year.
Up to 4 credits of coursework with a grade of D or D+ may be used to meet the major requirements if offset by an equivalent number of credits of A or B. Courses may not be taken S-N unless offered S-N only.
A minimum GPA of 2.00 is required in the major to graduate.
The GPA includes all, and only, University of Minnesota coursework. Grades of F are included in GPA calculation until they are replaced.

Sociology Major
Program Requirements
Students develop a coherent program of study in consultation with their major adviser generally no later than the spring semester of their sophomore year.
Up to 4 credits of coursework with a grade of D or D+ may be used to meet the major requirements if offset by an equivalent number of credits of A or B. Courses may not be taken S-N unless offered S-N only.
A minimum GPA of 2.00 is required in the major to graduate.
The GPA includes all, and only, University of Minnesota coursework. Grades of F are included in GPA calculation until they are replaced.

Courses for the Program
Required Courses
All four of Soc 3101, 3102, 3401, and 3402 are recommended. The discipline strongly recommends Stat 1601.
Soc 1101—Introductory Sociology, SS (4 cr)
Soc 3101—Qualitative Research Methodology (4 cr)
or Soc 3102—Quantitative Research Methodology, SS (4 cr)
Soc 3401—Classical Sociological Theory, SS (4 cr)
or Soc 3402—Contemporary Sociological Theory, SS (4 cr)
Soc 4901—Independent Project Seminar I (1 cr)
Soc 4902—Independent Project Seminar II, SS (3 cr)

Elective Courses
No more than 8 credits of the 20 elective credits required for the major can be from Anth courses.
Take 20 or more credit(s) from the following:

Sociology (Soc)
Division of the Social Sciences
Objectives—The sociology curriculum (with support from anthropology courses) is designed to acquaint students with the concerns, theories, and methods of the science that deals with groups, culture, and interpersonal relations of human beings. In addition to an introduction to sociology as a science, an effort is made to relate human values to the theories, methods, and data of sociology. Courses are designed to meet the needs of liberal arts students as well as students preparing for graduate school.

Sociology (Soc)
Program Requirements
Students develop a coherent program of study in consultation with their major adviser generally no later than the spring semester of their sophomore year.
Up to 4 credits of coursework with a grade of D or D+ may be used to meet the major requirements if offset by an equivalent number of credits of A or B. Courses may not be taken S-N unless offered S-N only.
A minimum GPA of 2.00 is required in the major to graduate.
The GPA includes all, and only, University of Minnesota coursework. Grades of F are included in GPA calculation until they are replaced.
Sociology Minor

Minor Requirements

Up to 4 credits of coursework with a grade of D or D+ may be used to meet the minor requirements if offset by an equivalent number of credits of A or B. Courses may not be taken S-N unless offered S-N only.

A minimum GPA of 2.00 is required in the minor to graduate. The GPA includes all, and only, University of Minnesota coursework. Grades of F are included in GPA calculation until they are replaced.

Courses for the Program

Required Courses

Soc 1101—Introductory Sociology, SS (4 cr)
Soc 3101—Qualitative Research Methodology (4 cr)
or Soc 3102—Quantitative Research Methodology, SS (4 cr)
Soc 3401—Classical Sociological Theory, SS (4 cr)
or Soc 3402—Contemporary Sociological Theory, SS (4 cr)

Elective Courses

No more than 4 credits of the 12 elective credits required for the minor can be from Anth courses.

Soc 4901 and 4902 are strongly recommended.

Take 12 or more credit(s) from the following:

Soc 2101—Systems of Oppression, HDiv (4 cr)
Soc 3111—Sociology of Modernization, IP (4 cr)
Soc 3121—Sociology of Gender, HDiv (4 cr)
Soc 3122—Sociology of Childhoods, HDiv (4 cr)
Soc 3131—World Population, Envt (4 cr)
Soc 3141—Social Deviance, E/CR (4 cr)
Soc 3204—Culture, Food, and Agriculture, Envt (4 cr)
Soc 3251—African Americans, HDiv (4 cr)
Soc 3252—Women in Muslim Society, IP (4 cr)
Soc 3451—Contemporary American Indians, HDiv (4 cr)
Soc 3452—American Indian Women, HDiv (4 cr)

Soc 3601—Social Justice and Human Rights in Latin America, IP (4 cr)
Soc 3602—Women in Latin America, IP (4 cr)
Soc 4901—Independent Project Seminar I (1 cr)
Soc 4902—Independent Project Seminar II, SS (3 cr)
Soc 2xxx, 3xxx, 4xxx

Take no more than 4 credit(s) from the following:

Anth 1111—Introductory Cultural Anthropology, SS (4 cr)
Anth 2101—Physical Anthropology, Sci-L (4 cr)
Anth 2501—Medical Anthropology—An Overview, SS (4 cr)
Anth 3204—Culture, Food, and Agriculture, Envt (4 cr)
Anth 3206—Ecological Anthropology, Envt (4 cr)
Anth 3402—Representations from the Field: American Indian Ethnography, HDiv (4 cr)
Anth 3411—Seminar in Anthropological Methodology, E/CR (4 cr)
Anth 3451—Contemporary American Indians, HDiv (4 cr)
Anth 3452—American Indian Women, HDiv (4 cr)
Anth 3601—Social Justice and Human Rights in Latin America, IP (4 cr)
Anth 3602—Women in Latin America, IP (4 cr)
Anth 2xxx, 3xxx, 4xxx

Anth 2103—Archaeology, SS (4 cr)
Anth 3455—North American Archaeology, SS (4 cr)
Anth 3206—Ecological Anthropology, Envt (4 cr)
Anth 3603—Latin American Archaeology, SS (4 cr)

Sociology Course Descriptions

Soc 1101. Introductory Sociology. (SS; 4 cr; fall, spring, every year)
Basic concepts, theories, and methods of sociology; survey of some of the institutional areas in which sociologists specialize.

Soc 1993. Directed Study. (1–5 cr [max 10 cr]; prereq approved directed study form; fall, spring, every year)
Individualized on- or off-campus research project or other learning activity not covered in the regular Sociology curriculum. Topic determined by the student and instructor.

Soc 2101. Systems of Oppression. (HDiv; 4 cr; prereq 1101 or Anth 1111 or #; fall, every year)
Patterns of group dominance, exploitation, and hate in the United States and globally. Emphasis on sexism, racism, and classism with some attention to other systems of oppression such as heterosexism, ageism, and ableism.

Soc 2993. Directed Study. (1–5 cr [max 10 cr]; prereq approved directed study form; fall, spring, every year)
Individualized on- or off-campus research project or other learning activity not covered in the regular Sociology curriculum. Topic determined by the student and instructor.

Soc 3101. Qualitative Research Methodology. (4 cr; prereq 1101; fall, every year)
Introduction to qualitative research procedures used in sociology. Overview of qualitative techniques in context of professional sociological research and student research design.

Soc 3102. Quantitative Research Methodology. (SS; 4 cr; prereq 1101; spring, every year)
Practical issues in quantitative sociological research; quantitative research project design, sociological statistics, data analysis, SPSS, reporting, and presentation.

Soc 3111. Sociology of Modernization. (IP; 4 cr; prereq 1101 or Anth 1111 or #; spring, every year)
Process of modernization in non-Western societies. Social, economic, and political impact of modernization from different theoretical perspectives. Assessment of those theoretical perspectives as a means to understand dynamics of change in Third World countries.

Soc 3121. Sociology of Gender. (HDiv; 4 cr; prereq 1101 or Anth 1111 or #; fall, every year)
An introduction to the sociological study of gender. Focus on gender difference and gender inequality. Analysis of the changing roles, opportunities, and expectations of women and men as their societies (and subsequently, gender relations and power) undergo change in today’s world. Theoretical overview and an examination of how gender affects everyday experiences.
An introduction to the sociological study of deviance. Explore the social realities of deviance within contemporary society and examine the social construction of deviant categories. Specific focus on images of deviance as social constructs, rather than as intrinsic elements of human behavior. Examination of the complex relationships between individual behavior and social structure, with a focus on power, inequality, and oppression. Also, an examination of the socio-cultural definitions of morality and behavior.

Soc 3141. Sociology of Deviance. (E/CR; 4 cr; prerequisite 4 cr in Soc or #; fall, every year)

An introduction to the sociological study of deviance. Explore the social reality of deviance within contemporary society and examine the social construction of deviant categories. Specific focus on images of deviance as social constructs, rather than as intrinsic elements of human behavior. Examination of the complex relationships between individual behavior and social structure, with a focus on power, inequality, and oppression. Also, an examination of the socio-cultural definitions of morality and behavior.

Soc 3204. Culture, Food, and Agriculture. (Env't; 4 cr; prerequisite 1101 or Anth 1111 or #; spring, even years)

Same as Anth 3204. Examines the globalization of food systems utilizing the political ecology of food to understand global and local dimensions of production, marketing, and consumption. Emphasis on connections between food production and national identity, relations of power, genetic engineering, environmental destruction, the politics of world hunger, and local efforts to achieve sustainability.

Soc 3251. African Americans. (HD/IV; 4 cr; prerequisite 1101 or Anth 1111; fall, spring, offered when feasible)

Examination of African American religious, economic, political, family, and kinship institutions in the context of the greater American society. Struggles to overcome problems and the degree of success or failure of these struggles are examined and placed in historical context.

Soc 3252. Women in Muslim Society. (IP; 4 cr; prerequisite 1101 or Anth 1111; spring, offered when feasible)

This discipline promotes a global perspective by encouraging students to take a close look at another culture and in this way become aware of both the diversity and similarity among all people.

Objectives—The Spanish curriculum offers coursework in Hispanic culture, language, and literature. The courses are designed to help students develop critical insight into the philosophy and values of another culture, fluency in a second language, and sensitivity toward literature that reflects the experience of the Spanish-speaking world. The curriculum accommodates liberal arts students interested in a cross-cultural perspective, language study, secondary school teaching, or preparation for graduate study in the field.

Soc 3450. Classical Sociological Theory. (SS; 4 cr; prerequisite 1101; add fr cr in Soc recommended; fall, every year)

Survey of major developments in classical sociological theory, with emphasis on the “Big Three”—Marx, Durkheim, and Weber, among others. Emphasis on sociological ideas in relation to the principal intellectual currents of European and American society.

Soc 3452. American Indian Women. (HD/IV; 4 cr; prerequisite 1101 or Anth 1111 or #; fall, odd years)

Same as Anth 3452. The role of Indian and mixed-blood women in a variety of North American Indian cultures, both traditional and contemporary, using ethnography, autobiography, life history, biography, and fiction. The interaction of Indian women and their cultures with the colonizing cultures of Western Europe and the United States.

Soc 3601. Social Justice and Human Rights in Latin America. (IP; 4 cr; prerequisite 1101 or Anth 1111 or #; spring, every year)

Same as Anth 3601. Examination of social, economic, and political transformations in Latin America with an emphasis on social justice and human rights. Critical approaches to understand U.S.-Latin American relations, labor struggles, rebellions to define alternative development, indigenous resistance to encroachment on resources and ways of life, civil war and genocide, and efforts to create a more environmental and socially sustainable development.

Soc 3602. Women in Latin America. (IP; 4 cr; prerequisite 1101 or Anth 1111 or #; fall, odd years)

Same as Anth 3602. Study of the social statuses of women in Latin American countries and the cultural norms influencing these statuses. Topics include class differences and the varied interests of women of different classes and ethnicities, women’s movements, economic and political conditions, religion and women, etc.

Soc 3993. Directed Study. (1-5 cr [max 10 cr]; prerequisite approved directed study form; fall, spring, every year)

Individualized on- or off-campus research project or other learning activity not covered in the regular Sociology curriculum. Topic determined by the student and instructor.

Soc 4901. Independent Project Seminar I. (1 cr; prerequisite 3101 or 3102, 3401 or 3402; A-F only; fall, spring, every year)

A capstone seminar to guide sociology majors in the completion of an independent study project; selection and definition of a research project; small-group and one-on-one consultation and advising on defining a research topic, designing and planning its execution, developing a bibliography, relating relevant theoretical perspectives to research materials, and organizing and writing a research paper.

Soc 4902. Independent Project Seminar II. (SS; 3 cr; prerequisite 4901; A-F only; spring, every year)

A capstone seminar to guide sociology majors in the completion of an independent study project; execution of a research project; small-group and one-on-one consultation and advising on conducting the research project planned in Soc 4901, developing a bibliography, relating relevant theoretical perspectives to research materials, and organizing and writing a research paper.

Soc 4993. Directed Study. (1-5 cr [max 10 cr]; prerequisite approved directed study form; fall, spring, every year)

Individualized on- or off-campus research project or other learning activity not covered in the regular Sociology curriculum. Topic determined by the student and instructor.

Spanish (Span)

Division of the Humanities

This discipline promotes a global perspective by encouraging students to take a close look at another culture and in this way become aware of both the diversity and similarity among all people.

Objectives—The Spanish curriculum offers coursework in Hispanic culture, language, and literature. The courses are designed to help students develop critical insight into the philosophy and values of another culture, fluency in a second language, and sensitivity toward literature that reflects the experience of the Spanish-speaking world. The curriculum accommodates liberal arts students interested in a cross-cultural perspective, language study, secondary school teaching, or preparation for graduate study in the field.

Study Abroad

In light of today’s increasingly interdependent world, the UMM Spanish faculty endorses study abroad, in combination with a Spanish major or minor, as the most effective means by which to

• improve language abilities
• broaden academic horizons
• globalize one’s world view
• expand career opportunities
• advance cross-cultural and problem-solving skills
• gain confidence in oneself personally and professionally

Students Not Majoring or Minoring in Spanish

For an in-depth cultural emphasis, students should complete:

1. Span 1001—Beginning Spanish I
2. Span 1002—Beginning Spanish II or equivalent
Spanish (Span)

Spanish Major

Courses for Admission

Beginning Spanish

Beginning Spanish I and II or equivalent previous language experience required to take intermediate Spanish.

Program Requirements

No grades below C- are allowed. Courses may not be taken S-N unless offered S-N only.

A minimum GPA of 2.00 is required in the major to graduate. The GPA includes all, and only, University of Minnesota coursework. Grades of F are included in GPA calculation until they are replaced.

A foreign study experience and regular use of the language laboratory are strongly recommended to maintain language skills.

Students majoring in Spanish are encouraged to take at least one year of instruction in another foreign language.

Courses for the Program

Required Courses

Span 2001—Intermediate Spanish I, IP (4 cr)
Span 2002—Intermediate Spanish II, IP (4 cr)
Span 3001—Spanish Composition and Conversation I, IP (4 cr)
Span 3002—Spanish Composition and Conversation II, IP (4 cr)
Span 3101—Introduction to Hispanic Literature, Hum (4 cr)
Span 3211—Literature and Culture of Latin America, Hum (4 cr)
Span 3212—Literature and Culture of Spain, Hum (4 cr)
Span 4001—Research Symposium, Hum (4 cr)

Elective Courses

Latin American area studies courses are also recommended.

Take 12 or more credit(s) from the following:

Span 3621—Seminar: Confessions and Letters in Latin American Fiction, Hum (4 cr)
Span 3622—Seminar: Exile and Emigration in Latin American Fiction, Envt (4 cr)
Span 3651—Seminar: Miguel de Cervantes Saavedra’s “El ingenioso hidalgo Don Quijote de la Mancha”, Hum (4 cr)
Span 3652—Seminar: Literary Minorities in Early Modern Spain, Hum (4 cr)
Span 3653—Seminar: Maria de Zayas: Literary Violence in Golden Age Spain, Hum (4 cr)

Spanish Minor

Courses for Admission

Beginning Spanish

Beginning Spanish I and II or equivalent previous language experience required to take intermediate Spanish.

Minor Requirements

A foreign study experience and regular use of the language laboratory are strongly recommended to maintain language skills.

No grades below C- are allowed. Courses may not be taken S-N unless offered S-N only.

A minimum GPA of 2.00 is required in the minor to graduate. The GPA includes all, and only, University of Minnesota coursework. Grades of F are included in GPA calculation until they are replaced.

Courses for the Program

Required Courses

Span 2001—Intermediate Spanish I, IP (4 cr)
Span 2002—Intermediate Spanish II, IP (4 cr)
Span 3001—Spanish Composition and Conversation I, IP (4 cr)
Span 3002—Spanish Composition and Conversation II, IP (4 cr)
Span 3101—Introduction to Hispanic Literature, Hum (4 cr)

Elective Courses

Latin American area studies are also recommended.

Take 8 or more credit(s) from the following:

Span 3211—Literature and Culture of Latin America, Hum (4 cr)
Span 3212—Literature and Culture of Spain, Hum (4 cr)
Span 3621—Seminar: Confessions and Letters in Latin American Fiction, Hum (4 cr)
Span 3622—Seminar: Exile and Emigration in Latin American Fiction, Hum (4 cr)
Span 3623—Seminar: Ecology and Nature in Latin American Literature, Envt (4 cr)
Span 3651—Seminar: Miguel de Cervantes Saavedra’s “El ingenioso hidalgo Don Quijote de la Mancha”, Hum (4 cr)
Span 3652—Seminar: Literary Minorities in Early Modern Spain, Hum (4 cr)
Span 3653—Seminar: Maria de Zayas: Literary Violence in Golden Age Spain, Hum (4 cr)
Span 3654—Seminar: Sex, Love, and Marriage in Golden Age Spanish Literature, Hum (4 cr)
Span 3671—Seminar: Origins of the Spanish Character, Hum (4 cr)
Span 3672—Seminar: Reform in Spain: The Saint and the Journalist, Hum (4 cr)
Span 3681—Seminar: Romanticism and Revolution in 19th-Century Spain, Hum (4 cr)
Span 3682—Seminar: Realism and Reform in 19th-Century Spain, Hum (4 cr)
Span 3683—Seminar: Modernity and Identity in Spain, 1900-1930, Hum (4 cr)
Spanish Course Descriptions

Span 1001. Beginning Spanish I. (FL; 4 cr; fall, summer, every year)
Development of basic skills of Spanish (reading, speaking, writing, listening) and an introduction to the cultural contexts of Latin America and Spain.

Span 1002. Beginning Spanish II. (FL; 4 cr; prereq 1001 or placement or #; fall, spring, summer, every year)
Continuation of the sequence beginning with 1001.

Span 1311. Salvador Da Bahia, Brazil: Exploring Its African Identity. (IP; 2 cr; prereq LAAS 1311; spring, offered when feasible)
Same as LAAS 1311. Focus on how Afro-Brazilian cultural identity is created and maintained in the face of globalization and immigration in Salvador da Bahia, a city in northeastern Brazil that embraces a vigorous and invigorating ethnic and cultural diversity. [Continuing Education course]

Span 1993. Directed Study. (1-5 cr [max 10 cr]; prereq approved directed study form; fall, spring, every year)
An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum.

Span 2001. Intermediate Spanish I. (IP; 4 cr; prereq 1002 or placement or #; fall, every year)
Review and building of the four basic skills in Spanish with emphasis on critical reading skills and writing for communication.

Span 2002. Intermediate Spanish II. (IP; 4 cr; prereq 2001 or placement or #; spring, every year)
Continuation of the sequence beginning with 2001.

Associated Languages: Introduction to a number of languages and cultures of the Iberian Peninsula and Latin America, such as Portuguese.

Span 2121. Associated Languages: Intensive Portuguese. (IP; 4 cr; prereq 2002 or Fren 2002 or #; fall, spring, offered when feasible)
Intensive, accelerated study of the basic skills of Brazilian Portuguese (reading, writing, listening, and speaking) with emphasis on oral competency.

Span 2993. Directed Study. (1-5 cr [max 10 cr]; prereq approved directed study form; fall, spring, every year)
An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum.

Span 3001. Spanish Composition and Conversation I. (IP; 4 cr; prereq 2002 or #; fall, every year)
Further review of the four skills in Spanish, with emphasis on: 1) development of greater competence and confidence in conversational Spanish; 2) greater precision and sophistication in written communication; and 3) analytical proficiency in reading selections from diverse literary and cultural contexts.

Span 3002. Spanish Composition and Conversation II. (IP; 4 cr; prereq 3001; spring, every year)
Continuation of the sequence beginning with 3001.

Span 3101. Introduction to Hispanic Literature. (Hum; 4 cr; prereq 3000; prereq or coreq 3002 for majors; spring, every year)
Study of a variety of literary genres representing the literature of Spain and Latin America; rudiments of literary analysis and interpretation. Students should demonstrate the ability to read and comprehend the literary works studied, analyze works critically while developing a sensitivity toward certain cultural aspects and literary nuances expressed therein; participate in and comprehend sustained class discussion with respect to certain topics or themes; write with accuracy in Spanish and show some degree of analytical proficiency at the short paper level.

Span 3211. Literature and Culture of Latin America. (Hum; 4 cr; prereq 3002, 3101; spring, offered when feasible)
Study of important exemplary works of Latin American literary and cultural production through major historical periods. Texts are examined in light of multiple contexts, such as artistic, political, historical, and philosophical.

Span 3212. Literature and Culture of Spain. (Hum; 4 cr; prereq 3002, 3101; fall, offered when feasible)
Study of important exemplary works of Spanish (peninsular) literary and cultural production through major historical periods. Texts are examined in light of multiple contexts, such as artistic, political, historical, and philosophical.

Seminar: Courses numbered 36xx are seminars focused on specific areas of research in Latin American and Peninsular literature and culture. They are designed to complement the broad coverage of these areas in the two literature and culture courses by allowing students to choose courses in their areas of interest and study these areas more thoroughly.

Span 3621. Seminar: Confessions and Letters in Latin American Fiction. (Hum; 4 cr; prereq 3002, 3101; spring, offered when feasible)
Study of confessions and letters in Latin American fiction. Fiction is seen as a combination of texts within other texts. The combination becomes part of the fictional game that imitates and enhances reality.

Span 3622. Seminar: Exile and Emigration in Latin American Fiction. (IP; 4 cr; prereq 3002, 3101; fall, offered when feasible)
Study of contemporary Latin American literary texts where characters face forms of exile, abandonment, and displacement as a result of emigration to Europe and the United States.

Span 3623. Seminar: Ecology and Nature in Latin American Literature. (Envt; 4 cr; prereq 3002, 3101; fall, offered when feasible)
Study of Latin American texts where authors create characters that read or misread Nature and its preservation or extinction. How globalization is making this issue more relevant in the Latin American context.

Span 3651. Seminar: Miguel de Cervantes Saavedra’s “El ingenioso hidalgo Don Quijote de la Mancha.” (Hum; 4 cr; prereq 3002, 3101; fall, offered when feasible)
Study of Miguel de Cervantes Saavedra’s novel “El ingenioso hidalgo Don Quijote de la Mancha” in light of its socio-historical context.

Span 3652. Seminar: Literary Minorities in Early Modern Spain. (Hum; 4 cr; prereq 3002, 3101; fall, offered when feasible)
Study of the representative literary works written by or about Jewish and Muslim minorities in light of their respective socio-historical contexts.

Span 3653. Seminar: Maria de Zayas: Literary Violence in Golden Age Spain. (Hum; 4 cr; prereq 3002, 3101; fall, offered when feasible)
Study of the major works of 17th-century writer María de Zayas y Sotomayor, “The Enchantments of Love” (1637) and “The Disenchantments of Love” (1647), in light of their socio-historical contexts and the political issues surrounding the formation of literary canons.

Span 3654. Seminar: Sex, Love, and Marriage in Golden Age Spanish Literature. (Hum; 4 cr; prereq 3002, 3101; fall, offered when feasible)
The theme of sex, love, and marriage in Golden Age Spanish Literature through prose, poetry, and theatre of the Golden Age (XVI-XVII centuries) Spain. Consideration of the gender relations and gender politics reflected in the works and the socio-historical context in which these works were produced.

Span 3671. Seminar: Origins of the Spanish Character. (Hum; 4 cr; prereq 3002, 3101; fall, offered when feasible)
Analysis of the Medieval and Golden Age roots of many of the beliefs and attitudes of contemporary Spain. Themes common to Spain, explored in both traditional and modern contexts, may include honor, patriotism, religion, idealism, individuality, satire, love, pride, etc.

Span 3672. Seminar: Reform in Spain: The Saint and the Journalist. (Hum; 4 cr; prereq 3002, 3101; fall, offered when feasible)
Analyzing, comparing, and contrasting the lives and writings of St. Teresa of Avila (XVI Century) and Mariano Jose de Larra (XIX Century) as they worked toward a better Spain. Difficulties of religious and cultural reform as well as differences in traditional and enlightenment values are explored.

Span 3681. Seminar: Romanticism and Revolution in 19th-Century Spain. (Hum; 4 cr; prereq 3002, 3101; fall, offered when feasible)
Study of representative texts (novels, stories, and essays) from the first half of the 19th century in Spain, with emphasis on the expression of the Romantic vision within the particular political context of the period, marked by tensions between liberal reform and traditional conservatism.

Span 3682. Seminar: Realism and Reform in 19th-Century Spain. (Hum; 4 cr; prereq 3002, 3101; fall, offered when feasible)
Study of representative texts (novels, stories, and essays) from the second half of the 19th century in Spain, with emphasis on the rise of realism as an exploration of the socio-political reality of the era and the need for reform. The focus is on general trends in Western cultures (e.g., industrialization, positivism, secularization).
Statistics (Stat)

Division of Science and Mathematics

The mission of the discipline is to create and apply statistical methods/techniques for collecting, exploring, analyzing, and communicating qualitative/quantitative information and to disseminate this knowledge through teaching, scholarly activity, and outreach.

Statistics is the science and art of enhancing knowledge in the face of uncertainty by modeling, predictions, and decisions. It is central to solutions of problems in the environment, medicine, law, industry, technology, finance, business, public policy, computing, and science in general. The need for statistics applies to almost every area of our lives.

Objectives—The statistics program provides an effective operational knowledge of the theory and methods of statistics and the application of statistical methods in a liberal arts environment. It seeks to enhance students’ critical thinking in making judgments based on data and provides students with the basic knowledge and skills to make contributions to modern society. Students learn to communicate and collaborate effectively with people in other fields and, in the process, to understand the substance of these fields. The curriculum prepares students to enter graduate school or pursue careers in statistical fields at research institutions and industry.

Statistics Major

Program Requirements

The GPA in these courses must be at least 2.00.

Students planning to pursue graduate work in statistics or biostatistics should complete Math 2101—Calculus III and consider taking Math 2202—Mathematical Perspectives and Math 3211—Analysis for Ph.D. preparation.

Courses for the Program

Required Courses

Math 1101—Calculus I, M/SR (5 cr)
Math 1102—Calculus II, M/SR (5 cr)

Elective Courses

Take 8 or more credit(s) from the following:

Stat 1601—Introduction to Statistics, M/SR (4 cr)
Stat 2601—Survey Sampling, M/SR (4 cr)
Stat 3601—Multivariate Statistical Analysis, M/SR (4 cr)
Stat 4601—Biostatistics, M/SR (4 cr)
Stat 4611—Statistical Consulting, M/SR (4 cr)

Additional Elective Courses

Choose from the list below or from courses with faculty approval.

Take 4 or more credit(s) from the following:

Biol 4004—Principles of Public Health and Epidemiology, Sci (4 cr)
CSci 1201—Introduction to Digital Media Computation, M/SR (4 cr)
CSci 1251—Computational Data Management and Manipulation, M/SR (4 cr)
CSci 1301—Problem Solving and Algorithm Development, M/SR (4 cr)
CSci 1302—Foundations of Computer Science, M/SR (4 cr)
CSci 4403—Systems: Data Mining, M/SR (2 cr)
CSci 4555—Theory: Neural Networks and Machine Learning, M/SR (4 cr)
Econ 3501—Introduction to Econometrics, M/SR (4 cr)
Math 2101—Calculus III, M/SR (4 cr)
Math 2111—Linear Algebra, M/SR (4 cr)
Math 2202—Mathematical Perspectives, M/SR (4 cr)
Math 3211—Analysis, M/SR (4 cr)
Math 3401—Operations Research, M/SR (4 cr)
Math 3501—Applied Deterministic Modeling for Management Science, M/SR (2 cr)
Math 3502—Applied Probabilistic Modeling for Management Science, M/SR (2 cr)
Psy 2001—Research Methods in Psychology, SS (4 cr)
Soc 3101—Qualitative Research Methodology, SS (4 cr)
Soc 3102—Quantitative Research Methodology, SS (4 cr)

Statistics Minor

Minor Requirements

The GPA in these courses must be at least 2.00.

Courses for the Program

Minor Requirements

Stat 3601—Data Analysis, M/SR (4 cr)
Stat 1601—Introduction to Statistics, M/SR (4 cr)

Minor Elective Courses

Take 16 or more credit(s) from the following:

Stat courses

Take 1 or more course(s) from the following:

Stat 2501—Probability and Stochastic Processes, M/SR (4 cr)
Stat 2611—Mathematical Statistics, M/SR (4 cr)
Stat 3601—Multivariate Statistical Analysis, M/SR (4 cr)
Stat 4601—Biostatistics, M/SR (4 cr)
Stat 4611—Statistical Consulting, M/SR (4 cr)
Statistics (Stat)

Statistics Course Descriptions

Stat 1601. Introduction to Statistics. (M/SR; 4 cr; prereq high school algebra; fall, spring, every year)
Scope, nature, tools, language, and interpretation of elementary statistics. Descriptive statistics; graphical and numerical representation of information; measures of location, dispersion, position, and dependence; exploratory data analysis. Elementary probability theory, discrete and continuous probability models. Inferential statistics; point and interval estimation, tests of statistical hypotheses. Inferences involving one and two populations, ANOVA, regression analysis, and analysis of covariance structures. Some special models; simple regression, correlation analysis, multiple regression analysis, analysis of variance, use of statistical computer packages.

Stat 1993. Directed Study. (1–5 cr; max 10 cr; prereq approved directed study form; fall, spring, every year)
An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum.

Stat 2501. Probability and Stochastic Processes. (M/SR; 4 cr; [Math 2501]; prereq Math 1101 or #; fall, offered when feasible)

Stat 2601. Statistical Methods. (M/SR; 4 cr; prereq Math 1101 or Math 1021; fall, every year)
Descriptive statistics, elementary probability theory; laws of probability, random variables, discrete and continuous probability models, functions of random variables, mathematical expectation. Statistical inference; point estimation, interval estimation, tests of hypotheses. Other statistical methods; linear regression and correlation, ANOVA, nonparametric statistics, statistical quality control, use of statistical computer packages.

Stat 2611. Mathematical Statistics. (M/SR; 4 cr; prereq Math 1101; spring, every year)
Introduction to probability theory. Principles of data reduction; sufficiency principle. Point estimation; methods of finding and evaluating estimators. Hypothesis testing; methods of finding and evaluating tests. Interval estimation; methods of finding and evaluating interval estimators. Linear regression and ANOVA.

Stat 2993. Directed Study. (1–5 cr; max 10 cr; prereq approved directed study form; fall, spring, every year)
An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum.

Stat 3501. Survey Sampling. (M/SR; 4 cr; prereq 1601 or 2601 or #; summer, every year)
Introduction to basic concepts and theory of designing surveys. Topics include sample survey designs including simple random sampling, stratified random sampling, cluster sampling, systemic sampling, multistage and two-phase sampling including ratio and regression estimation, Horvitz-Thomson estimation, questionnaire design, non-sampling errors, missing value-imputation method, sample size estimation, and other topics related to practical conduct of surveys.

Stat 3601. Data Analysis. (M/SR; 4 cr; prereq 1601 or 2601 or 2611 or #; fall, every year)
Nature and objectives of statistical data analysis, exploratory and confirmatory data analysis techniques. Some types of statistical procedures; formulation of models, examination of the adequacy of the models. Some special models; simple regression, correlation analysis, multiple regression analysis, analysis of variance, use of statistical computer packages.

Stat 3611. Multivariate Statistical Analysis. (M/SR; 4 cr; prereq 1601 or 2601 or 2611 or #; spring, every year)

Stat 3993. Directed Study. (1–10 cr; max 10 cr; prereq approved directed study form; fall, spring, every year)
An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum.

Programs and Course Descriptions

Non-stat courses
Take 0 or more course(s) from the following:

CSci 1301—Problem Solving and Algorithm Development, M/SR (4 cr)
CSci 1302—Foundations of Computer Science, M/SR (4 cr)
Econ 3501—Introduction to Econometrics, M/SR (4 cr)
Math 2101—Calculus III, M/SR (4 cr)
Math 2111—Linear Algebra, M/SR (4 cr)
Math 2202—Mathematical Perspectives, M/SR (4 cr)
Math 3221—Analysis, M/SR (4 cr)
Math 3401—Operations Research, M/SR (4 cr)
Math 3501—Applied Deterministic Modeling for Management Science, M/SR (2 cr)
Math 3502—Applied Probabilistic Modeling for Management Science, M/SR (2 cr)
Soc 3101—Qualitative Research Methodology (4 cr)
Soc 3102—Quantitative Research Methodology, SS (4 cr)
Studio Art (ArtS)

(See Art, Studio.)

Teacher Education Programs

(See Education; Education, Elementary; and Education, Secondary.)

Theatre Arts (Th)
Division of the Humanities

The discipline encompasses theatre as an artistic form and as a social and cultural institution. The study of theatre arts enables the individual to develop a creative imagination, an inquiring mind, a sense of social responsibility, professional discipline, a collaborative attitude, artistic standards and judgment, and a respect for the art form.

Objectives—The curriculum provides sound academic and practical training in theatre arts for undergraduate liberal arts students, for those wishing to pursue graduate studies in the field, and for those preparing to teach. It is designed to help students develop an appreciation for and ability to produce quality theatre.

Theatre Arts Major

Program Requirements
Up to 4 credits of coursework with a grade of D or D+ may be used to meet the major requirements if offset by an equivalent number of credits of A or B. Courses may not be taken S-N unless offered S-N only.

A minimum GPA of 2.00 is required in the major to graduate. The GPA includes all, and only, University of Minnesota coursework. Grades of F are included in GPA calculation until they are replaced.

Courses for the Program

Required Courses
Th 1101—The Theatre Experience: An Introduction, FA (4 cr)
Th 1111—Fundamentals of Acting, ArtP (4 cr)
Th 1301—Fundamentals of Design, ArtP (4 cr)
Th 2101—Fundamentals of Directing, ArtP (4 cr)
Th 2301—Stagecraft, ArtP (4 cr)
Th 3011—World Theatre: History and Literature I, FA (4 cr)
Th 3021—World Theatre: History and Literature II, FA (4 cr)
Th 3201—Advanced Acting, ArtP (4 cr)
or Th 3202—Advanced Directing, ArtP (4 cr)
Th 4901—Senior Project (2–4 cr)

Elective Courses
Take 4 or more credit(s) from the following:
Th 2111—Creative Drama with Children, ArtP (4 cr)
Th 2201—Voice and Movement, ArtP (4 cr)
Th 2211—Oral Interpretation, ArtP (4 cr)
Th 2221—Readers’ Theatre, ArtP (4 cr)
Th 3001—Theatre Scene Painting Studio, FA (4 cr)
Th 3003—Stage Management, ArtP (4 cr)
Th 3101—World Theatre: History and Literature I, FA (4 cr)
Th 3102—World Theatre: History and Literature II, FA (4 cr)
Th 3301—Stage Lighting, ArtP (4 cr)
Th 3302—Stage Costuming, FA (4 cr)
Th 3303—Computer-Assisted Drawing, ArtP (4 cr)
Th 4301—Scenic Design, FA (4 cr)

Production Requirement
Three major production responsibilities (at least one of which must be in a faculty-directed production, and at least two must be completed in the junior and senior years).

Theatre Arts Minor

Minor Requirements
Up to 4 credits of coursework with a grade of D or D+ may be used to meet the minor requirements if offset by an equivalent number of credits of A or B. Courses may not be taken S-N unless offered S-N only.

A minimum GPA of 2.00 is required in the minor to graduate. The GPA includes all, and only, University of Minnesota coursework. Grades of F are included in GPA calculation until they are replaced.

Courses for the Program

Required Courses
Th 1101—The Theatre Experience: An Introduction, FA (4 cr)
Th 1111—Fundamentals of Acting, ArtP (4 cr)
Th 1301—Fundamentals of Design, ArtP (4 cr)
Th 2101—Fundamentals of Directing, ArtP (4 cr)
Th 2301—Stagecraft, ArtP (4 cr)

Elective Courses
Take 12 or more credit(s) from the following:
Th 2111—Creative Drama with Children, ArtP (4 cr)
Th 2201—Voice and Movement, ArtP (4 cr)
Th 2211—Oral Interpretation, ArtP (4 cr)
Th 2221—Readers’ Theatre, ArtP (4 cr)
Th 3001—Theatre Scene Painting Studio, FA (4 cr)
Th 3003—Stage Management, ArtP (4 cr)
Th 3101—World Theatre: History and Literature I, FA (4 cr)
Th 3102—World Theatre: History and Literature II, FA (4 cr)
Th 3301—Stage Lighting, ArtP (4 cr)
Th 3302—Stage Costuming, FA (4 cr)
Th 3303—Computer-Assisted Drawing, ArtP (4 cr)
Th 4301—Scenic Design, FA (4 cr)

Production Requirement
Three major production responsibilities (at least one of which must be in a faculty-directed production, and at least two must be completed in the junior and senior years).
Theatre Arts Course Descriptions

**Th 1040. Backstage on Broadway.** (1 cr; max 4 cr; prerequisite: S-N only; fall, spring, offered when feasible)
Supervised field trip to New York; attending selected professional theatre productions; backstage tours; discussions with theatre professionals.

**Th 1050. London Theatre Tour.** (1 cr; max 4 cr; prerequisite: S-N only; fall, spring, offered when feasible)
Supervised field trip to London, England; attending selected professional theatre productions; backstage tours; discussions with theatre professionals.

**Th 1060. Production Experience.** (1 cr; max 8 cr; prerequisite: S-N only; fall, spring, every year)
Participation in some aspect of theatre production other than performing (e.g., scenery, props, costumes, lighting).

**Th 1070. Performance Experience.** (ArtP; 1 cr; max 8 cr; prerequisite: S-N only; fall, spring, every year)
Participation in theatrical production as a performer.

**Th 1101. The Theatre Experience: An Introduction.** (FA; 4 cr; practicum two hours per week; selected from M-Th from 2:00-5:00 p.m.; fall, every year)
Fundamental examination and practical application of the theory, history, and practice of theatrical performance as a reflection of society. Focus is on the theatre event as a collaborative effort and transitory art form. (lect, 2 hrs practicum).

**Th 1111. Fundamentals of Acting.** (ArtP; 4 cr; prerequisite 1101, theatre arts major or minor or #; spring, every year)
Approaches characterization from a physical and psychological view. Focus is on the study of the craft of directing modern realistic dramatic literature through text analysis, communication, and stylistic techniques.

**Th 2101. Fundamentals of Directing.** (ArtP; 4 cr; prerequisite 1111, theatre arts major or minor or #; fall, every year)
Introduces the practical components of the director as artist, teacher, and collaborator. Focus is on the craft of directing modern realistic dramatic literature through text analysis, communication, and stylistic techniques.

**Th 2111. Creative Drama with Children.** (ArtP; 4 cr; prerequisite 1101 or theatre elem ed major or #; fall, spring, offered when feasible)
Development of classroom skills in the use of dramatic techniques to teach a broad range of subjects to children. Exercises, presentations, and experiential learning techniques are modeled and practiced in class.

**Th 2201. Voice and Movement.** (ArtP; 4 cr; prerequisite 1111, theatre arts major or minor or #; spring, every year)
Explores the use of the voice and the body as means for expression in performance and everyday communication. Focus is on the development of the voice and its use.

**Th 2211. Oral Interpretation.** (ArtP; 4 cr; offered alternate yrs; fall, spring, even years)
Introduces the study of literature through text analysis and performance. Focus is on the discovery of the aesthetic, communicative, and performative elements of a variety of personal narratives, prose, and poetry.

**Th 2221. Readers’ Theatre.** (ArtP; 4 cr; prerequisite 2121; fall, spring, offered when feasible)
Explores the theory and practice of adapting literature into group performance. Focus is on text analysis, script development, directing, and performing both dramatic and non-dramatic literary texts.

**Th 2231. Playwriting.** (ArtP; 4 cr; fall, spring, offered when feasible)
Introduces the process for writing and revising an original play. Focus is on writing, revising, and presenting a short play, including idea generation, invention, drafting, and peer response.

**Th 2301. Stagecraft.** (ArtP; 4 cr; fall, spring, every year)
Development of stagecraft from the Greeks to the present. Basic forms of stage scenery and their functions in the theatre. Tools, materials, and techniques employed in creating the visual environment of the stage. (3 hrs lect, 3 hrs practicum).

**Th 2993. Directed Study.** (1-5 cr; max 10 cr; prerequisite approved directed study form; fall, spring, every year)
An off- or on-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum.

**Th 3001. Theatre Scene Painting Studio.** (FA; 4 cr; prerequisite #; fall, odd years)
Instruction in a systematic approach to painting theatrical scenery. Traditional techniques and the tools and paints that have been developed to support those techniques.

**Th 3003. Stage Management.** (ArtP; 4 cr; prerequisite #; fall, spring, offered when feasible)
Introduces the principles of theatrical stage management; explores the stage manager’s functions and duties through all phases of the production process including pre-production, rehearsal, and performance.

**Th 3101. World Theatre: History and Literature I.** (FA; 4 cr; fall, every year)
Theatrical practice and dramatic literature from origins through late 17th century, tracing the roots leading to, and influencing early modern European theatre practice and dramatic literature, as well as examining select Asian, African, and/or pre-Columbian American theatrical practice.

**Th 3102. World Theatre: History and Literature II.** (FA; 4 cr; spring, every year)
Theatrical practice and dramatic literature from the late 17th century to the present, examining select Asian, African, and/or Western Hemisphere theatrical practice, as well as tracing the roots leading to, and influences on, current world theatre practice and dramatic literature.

**Th 3201. Advanced Acting.** (ArtP; 4 cr; prerequisite 1101, 1111, 2101; fall, spring, odd years)
Begins with advanced acting techniques based in psychological realism and moves to an exploration of select classical and non-realistic forms. Styles to be examined are chosen from a list, including ancient Greek, Elizabethan, comedy of manners, absurdism, postmodernist, musical theatre, etc.

**Th 3202. Advanced Directing.** (ArtP; 4 cr; prerequisite 1101, 1111, 2101; fall, spring, even years)
Begins with advanced directing techniques based in psychological realism and moves to an exploration of select classical and non-realistic forms. Styles to be examined are chosen from a list, including ancient Greek, Elizabethan, comedy of manners, absurdism, postmodernism, musical theatre, etc.

**Th 3301. Stage Lighting.** (ArtP; 4 cr; prerequisite 1301, 2301; fall, every years)
History and development of lighting for the stage. Theory and concepts of lighting as a visual art and its function in the theatre. Lighting design as a creative process and practical solution of lighting design problems. Lighting equipment and its use.

**Th 3302. Stage Costuming.** (FA; 4 cr; prerequisite 1301, 2301; fall, odd years)
History and development of stage costume. Theory and concepts of stage costume as a visual art and its function in the theatre. Costume design as a creative process. Practical demonstrations of knowledge of design, history, and functions of stage costume.

**Th 3303. Computer-Assisted Drawing.** (ArtP; 4 cr; fall, offered when feasible)
Theory, concepts, and practice of using a computer as a drawing and drafting tool.

**Th 3304. Art Direction for Film and Television.** (FA; 4 cr; fall, spring, offered when feasible)
Introduction of art direction for film and television. The roles and duties of the production designer and art director for fictional film and television series.

**Th 3305. Stage Makeup.** (ArtP; 4 cr; fall, spring, offered when feasible)
Systematic approach to stage makeup application. Includes history, safety, product, design, and application, with heavy emphasis on hands-on experience.

**Th 3451. Shakespeare’s England.** (Hum; 4 cr; fall, offered when feasible)
Same as Eng 3451. A study-abroad course in London and Stratford that concentrates on Shakespeare’s plays in performance. Exploration of the relationship between plays as written scripts and the decisions directors and actors make when they stage productions. (Continuing Education course)
Wellness and Sport Science (WSS)

Th 3993. Directed Study. (1-5 cr [max 10 cr]; prereq approved directed study form; fall, spring, every year)
An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum.

Th 4301. Scenic Design. (FA: 4 cr; prereq 1301, 2301; fall, odd years)
Designing scenery as an expressive environment for the theatre. Elements and functions of design and principles of composition. Problems in coordination and execution of design in the interpretation of dramatic literature using a variety of staging techniques. Study of various styles of historical and contemporary stage productions and theatre architecture through the writings and designs of such artists and theorists as Appia, Craig, Meyerhold, Jones, and Svoboda.

Th 4901. Senior Project. (2-4 cr [max 4 cr]; prereq theatre arts major, #; fall, spring, every year)
Culminating activity to demonstrate the student’s competence in some area of theatre arts. Projects may be completed independently (e.g., a research paper, a solo acting performance) or as part of a group effort. Acting, scenery, lighting, costume design, playwriting, and theatre history are some areas in which the project may be undertaken.

Th 4993. Directed Study. (1-5 cr [max 10 cr]; prereq approved directed study form; fall, spring, every year)
An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum.

Wellness and Sport Science (WSS)

Division of Education

Objectives—This curriculum helps students develop and maintain a healthy lifestyle and prepares them for a lifetime of service as sports management and coaching professionals.

The statement, “Varsity coaching requirements completed,” is added to the transcript of students who complete:

Coaching
WSS 1101—First Aid
WSS 2102—Human Anatomy
WSS 2111—Kinesiology
WSS 2112—Exercise Physiology
WSS 2121—Prevention and Care of Injuries
WSS 3201—Coaching Internship

One of the following courses:
WSS 2201—Baseball Coaching
WSS 2202—Basketball Coaching
WSS 2203—Football Coaching
WSS 2204—Softball Coaching
WSS 2205—Track and Field Coaching
WSS 2206—Volleyball Coaching
WSS 2208—Soccer Coaching

Sports Management
The area of sports management focuses on contemporary sport as a product of social, psychological, and economic phenomena. Coursework in this area of concentration addresses such topics as ethics and sport; psychology of sport performance; lifetime fitness and health; philosophy of sports; sport facilities and equipment; sport promotion; and sport injuries.

Suggested concentration requirements
Students are required to complete an Area of Concentration form. (See Areas of Concentration in the Academic Information section for more information on majors and areas of concentration.)

WSS 1051—Fitness for Life
WSS 1052—Societal Issues in Wellness and Health
WSS 1101—First Aid
WSS 2102—Human Anatomy
WSS 2111—Kinesiology
WSS 2112—Exercise Physiology
WSS 2401—Sociological Aspects of Sports
WSS 2402—Psychological Aspects of Sports
WSS 3210—Internship in Wellness and Sport Science (min 4, max 8 cr)
WSS 4101—Planning and Programming of Athletic Facilities
WSS 4102—Organization and Administration of Athletics and Recreation
Mgmt 2101—Principles of Accounting I
Mgmt 3201—Marketing Principles and Strategies
Mgmt 3221—Management and Organization Theory
or Mgmt 3701—Organizational Behavior
Stat 1601—Introduction to Statistics
Spch 1052—Introduction to Public Speaking

Two of the following courses:
WSS 2201—Baseball Coaching
WSS 2202—Basketball Coaching
WSS 2203—Football Coaching
WSS 2204—Softball Coaching
WSS 2205—Track and Field Coaching
WSS 2206—Volleyball Coaching
WSS 2208—Soccer Coaching

Note: Up to four credits of D or D+ may be used to meet the area of concentration requirements if offset by a sufficient number of higher grades to meet the minimum requirement of a cumulative GPA of 2.00 in all courses included in the area of concentration. The GPA includes all, and only, University of Minnesota course work. Grades of “F” are included in GPA calculation until they are replaced.

Wellness and Sport Science Course Descriptions

WSS 1051. Fitness for Life. (2 cr; fall, spring, every year)
Factors associated with a positive lifestyle; assessment of each individual’s current wellness status, and development of a personal lifestyle program for improving one’s quality of life.

WSS 1052. Societal Issues in Health and Wellness. (SS; 2 cr; fall, spring, every year)
A study of how perceptions of society’s health and wellness issues affect our individual health/fitness choices.

WSS 1101. First Aid. (1 cr; fall, spring, every year)
Lectures, demonstrations, practical work in emergencies and first aid. Emphasis on accident prevention. Completion of the course prepares students for National Safety Council First Aid and CPR Certification.

WSS 1044. Lifeguard Training. (5 cr; prereq #, must be 15 years of age by the end of course and pass a swimming test; S-N only; fall, spring, offered when feasible)
Provides candidates with the skills and knowledge to become American Red Cross certified Lifeguards. Lifeguards are trained to prevent and respond to emergencies. The Lifeguard Training Certificate includes certification in First Aid and CPR/AED for the Professional Rescuer. [Continuing Education course]
WSS 1105. Water Safety Instruction. (1 cr.; prereq must be 16 years old by end of course; S-N only; fall, spring, summer, offered when feasible) Training of instructor candidates to teach in the Learn to Swim Program and Community Water Safety. Includes teaching swimming programs levels 1-7, infant and preschool aquatics, water safety, and basic water safety. [Continuing Education course]

Skills Courses: The lifetime fitness skills development courses carry 0.5 credit each, are graded S-N only, and are repeatable to a limited number of credits. No more than 4 credits in WSS 12xx skills may be applied to the 120-credit degree requirement.

WSS 1213. Golf. (5 cr. [max 1 cr.]; S-N only; fall, every year) Introductory instruction in the skills and techniques of golf.

WSS 1219. Strength Training. (5 cr. [max 1 cr.]; S-N only; fall, spring, every year) Introductory instruction in the skills and techniques of strength training.

WSS 1224. Wellness Skills: R.A.D.-Basic Self-Defense System. (5 cr. [max 1 cr.]; S-N only; fall, spring, every year) A comprehensive program of realistic, self-defense tactics and techniques for women. Includes awareness, prevention, risk reduction and avoidance, progressing to the basics of hands-on defense training. Utilizes nationally approved/recognized curriculum. [Continuing Education course]

WSS 1226. Beginning Karate. (5 cr. [max 3 cr.]; S-N only; fall, spring, every year) Terminology, fundamentals, basic techniques of blocking, punching and kicking; basic attack and defense strategies. [Continuing Education course]

WSS 1228. Advanced Karate. (5 cr. [max 3 cr.]; prereq 1226 or #; S-N only; fall, spring, every year) Continuation of 1226. Detailed instruction in authentic karate technique. Instructor sets groundwork as students begin training for first degree black belt. [Continuing Education course]

WSS 1231. Beginning Taekwondo. (5 cr. [max 1 cr.]; fall, spring, every year) Philosophy of the martial arts. Basic stances and blocking, kicking, and striking techniques, terminology, footwork and sparring fundamentals. [Continuing Education course]

WSS 1233. Advanced Taekwondo. (5 cr. [max 1 cr.]; prereq 1231 or #; fall, spring, every year) Advanced stances and blocking, kicking, and striking techniques, terminology, footwork and sparring fundamentals. [Continuing Education course]

WSS 1235. PADI Open Water Scuba. (5 cr.; S-N only; fall, offered when feasible) Theory of diving; SCUBA apparatus and equipment; diving techniques, skills, and exercises; proper safety practices in open water dives. Covers all academic and confined water (pool) water requirements for students to continue and complete four open water dives required for PADI Open Water Diver certification. [Continuing Education course]

WSS 1993. Directed Study. (1-5 cr. [max 10 cr.; prereq approved directed study form; fall, spring, every year) An on- or off-campus learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum.

WSS 2102. Human Anatomy. (3 cr.; [Biol 2102]; prereq soph; fall, every year) Same as Biol 2102. Structure of human systems at their organ and cellular levels. (two 65-min lect, one 120-min lab)

WSS 2111. Kinesiology. (Sci; 2 cr.; prereq 2102; fall, every year) Scientific principles of movement and tissue responses to force; analysis of basic movement in sports and other physical activities.

WSS 2112. Exercise Physiology. (2 cr.; fall, every year) Human physiological adaptations resulting from activity/exercise.

WSS 2121. Prevention and Care of Injuries. (4 cr.; prereq 2111; spring, every year) Introduction to safety measures, care, prevention, and rehabilitation of injuries in sports and other physical activities. (three 65-min lect, one 65-min lab)

WSS 2201. Baseball Coaching. (2 cr.; spring, every year) History, psychology, and theory of the game, techniques of coaching each position, rules, batting, practice and game organization, strategy, officiating.

WSS 2202. Basketball Coaching. (2 cr.; fall, every year) History, psychology, and theory of the game, offensive and defensive formations, strategy, practice and game organization, officiating, rules, and techniques of coaching each position.

WSS 2203. Football Coaching. (2 cr.; fall, every year) History, psychology, and theory of the game, offensive and defensive formations, strategy, practice and game organization, officiating, rules, techniques of coaching each position.

WSS 2204. Softball Coaching. (2 cr.; spring, every year) History, psychology, and theory of the game, offensive and defensive formations, strategy, practice and game organization, officiating, rules.

WSS 2205. Track and Field Coaching. (2 cr.; spring, every year) History, psychology, and theory of the sports, techniques for all track and field events, methods of coaching, practice and meet organization, strategy, rules, officiating.

WSS 2206. Volleyball Coaching. (2 cr.; fall, every year) History, psychology, and theory of the game, offensive and defensive formations, strategy, practice and game organization, officiating, rules.

WSS 2208. Soccer Coaching. (2 cr.; fall, every year) History, psychology, and theory of the sport, individual techniques, practice and game organization, officiating, rules and strategies.

WSS 2311. Sports Officiating. (2 cr.; summer, offered when feasible) Knowledge of the rules, techniques, and mechanics for officiating basketball, baseball, and softball at the high school level. [Continuing Education course]

WSS 2321. Group Fitness Instructor Training. (2 cr.; S-N only; fall, spring, offered when feasible) Study of the principles and foundation of group exercise leadership and instruction and the development and progression of all components of an exercise program including movements, choreography, health screening and assessments, and prevention of injuries common to an exercise program. Preparation for national certification examinations in aerobics instruction. [Continuing Education course]

WSS 2324. Advanced R.A.D. (Rape Aggression Defense System). (1 cr.; prereq 1224; S-N only; fall, every year) Builds on self-defense techniques and awareness, prevention and avoidance strategies learned in basic R.A.D., adding defenses against the edged weapon and firearm. Covers more prone defense strategies, multiple subject encounters, and low and diffused light simulation exercises. [Continuing Education course]

WSS 2331. Personal Training Preparation. (2 cr.; S-N only; fall, spring, offered when feasible) Concepts, theory, practice, and research in personal training and conditioning: Basic anatomy and physiology, principles of strength training, overview of training equipment, fitness assessments, designing individual exercise programs, legal liabilities, national certifications, and review of research. Preparation for national certification examinations in the areas of personal training and strength conditioning. [Continuing Education course]
Wellness and Sport Science (WSS)

WSS 2333. The Story of Sports. (SS; 4 cr; summer, offered when feasible)
Sports have become an important way to view and understand the broad
developments of society in the 20th century. Many of these developments
have been presented in the form of movies, music, poetry, short stories,
novels, and stories handed down through the generations. Study these
developments, how they are told through stories, and how sports can
be useful for examining 20th century society and culture. [Continuing
Education course]

WSS 2401. Sociological Aspects of Sports. (SS; 2 cr; spring, every year)
Sociological aspects of physical education, sports, and recreation and
the implications this knowledge has for effective teaching, coaching, and
athletic training.

WSS 2402. Psychological Aspects of Sports. (SS; 2 cr; prereq 2401; spring,
every year)
Psychological aspects of physical education, sports, and recreation and
the implications this knowledge has for effective teaching, coaching, and
athletic training.

WSS 2993. Directed Study. (1-5 cr [max 10 cr]; prereq approved directed
study form; fall, spring, every year)
An on- or off-campus learning experience individually arranged between a
student and a faculty member for academic credit in areas not covered in the
regular curriculum.

WSS 3201. Coaching Internship. (1 cr; prereq #; S-N only; fall, spring,
every year)
Supervised field experience in coaching, consisting of no fewer than 40
hours.

WSS 3210. Internship in Wellness and Sport Science. (1-12 cr [max 24 cr];
prereq #; S-N only; fall, spring, every year)
An educational experience in a work environment providing field
applications for the student’s theoretical classroom learning experiences.
Learning contract approved by instructor prior to registration.

WSS 3993. Directed Study. (1-5 cr [max 10 cr]; prereq approved directed
study form; fall, spring, every year)
An on- or off-campus learning experience individually arranged between a
student and a faculty member for academic credit in areas not covered in the
regular curriculum.

WSS 4101. Planning and Programming of Athletic Facilities. (SS; 4 cr;
spring, every year)
Theories/techniques in administration/management of sport enterprises
including the steps in planning/building facilities for athletics, physical
education, and sport for college, professional, and public use.

WSS 4102. Organization and Administration of Athletics and Recreation.
(SS; 4 cr; prereq 4101; fall, every year)
Comprehensive analysis of organization and management of athletics and
recreation.

WSS 4993. Directed Study. (1-5 cr [max 10 cr]; prereq approved directed
study form; fall, spring, every year)
An on- or off-campus learning experience individually arranged between a
student and a faculty member for academic credit in areas not covered in the
regular curriculum.