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## University of Minnesota Morris Catalog

## 2011-2013

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## General Information

## Morris Campus

Located on 160 acres in west central Minnesota, the University of Minnesota, Morris continues the educational service that began in 1887. The campus was originally an American Indian boarding school, operated for 22 years, first by the Sisters of Mercy and then by the federal government. In 1909, as the federal government reduced the number of nonreservation boarding schools, the campus and facilities were deeded by Congress to the State of Minnesota on the condition "that Indian pupils shall at all times be admitted to such school free of charge for tuition and on terms of equality with white pupils." Beginning in 1910 and for the next 53 years, the West Central School of Agriculture offered a boarding high school experience for rural young people under the auspices of the University of Minnesota's Institute of Agriculture. To meet changing educational needs, as the School of Agriculture was being phased out, the Board of Regents in 1959 established the University of Minnesota, Morris.
Conceived at the outset as a four-year liberal arts college, UMM was not only to serve the population of west central Minnesota, but also to provide an educational opportunity for students throughout the state who sought a rigorous and focused undergraduate liberal education in a small college setting. The guiding principles of selective admission, controlled growth, and academic excellence in a residential campus atmosphere have not changed for more than four decades.
With approximately 1,800 students and 115 teaching faculty, UMM combines the residential environment of the small liberal arts college with the advantages of being a campus of the University of Minnesota. The members of the faculty, representing more than 25 academic fields, are organized into four divisions: Education, Humanities, Science and Mathematics, and Social Sciences. A 14 to 1 student-faculty ratio and a strong institutional commitment to individual attention bring UMM students into frequent contact with faculty; undergraduates often collaborate with faculty in research activities and artistic performances.
The UMM student body is diverse and talented. The campus currently is the collegiate home for students from throughout Minnesota, approximately 30 other states, and 15 foreign countries. In 2010, 20 percent were students of color and 6 percent were international students. Also, in 2010, 16 percent of entering freshmen ranked in the top 5 percent of their high school class; 33 percent were in the top 10 percent; and 59 percent were in the top 25 percent.
There are more than 85 student organizations, clubs, committees, and special interest groups at UMM. Throughout the year, the campus community and residents of the region enjoy a variety of cultural and cocurricular activities-theatre productions, concerts, recitals, music festivals, lectures, and athletic events.

UMM helped found the Council of Public Liberal Arts Colleges (COPLAC) in 1992. This national organization has 26 member colleges that share a common commitment to academic excellence and concern for undergraduate student development. The council sponsors professional development conferences for faculty in various disciplines and helps tell the public liberal arts story. The COPLAC website can be viewed at www.coplac.org.

## University of Minnesota Morris Mission

The University of Minnesota, Morris provides a rigorous undergraduate liberal arts education, preparing its students to be global citizens who value and pursue intellectual growth, civic engagement, intercultural competence, and environmental stewardship.
As a public land-grant institution, UMM is a center for education, culture, and research for the region, nation, and world. UMM is committed to outstanding teaching, dynamic learning, innovative faculty and student scholarship and creative activity, and public outreach. Our residential academic setting fosters collaboration, diversity, and a deep sense of community.

## Accreditation

The University of Minnesota, Morris is accredited by the Higher Learning Commission of the North Central Association of Colleges and Schools. Professional accreditation for elementary and secondary teacher preparation has been granted by the National Council for Accreditation of Teacher Education and the Minnesota Board of Teaching.

## Academic Programs

UMM's academic programs offer preparation for most of the professions and several specialized occupational areas. Each student program includes studies in three broad areas of knowledge - the humanities, the natural sciences, and the social sciences.

## Majors

UMM students may choose a four-year curriculum leading to the bachelor of arts degree with a major in any of the following fields.
American Indian Studies
Anthropology
Art History
Biology
Chemistry

Communication, Media, and Rhetoric<br>Computer Science<br>Economics<br>Education<br>Secondary Education (licensure only)<br>Coaching (endorsement only)<br>Elementary Education<br>English<br>Environmental Science<br>Environmental Studies<br>European Studies<br>French<br>Gender, Women, and Sexuality Studies<br>Geology<br>German Studies<br>History<br>Latin American Area Studies<br>Liberal Arts for the Human Services<br>Management<br>Mathematics<br>Music<br>Philosophy<br>Physics<br>Political Science<br>Psychology<br>Social Science<br>Sociology<br>Spanish<br>Sport Management<br>Statistics<br>Studio Art<br>Theatre Arts

## Individualized Majors ("Areas of Concentration")

UMM students may also work closely with faculty to design their own individualized program or "area of concentration." Examples of these individualized majors include: actuarial science, American studies, animal behavior, art therapy, biostatistics, digital media studies, forensic sciencebiochemistry emphasis, forensic science-biology emphasis, forensic science-chemistry emphasis, international studies, and peace studies. To declare an individualized major, students must consult with a faculty adviser and develop their area of concentration. Students must complete the Area of Concentration Approval Form and request approval by a faculty adviser and the dean. Area of Concentration Forms are available online at www.morris.umn.edu/services /acad_affairs/aavarious.html. Changes to an approved area of concentration must go through the original approval process.

## Preparation for Professional Degrees

UMM also offers students the opportunity to pursue coursework that prepares them for admission to a variety of professional schools offered at the University of Minnesota, Twin Cities or Duluth, or other prestigious universities across the country. (See Preparation for Professional Degrees in Other Colleges on page 51.) This coursework is determined in consultation with faculty advisers and is intended to complement the broad range of liberal arts courses required for the degree at UMM.

## Honors Program

The UMM Honors Program offers a distinct, academically challenging, intellectual experience for motivated and high-achieving students that amplifies and complements the liberal arts mission of UMM. It does this by relying upon an interdisciplinary curriculum. Successful completion of the Honors Program provides students a UMM degree "with honors" as a recognition of their achievements and willingness to explore ideas beyond disciplinary boundaries. This notation is included on the transcript and on the diploma.
All honors students must enroll in IS 2001H—Traditions in Human Thought, a course that explores significant works from history, literature, philosophy, and science from an interdisciplinary perspective. Students may then choose from several elective offerings each semester that examine a particular topic from an interdisciplinary perspective. The courses are often team-taught by faculty from different UMM academic divisions. As seniors, honors students complete an Honors Project: a substantial scholarly or creative interdisciplinary work designed by each student working cooperatively with a project adviser. Upon completion, the project is defended before a panel of faculty from different disciplines. In addition to these requirements, honors program students often volunteer for service initiatives; attend public presentations, music, and theatrical performances; enjoy occasional field trips and outings; and mentor those just starting in the program.
All UMM students are eligible to participate in the Honors Program. Students normally apply to the program in the 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 to students with the proven motivation and likely ability to succeed in the program. A more detailed description of the Honors Program courses and requirements appears in the Programs and Course Descriptions section of this catalog.

## Facilities

The UMM campus is situated on rolling prairie along the Pomme de Terre River adjacent to the city of Morris. The attractive, tree-shaded campus, with its 33 buildings, is located around a pedestrian mall. The campus recently completed a state-of-the-art Welcome Center. The major buildings, including the Science and Math Complex, the Rodney A. Briggs Library, the Humanities Fine Arts Center, the Physical Education Center, the Student Center, the Dining Hall, and three of the residence halls, are modern in design and of relatively recent origin. They are blended with several older buildings of a gracious early 20th-century style, which recalls the campus's early history, first as an American Indian boarding school, then as the University's West Central School of Agriculture. All major instructional areas as well as most administrative space are accessible to persons with mobility limitations.
The Humanities Fine Arts Center received the prestigious First Design Award from Progressive Architecture magazine. It houses two theatres, a recital hall, a gallery, art studios, music rehearsal rooms, two television studios, and a variety of special purpose classrooms.
The Rodney A. Briggs Library provides reading and study space for 600 students and contains more than 230,000 volumes. Through excellent interlibrary loan arrangements, students can borrow books and receive photocopies from the entire University of Minnesota library system as well as from other libraries throughout the state, region, or beyond. The library also serves as a depository for certain government documents and houses the West Central Minnesota Historical Research Center, the Writing Room, and the Academic Assistance Center.
UMM has laboratory facilities for psychology and a simulation laboratory for political science students, as well as many laboratories for the natural sciences. Students also have access to the modern Computing Services center, which supplies support services for instructional, research, and administrative programs on campus.
The Student Center opened in 1992. Intended as the community center for students, faculty, staff, alumni, and guests, the center contains meeting rooms, a café, a major auditorium, lounges, recreation rooms, study space, a banquet and ballroom, student activities and student organization offices, and the campus radio station.
In 2000, a science building and renovated existing science facilities gave the campus a state-of-the-art science complex. The 60,000 -square-foot science building houses laboratories and computer classrooms to support the science and mathematics curriculum.

The 40,000-square-foot Regional Fitness Center, a campus/ community partnership, houses a walking/jogging track, low impact cardiovascular area, warm water pool and water slide, and multipurpose court areas. The nearby Physical Education Center houses three basketball courts in its main gymnasium. Seating capacity for games is 4,000 . It also features a large multipurpose gymnasium, an exercise therapy and weight room, handball courts, and classrooms. It has a spacious natatorium consisting of an official Olympic-size, eight-lane swimming pool, and a separate diving tank.
UMM has been in the forefront in adopting renewable energy technologies and achieving energy efficiency. The campus recently commissioned a new biomass heating and cooling plant which will reduce greenhouse gas emissions by more than 80 percent. One wind turbine, installed in 2005, provides 60 percent of campus electricity demand. An additional turbine, installed in 2011, further reduces electricity demand from fossil fuel sources. Combining the biomass facility, the wind turbines, and other conservation efforts, the campus expects to be energy self-sufficient in 2011.
Renovation of the Community Services building was completed in 2010. This project achieved LEED (Leadership in Energy Efficient Design) certification. The building was renamed "Welcome Center" and houses Admissions, External Relations, and the Center for Small Towns.
The campus is also planning an on-campus Green Prairie Living and Learning residential environment. This state-of-the-art facility will further enhance the campus's energy and sustainability initiatives with both first-class residential space and a high quality learning environment suitable for student research and demonstration programs.

## Admissions

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## Admissions

The Office of Admissions is the primary source of information about the University for prospective students. It provides college catalogs, brochures, and other printed materials regarding all phases of the institution and its policies and programs. In addition, the office arranges personal visits with admissions counselors or with University faculty to discuss programs in which a student is interested. For more information about admissions and financial aid or to arrange a campus visit, call 1-888-866-3382. Persons with disabilities seeking accommodation during the admissions process may contact the disability services coordinator in Room 362, Rodney A. Briggs Library, 320-589-6178.

## Admission Requirements

Persons seeking admission to the University of Minnesota, Morris on the basis of a high school diploma or through transfer from another college should check the admission requirements detailed on the following pages.
Applicants may obtain an application form from their high school principal or counselor, or may submit an application online at admissions.morris.umn.edu with a $\$ 25$ nonrefundable fee. Each application submitted in hard copy must be accompanied by a nonrefundable fee of $\$ 35$, payable by check or money order to the University of Minnesota, Morris. (Please do not send cash through the mail.)

## Freshman Admission

Because of the nature of the curriculum, the standards of academic performance required, and the need to maintain the small size of the college, a selective admission policy is necessary. UMM currently enrolls approximately 400 firstyear students in its fall semester class, most of whom graduate in the top 25 percent of their high school class. The current student body represents 26 states and 15 foreign countries; large and small, public and private high schools; and a variety of social, economic, and cultural backgrounds. Success with high school preparatory courses, class rank, ACT or SAT test scores, educational objectives, extracurricular activities, and other relevant information are all taken into consideration in the admission decision. If a student did not complete high school, a GED (General Equivalency Diploma) may be accepted in lieu of high school transcripts.
Applications for first-year applicants are reviewed on a rolling basis beginning September 1. Priority deadline for admission and competitive scholarships is December 15. Complete applications, including the Supplement for Competitive Scholarships, must be postmarked by December 15. Applications submitted by the priority deadline will be considered for admission, UMM Competitive Academic Scholarships, and Automatic Academic Scholarships. The final deadline to apply is March 15. Applications received after December 15 will be considered for admission and Automatic Academic Scholarships.

All admitted applicants are required to confirm their acceptance with a $\$ 150$ nonrefundable confirmation fee due on or before the national candidate's reply date of May 1 . The confirmation fee reserves space in the class, and the date of receipt of the student's confirmation fee gives priority consideration for housing assignments and course registration. Students are encouraged to send their confirmation fees as soon as possible.

## High School Preparation

Successful applicants to UMM must complete the following courses in high school:

1. Four years of English, with emphasis on writing, including instruction in reading and speaking skills, and literary understanding and appreciation.
2. Three years of mathematics required; four years recommended, including one year each of elementary algebra, geometry, and intermediate algebra. Students who plan to enter the natural sciences, health sciences, or quantitative social sciences should have additional preparation beyond intermediate algebra. It is anticipated that four years of mathematics will be required starting in fall 2013. See the policy link for current information, policy.umn.edu/Policies/Education/Education /HIGHSCHOOLPREP.html.
3. Three years of science, including one year each of biological and physical science.
4. Three years of social studies, including U.S. history.
5. Two years of a single foreign language. American Indian languages and American Sign Language may be used to fulfill this requirement. Applicants who are missing this requirement will not be denied admission if they are otherwise admissible.
Students are strongly urged to include visual arts, performing arts, and computer skills courses in their college preparation program.

## Standardized Test Scores

Freshmen must submit scores from the American College Testing (ACT) Assessment Program or the College Board's SAT Reasoning Test. As a basis for admission, applicants' ACT/SAT scores should clearly indicate strength in their aptitude and preparation. Applicants should complete the ACT/SAT assessment during one of the national testing periods (preferably spring or summer of the applicant's junior year of high school or fall of their senior year of high school) and have their assessment report sent to UMM (ACT code 2155, SAT code 6890). In certain instances in which the ACT/ SAT is not readily available, scores from the on-campus residual ACT can be used for UMM admission purposes only. Please contact the Office of Admissions to schedule a residual ACT exam.

## Freshmen With PSEO Credits

Students who have acquired college credits from regionally accredited post secondary institutions through Minnesota's Post Secondary Enrollment Options Act (PSEO) must provide the UMM Office of Admissions with an official transcript of courses taken from a college or university during their junior and/or senior year in high school.

## International Students

Citizens of other countries are encouraged to apply for admission to the University of Minnesota, Morris. They are evaluated on an individual basis, with consideration given to the academic record of each student in relation to the educational system of her or his native country. Applicants must show evidence of exceptional academic achievement and probability of success at Morris. Applicants should submit official transcripts from every post secondary institution previously attended. The Test of English as a Foreign Language (TOEFL) is required of all students applying from outside the United States unless their native language is English. A minimum score of 550 paper, 213 computer, or 79 Internet-based is expected of Morris applicants. The TOEFL is offered worldwide at selected locations. Please see www. toefl.org for more information.
Students not holding U.S. citizenship and entering this country on a student visa are assessed the standard tuition rate, which is equal to that of resident tuition.

## Transfer Student Admission

Students who have completed coursework at another accredited institution of higher education may transfer to the University of Minnesota, Morris. Based on the types of courses completed and the student's performance in that coursework, students can receive advanced standing and credit toward their bachelor of arts degree requirements at UMM. Because of this extra stage in the admission process, students are asked to contact the admissions office immediately to start the conversations about the admissions process and the transfer of course credit.
As a preliminary guide to prospective transfer students, Minnesota's public colleges and universities offer course transferability information. Visit their website at www .transfer.org/uselect to check into course transferability information and established transfer agreements.

## Preparing for Transfer to UMM

Students currently enrolled in another college or university should

- discuss transfer plans with a UMM admissions counselor, at 320-589-6035 or 1-888-866-3382.
- call or visit UMM. Students should request the following materials:
- information on financial aid (how to apply and by what date).
- information on UMM admission criteria and materials required for admission (e.g., transcripts, test scores). Note that elementary education and secondary education programs require special admission in addition to general UMM admission. In these instances, admission to UMM does not guarantee admission to
the program. These special admission requirements are listed under the respective majors in the Academic Division Structure and Program and Course Descriptions sections in this catalog.
- make an appointment-after reviewing the above materials-to talk with the transfer coordinator. Be sure to ask about course transfer and degree requirements.
For more information, visit the Office of the Registrar transfer website at www.morris.umn.edu/services/registrar /transfer.php.


## Applying for Transfer Admission to UMM

Applications submitted to UMM are reviewed on a rolling basis beginning September 1. The deadline for spring admission is November 1; the deadline for fall admission is May 1. Applicants may obtain a paper application from UMM or may apply online at admissions.morris.umn .edu. Each application submitted must be accompanied by a nonrefundable fee of $\$ 35$ payable by check or money order to the University of Minnesota, Morris (please do not send cash through the mail). Online applicants must submit a nonrefundable fee of $\$ 25$. A $\$ 150$ confirmation fee is due within 30 days after notification of admission.
Applicants must submit the following:

- a completed application for admission.
- official transcripts from every previous institution attended, whether courses were completed satisfactorily or not.
Students with less than one year of college must include high school transcripts and ACT/SAT scores. In general, transfer students with credits from an accredited college or university who have maintained at least a $\mathrm{C}+$ average ( 2.50 cumulative GPA) in all credits attempted are considered for admission.
After a student has applied for admission, her or his transcript is evaluated. An Academic Progress Audit System (APAS) report showing how the courses meet specific degree requirements will be made available to the student as soon as transcripts from previously attended colleges are processed. If the student has questions about the evaluation, the student may contact the transfer specialist. If not satisfied, the student can appeal. See "Rights as a Transfer Student" below.


## Understanding How Transfer of Credit Works

- Credits and grades are assigned by the previous (source) college. UMM, as the target college, decides which credits transfer.
- UMM accepts transfer coursework:
- from institutions that are regionally accredited
- from institutions that provide courses that are intended for transfer to baccalaureate programs
- that is comparable in nature, content, and level to courses offered by UMM
- that is applicable to the bachelor of arts degree: "like" transfers to "like"
- with the grade of D or above, subject to the restrictions of UMM's degree requirements (see Grading Policy in the College Regulations section of this catalog)
- In addition to coursework from the traditional liberal arts disciplines, UMM may accept courses in teaching licensure that compare to UMM education courses.
- UMM does not accept transfer coursework from proprietary technical colleges, business colleges, and similar postsecondary schools. However, credit for knowledge acquired in liberal arts coursework from these programs may be obtained by special examination.
- Courses that are technical or applied do not transfer to UMM.
- The University of Minnesota transcript lists the name of each source college with the number of credits accepted from each. Grades earned in transfer courses do not count toward the GPA on the University of Minnesota transcript or toward GPA-based degree honors.
- Transfer course titles appear on Academic Progress Audit System (APAS) reports. Transfer courses may qualify to fulfill general education requirements, major/minor requirements, and teaching licensure requirements.
- Religious studies from regionally accredited colleges go through the normal transfer review. Religious studies from colleges that do not have regional accreditation go through a special review committee.
- In lieu of regional accreditation, evidence must be provided that instruction is collegiate level and appropriate for UMM's liberal arts mission before credit is awarded.


## Rights as a Transfer Student

A transfer student is entitled to

- a fair credit review and an explanation of why credits were or were not accepted; and
- a formal appeals process. Appeals steps are:

1. the transfer student provides supplemental information to the Office of the Registrar-a syllabus, course description, or reading list;
2. the Office of the Registrar may ask the destination department(s) to review supplemental materials;
3. the student receives an updated APAS showing the outcome of the appeal; and
4. the student, if dissatisfied with the outcome, can make a further appeal to the Scholastic Committee.

## Understanding Degree Requirements for Transfer Students

- Not everything that transfers will help the student graduate. UMM's bachelor of arts degree program requires coursework in several categories: general education, major/ minor courses with their prerequisites, and electives. The key question in determining whether transfer courses will fulfill UMM requirements is, "Will the student's credits fulfill requirements of the degree or program chosen?"
- The Minnesota Transfer Curriculum (MNTC) is an agreement for transferring general education requirements as a package from colleges within Minnesota State Colleges and Universities (MNSCU). MNTC will be honored for students who have fully completed that curriculum before transfer to UMM. The remaining UMM degree requirements are:
- foreign language study, one year at the college level;
- a total of 60 general education credits outside the discipline of the major;
- a major or area of concentration;
- 30 credits in residence; 15 of the last 30 credits must be from UMM;
- 2.00 cumulative U of M GPA;
- 120 credits (minimum) for the degree.
- Application of courses to UMM general education requirements for students who are transferring to UMM from within MNSCU but who have not completed the MNTC will be done on a course-by-course basis. Designation of courses from the source college's version of the MNTC can be used as a general guide.
- If the student changes the career goal or major, it might not be possible to complete all degree requirements within the 120 minimum total credits required for graduation.


## Adding Programs After Earning a Degree from Another Institution

Students transferring to UMM after earning a degree from another college should note:

## Teaching licensure

- Students must be admitted to both UMM and the education program.
- Students may earn a bachelor of arts degree that would be recorded on the University of Minnesota official academic transcript.
- Students may elect a "teaching licensure only" option without a degree notation on the official transcript.


## Completing or adding a major

- Students must meet all bachelor of arts degree requirements at UMM; a major is one component of the degree.
- Catalogs are in effect at UMM for nine years from the first semester covered by the catalog.
- Students may use catalog requirements in effect at the time they enter UMM and later, but not catalogs in effect before their entrance date.
- The major, one of the components of the degree, is recorded with the UMM degree information on the official transcript.


## Completing or adding a minor

- Students meet all bachelor of arts degree requirements at UMM; a minor is an optional component of the degree.
- All of the items listed under Adding a Major at UMM (see the previous section) also apply to adding a UMM minor to a degree earned at another college or university.


## Transfer Within the University of Minnesota

A student who wishes to change from one college, school, or campus of the University of Minnesota to UMM must meet the UMM requirements for admission.

- Transfer applicants from other colleges within the University to UMM who have maintained at least a 2.50 GPA are considered for admission.
- Students with less than a year of college must meet the admission requirements for freshmen and should have at least a 2.50 GPA in their college coursework.
- Application for transfer within the University of Minnesota should be made at the Office of the Registrar on the campus where the student is currently enrolled or was last registered. The Application for Undergraduate Change of College, available at admissions.morris.umn.edu /howtoapply/transfer/uofm, serves as the application for admission.
- Students should apply as early as possible before their expected date of transfer.
- To receive a bachelor of arts degree, transfer students must also meet all UMM degree requirements.


## Deferred Admission

Students choosing to delay their matriculation into UMM after being admitted may defer their admission. To seek deferred admission, students first complete all admissions procedures. Once admitted, they request deferred status; after deferment has been granted, the $\$ 150$ nonrefundable confirmation fee will reserve space for up to one year.

## Nonresidents and Reciprocity

Under reciprocity agreements, residents of North Dakota, South Dakota, Wisconsin, and Manitoba who attend UMM may pay a specially designated tuition rate. To obtain current figures and necessary forms, contact the student's home state higher education services office, the UMM Office of Admissions, or the appropriate office listed below:
North Dakota residents-Reciprocity Program, North Dakota Board of Higher Education, 10th Floor, State Capitol Building, Bismarck, ND 58501
South Dakota residents-Reciprocity Program, South Dakota Board of Regents, Box 41, Brookings, SD 57007
Wisconsin residents-Reciprocity Program, Wisconsin Higher Educational Aids Board, 137 East Wilson Street, Madison, WI 53707
Manitoba residents-Office of Admissions, University of Minnesota, Morris, 600 East 4th Street, Morris, MN 56267
As part of its efforts to make a high quality UMM education available to students from across the country, the University of Minnesota, Morris does not charge nonresident tuition.

## Multi-Institutional Student

A consortium agreement among the University of Minnesota campuses allows students planning to earn their degree at their home campus to enroll in courses offered by another University of Minnesota campus. This arrangement is available for only one term per academic year. Application
forms for attending another campus are available in the Office of the Registrar and on its website, www.morris.umn.edu /services/registrar. Applications for financial aid and enrollment are processed through the home campus. Students are charged separate tuition rates and fees for classes taken on different campuses.

## Special Admissions Status

## Returning UMM Students

UMM students who do not register for two consecutive semesters (excluding summer), must apply for readmission through the Office of Admissions. Former Morris students are considered for readmission on the basis of their past performance as space is available. Former Morris students who interrupted their enrollment to transfer to another college, must submit official transcripts from that institution with their application for readmission.

## Non-Degree Students

Non-degree student enrollment is reserved for students, whether part- or full-time, who are not degree-seeking candidates, and who have access to courses if space is available. Non-degree student status is reserved for six categories: 1) adults taking courses of special interest; 2) students with probationary admission status who will later become regular degree candidates; 3) UMM faculty and staff; 4) PSEO students taking courses for enrichment; 5) PSEO students carrying a part- or full-time Morris freshman course load on campus; and 6) students from other colleges or universities enrolled for a single term in the Global Student Teaching or English Language Teaching Assistant Program. PSEO high school students interested in on-campus attendance should contact the Office of Admissions directly for applications materials.

## Senior Citizens

Minnesota residents age 62 years or older may be admitted to UMM classes at a minimal cost when space is available after tuition-paying students have been accommodated. Persons wishing to take a course without credit pay only materials or other special fees. Those seeking credit for a course pay $\$ 10$ per credit as well as materials or other special fees. Further information is available from the Office of the Registrar.

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# Cost of Attendance, Fees, Financial Aid, and Scholarships 

## Cost of Attendance

The Cost of Attendance (COA) is an estimate of a student's educational expenses at a modest but adequate standard of living for the period of enrollment and is used to award financial aid.
The COA budget components are determined by federal regulation and include tuition and fees, books, housing and meal plans, transportation, personal and miscellaneous educational expenses, and loan fees.
Information is collected from various sources and departments on an annual basis to determine the standard costs each year.
The University of Minnesota, Morris charges residents and non-residents the same tuition in an effort to make a highquality education available to students from across the country. Morris has a 13+ credit tuition band; students taking $13+$ credits are billed the 13 -credit rate, students taking fewer than 13 credits per semester are billed on a per-credit basis.
All UMM fees, deposits, and refund policies are subject to change without notice. Current information may be obtained from the UMM Business Office or online at www.morris .umn.edu/financialaid/costofattendance.

## Estimated Cost of Attendance

Per Year-The approximate yearly cost of attendance for a UMM student living on campus is currently $\$ 20,210$. This amount includes tuition and fees, room and board, and an estimate for textbooks and supplies. Not included are personal expenses such as clothing, travel, and recreation, which are best estimated by the individual student. (Reciprocity tuition rates vary from state to state.)
Per Semester-A breakdown of the estimated cost of attendance per semester for a typical student in 2011-12 follows. Note: Minnesota residents and nonresidents pay the same tuition, room and board, and fees.

| Tuition ( $13+$ credits) | $\$ 5,661$ |
| :--- | ---: |
| Room and board | $\$ 3,560$ |
| (19 meals/week) |  |
| Mandatory fees | $\$ 384$ |
| Textbooks and supplies | $\$ 500$ |
| Total | $\$ 10,105$ |

## Tuition

Semester rates for students taking 13 or more credits: Resident and nonresident $\$ 5,661$

Per-credit-hour tuition for students taking fewer than 13 credits per semester:

Resident and nonresident $\$ 435.47$ per credit

## Student Services Fees

Student Services Fees are mandatory assessments on each campus and provide non-instructional activities and services that make significant contributions to student development.
For more information about Student Service Fees, visit www.morris.umn.edu/committees/AFRC/yourfees htm\#activities.
Activities Fee-A fee of $\$ 93.50$ per semester is charged to all students registered for 6 or more credits. Those registered for fewer than 6 credits may elect to pay the fee to participate in the activities, events, and services it funds, which include cultural and social events sponsored by student organizations and other UMM units.

Intercollegiate Athletic Fee-A fee of $\$ 25$ is charged to all students registered for 6 or more credits to support the athletic programs at UMM. This fee provides free admission for UMM students to all athletic events.
Health and Wellness Services Fee-A fee of $\$ 75$ per semester is charged to all students registered for 6 or more credits. Those registered for fewer than 6 credits may elect to pay this fee in order to have access to the Health Service, which provides limited outpatient care (students must have adequate health insurance coverage to supplement this care).
RFC (Regional Fitness Center) Fee—A fee of $\$ 82$ per semester is charged to all students registered for 6 or more credits for student memberships, granting access to the RFC facilities and programs.
Student Center Fee-A fee of $\$ 39$ per semester is charged to all students to cover the operational, repair, and maintenance expenses for the Student Center.
Summer Activities Fee-A per-session fee is charged to all summer students to participate in the activities, events, and services it funds, which include cultural and social events sponsored by student organizations and other UMM units.

## Special Course Fees (charged in addition to tuition)

Music Lesson Fee-A fee of $\$ 350$ per credit is charged to students registered in Individual Performance Studies (Mus 1200 through 1223 and Mus 3200 through 3223), Class Piano (Mus 1044), and Class Guitar (Mus 1045). Note: Applied music instructors are not expected to make up sessions for unexcused student absences from scheduled lessons.
Studio Art Materials Fee-A materials fee is charged for supplies that are used by students who are registered in many of the Studio Art (ArtS) courses. The amount of the fee varies by the course being taken.

## Supplemental Fees

Application Fee-A nonrefundable fee of $\$ 35$ must be submitted with a paper application for admission to UMM. The online application fee is $\$ 25$.
Admissions Confirmation Fee-A fee of $\$ 150$ is necessary for admitted students to show their intent to enroll at UMM.
Campus Fee-A fee of $\$ 70$ per semester is charged to all students registered for 6 or more credits. A fee of $\$ 35$ is charged to those students with less than 6 credits and for summer term. This fee helps fund technological enhancements on campus that are of direct benefit to students and their educational programs.
Credit by Examination Fee-A fee of $\$ 50$ per credit is charged to take special subject exams to demonstrate knowledge acquired outside specific courses offered at UMM. Special exams are given at the discretion of the discipline.
Health Insurance Fee-All UMM students who are registered for 6 credits or more are required to provide proof of health insurance. Students who are unable to provide such proof are required to carry insurance through a group plan provided by an outside agency contracted through UMM Health Services. The annual cost for the insurance premium is $\$ 1,860$. Students from foreign countries are required to purchase the UMM group insurance or they may seek a waiver based on proof of equivalent coverage. For more information, call Health Services at 320-589-6070.
Locker Fee-A fee of $\$ 10$ per year is charged for use of a locker and towel service in the Physical Education Center. Lockers also are available in the lower level of the Student Center and are accessible in two ways. Coin operated lockers are 25 cents per use and an unlimited use locker may be rented for $\$ 5$ per year ( $\$ 3$ for the summer). These lockers are located on the west wall across from Louie's Lower Level. Unlimited use lockers may be rented from the Information Center.
Parking Fee—A fee of $\$ 91$ per academic year is charged for a permit to park in campus lots.
Storage Container Fee—A fee of $\$ 8$ per academic year is charged for storing items with limited access. Contact the Office of Residential Life at 320-589-6472.
Testing Service Fees-Students are not assessed any testing fees for placement exams (foreign language and math) at UMM. Exams for national testing companies or agencies, i.e., for admissions, licensing, or CLEP (College Level Examination Program), are administered by the UMM Test Center and students register with and pay fees to the respective testing company. UMM's Test Center is located in the Student Counseling office, 235 Behmler Hall.
Transcript Fees- If a student has no financial holds on his/ her record, official transcripts are issued for a fee of $\$ 12.00$. Transcripts are usually processed within one to two working days. Additional information, including how to request a
transcript, is available at www.morris.umn.edu/transcript. Unofficial transcripts are available online at no cost to current students at the Student One Stop website.
U-Card Replacement Fee-A fee of $\$ 25$ is charged to replace a U-Card, the University's identification card. This fee applies to registered UMM students who have lost or damaged their cards.

## Deposits

Housing Deposit-A $\$ 200$ nonrefundable deposit must be paid by all newly admitted UMM students seeking on-campus housing.
Key Return Deposit-A \$10 refundable deposit is charged for each key issued for an outside door of, or a room in, a campus building to ensure its return. A $\$ 20$ refundable deposit is charged for Science Building keys.

## Payments

Students must pay tuition, student services fees, special course fees, room and board, and other financial obligations by the due date shown on the billing statement. It is the student's obligation to pay bills on time in order to avoid late fees.
For more information about billing and payment, visit www .morris.umn.edu/services/business.

## Installment Option

Students may make installment payments for fall and spring semesters. Students may elect to pay by installments during the term by paying at least the minimum amount due listed on the bill by the due date. For students who elect to pay their bill in installments, a $\$ 35$ installment/re-billing fee per semester will be added to the balance on their next bill. No application form is required to participate in the installment plan.
Non-degree students are not eligible for the installment plan. The installment plan is not available for Summer Session.

## Late Payment Fees

If a student pays less than the full amount by the due date, an installment/re-billing fee will be assessed on the next statement. Any time a student pays less than the minimum amount due by the due date, a $\$ 30$ late payment fee, in addition to the $\$ 35$ per semester installment/re-billing fee, will be assessed to the student's account and a hold will be placed on the student's record.

## Financial Aid

The University of Minnesota, Morris financial aid staff is dedicated to providing students with the most comprehensive and simplified methods of financial aid delivery. Financial Aid Office procedures are designed to provide financial assistance to as many students as possible in an equitable and consistent manner. For more detailed information on financial aid, visit www.morris.umn.edu/financialaid.

## Financial Aid Application

The Free Application for Federal Student Aid (FAFSA) is the only application needed to receive federal, state, or institutional financial aid at UMM. Students should complete the FAFSA as soon after January 1 as possible to be considered for all available funding.

## Criteria for Awarding Federal, State, and Institutional Financial Aid Funds

Financial Aid is awarded based on financial need and/or the eligibility criteria of scholarship, grant, loan, and student employment programs. The Expected Family Contribution (EFC) and financial need are determined by federal methodology based on the information provided on the Free Application for Federal Student Aid (FAFSA). The EFC determines what the student/ parent(s) can reasonably be expected to pay toward their educational costs. The University of Minnesota, Morris uses the EFC to determine financial need and the eligibility for financial aid based on federal, state, and institutional formulas, criteria, policy, regulations, and the availability of funds under the direction of the University of Minnesota administration.

## Unusual Circumstances

Students should contact the financial aid office when/if a family's financial situation changes after submitting the Free Application for Federal Student Aid (FAFSA), or a student/ family feels that the results from the FAFSA don't fully represent their family's financial situation.
Death, separation, divorce, unemployment, loss of employment, military service, nursing home expenses, unusual medical care expenses, tuition costs for a dependent student's parent attending college, tuition expenses for children attending a private elementary or high school, or loss of nontaxable income or benefits are all examples of unusual circumstances that may affect a student's financial aid eligibility.
A financial aid officer can help determine whether unusual circumstance adjustments should be made to the processed FAFSA by requesting the appropriate documentation.

## Satisfactory Academic Progress (SAP)

Each term, the Financial Aid Office is required by federal and state regulations to determine if students receiving financial aid are making Satisfactory Academic Progress. For more information, visit www.morris.umn.edu/financialaid /academicprogress.

To maintain eligibility for federal, state, and institutional aid, students must meet University of Minnesota, Morris academic progress standards for financial aid recipients.

## Scholarships and Waivers

For detailed information regarding scholarships and waivers, visit www.morris.umn.edu/financialaid /scholarshipswaivers.

## Competitive Academic Scholarships

Incoming first-year students are invited to compete for UMM's top two scholarships, the Prairie Scholars Award and the Morris Scholars Award. Students must submit a completed Application for Admission, and complete a Competitive Scholarship Application by December 15 of the student's senior year in high school. Recipients will be selected during a competitive interview process held at Morris in early February.
Prairie Scholars Award-The Prairie Scholars Award is a full-tuition scholarship renewable for up to four years by maintaining a 2.50 GPA.
Morris Scholars Award-Morris Scholars Award winners will receive up to a $\$ 20,000$ scholarship- $\$ 5,000$ per yearplus a one-time $\$ 2,500$ scholarly stipend. The $\$ 5,000$ per year portion of this award is renewable for up to four years by maintaining a 2.50 GPA. The stipend may be used during the second, third, or fourth year at UMM to engage in an eligible scholarly experience (e.g., to study abroad, to participate in a research or artistic project, or for travel to academic conferences).

## Automatic Academic Scholarships

For more information about Automatic Academic Scholarships visit: www.morris.umn.edu/costsaid /scholarships/automatic.

## Automatic Academic Scholarships for First-year

 Students-The following scholarships are awarded to first-year students based on their high school class rank (if applicable). Students who are home-schooled or attend a non-ranking high school are judged on alternative criteria. Scholarships are renewable for four years by maintaining a 2.50 GPA.| HS Class Rank | Scholarship Name | Scholarship Value <br> Top 5 percent <br> Chancellor's <br> Scholarship <br> Top 10 percent <br> Dean's Scholarship <br> $\$ 14,000$ (\$3,500 <br> per year for up <br> to four years) <br> Top 20 percent\$10,000 (\$2,500 <br> per year for up <br> to four years) |
| :--- | :--- | :--- |
| Associate <br> Scholarship | $\$ 4,000$ (\$1,000 <br> per year for up <br> to four years) |  |

No additional application is required to receive the Automatic Academic Scholarship. The Admissions Committee awards the above scholarships after reviewing the academic credentials provided with the student's application for admission. Recipients of the Automatic Academic Scholarship are notified by mail with their admission decision. These
scholarships may not be combined with the Prairie Scholars Award, the Morris Scholars Award, or the National Merit Scholar Winner
Automatic Academic Scholarships for National Merit Scholars-National Merit Scholarships are awarded upon admission throughout the year to students who document and verify their National Merit Scholar status. The amount varies according to the table below. Scholarships are renewable for up to four years by maintaining a 2.50 GPA and enrolling for at least 12 credits per semester.

| Status | Award | Requirements |
| :--- | :--- | :--- |
| Winner | Full tuition, <br> renewable for up <br> to four years | Proof of status, <br> Morris listed as first <br> choice college. |
| Semi-Finalist | \$4,000 (\$1,000 <br> per year for up <br> to four years) | Proof of status, <br> priority given <br> to students who <br> confirm enrollment. |
| Commended | \$4,000 (\$1,000 <br> per year for up <br> to four years) | Proof of status, <br> priority given <br> to students who <br> confirm enrollment. |

## Automatic Academic Scholarships for Transfer

 Students-Students transferring to UMM from another college outside of the University of Minnesota system with 30 transferable credits (not earned prior to high school graduation) and a 3.75 grade point average (GPA) qualify for a $\$ 2,000$ nonrenewable scholarship. Those with at least a 3.50 GPA qualify for a $\$ 1,000$ nonrenewable scholarship to be used in their first year at Morris.
## Waivers

For more information about waivers, visit www.morris.umn .edu/financialaid/scholarshipswaivers.
American Indian Tuition Waiver-In recognition of the Morris campus history as an Indian Boarding School in the 1800 s , federal and state legislatures have mandated that American Indians attending Morris are not required to pay tuition.
Blind or Deaf Students Tuition Waiver/AssistanceMinnesota resident students who are blind or deaf may be eligible for a tuition waiver or partial tuition assistance. To apply for either of these tuition assistance programs the student must complete the Tuition Waiver/Assistance for Blind or Deaf Students Application.

## Institutional and Donor-Funded Scholarships

For more information regarding institutional and donor funded scholarships visit: www.morris.umn.edu /financialaid/scholarshipswaivers/institutionaldonor.

## Institutional Scholarships

Josephine L. Merriam Scholarship—Students must be admitted to UMM as first-year students to be considered for this scholarship. This scholarship is awarded to first-year
male students who demonstrate financial need as determined by UMM Financial Aid Office criteria. No application is required.
Clyde Johnson Music Scholarship-Clyde E. Johnson Music Scholarships honor Clyde Johnson, professor emeritus of music, who served UMM from 1961 until 1999. The scholarships are awarded to talented UMM music majors to cover one free year of private lessons in the student's major performance area. Students who plan to enter UMM as music majors and who have demonstrated high music ability and performance may be eligible for this scholarship.
William W. Stout Scholarship—Students must be admitted to UMM as first-year students to be considered for this scholarship. This scholarship is awarded to first-year female students who demonstrate financial need as determined by UMM Financial Aid Office criteria. No application is required.

## Donor Funded Scholarships

UMM manages over 75 scholarship funds, from which over 200 awards are made annually. First-year students must submit a completed Application for Admission by December 15 of the student's senior year in high school. Returning students are automatically considered. Recipients are notified directly by the Financial Aid Office by May 1.

## Federal, State, and Institutional Programs

Student who have completed a Free Application for Federal Student Aid (FAFSA) and are admitted to UMM are considered for federal, state, and University funding. Awards are based on financial need (as determined by the FAFSA), any eligibility criteria specific to the programs, and availability of funds

## Federal Programs

Federal Pell Grant-The Federal Pell Grant is a federally funded grant for students who are pursuing their first undergraduate degree. The results of the Free Application for Federal Students Aid (FAFSA) will determine Federal Pell Grant eligibility. Students may receive a Pell Grant for three consecutive full-time semesters during the course of a single academic year.
Federal Supplemental Educational Opportunity Grant (FSEOG)-The Federal Supplemental Educational Opportunity Grant is a federally funded program for students who are pursuing their first undergraduate degree. The FSEOG amount is set by institution's financial aid office criteria, availability of federal funds from the U.S. Department of Education and enrollment status.
TEACH Grant Program-The TEACH Grant is a federally funded gift program for full-time undergraduate students or students enrolled in a post-baccalaureate teacher credential program. Eligible undergraduate and post-baccalaureate students will receive up to $\$ 16,000$ with this automatic $\$ 4,000$ ( $\$ 2,000$ per enrolled semester) TEACH Grant.

## State of Minnesota Programs

Minnesota State Grant-The Minnesota State Grant is a State of Minnesota funded gift program for students who are pursuing their first undergraduate degree, are Minnesota residents, and have not attended a post-secondary institution more than eight semesters at full-time status. Students may receive the Minnesota State Grant for three consecutive fulltime semesters during the course of a single academic year. The award is based on availability of funds from the state of Minnesota and enrollment status.
Minnesota Postsecondary Child Care Grant-The Postsecondary Child Care Grant is a state of Minnesota funded gift program for students who are pursuing their first undergraduate degree, are Minnesota residents, have children 12 and under ( 14 and under if disabled), demonstrate financial need and have not attended a post-secondary institution more than eight semesters at full-time status. The amount of assistance will depend on the family size, annual income of the family, and the number of daycare hours necessary to cover education or work obligations.
Minnesota Public Safety Officer's Survivor GrantThe Public Safety Officer's Survivor Grant provides an educational benefit to dependent children under age 23 (age extended to 30 for those who served on active military duty for at least 181 consecutive days and were honorably discharged or released) and the spouses of public safety officers killed in the line of duty. Eligibility is determined by the Minnesota Department of Public Safety.

Minnesota GI Bill-The Minnesota GI Bill program was established in 2007 to provide postsecondary financial assistance to eligible Minnesota veterans who served on or after September 11, 2001. The Minnesota Office of Higher Education determines funding based on enrollment status.

## Institutional Programs

University Grant-The University Grant is awarded to students who are pursuing their first undergraduate degree. The actual award amount is set by institutional financial aid office criteria, availability of funds, and the student's enrollment status.
University of Minnesota Promise Scholarship-The University of Minnesota is committed to making a worldclass education a great value for Minnesota families. The University of Minnesota Promise Scholarship (U Promise) has expanded the need-based programs to guarantee tuition aid for Minnesota resident undergraduates with a family income of up to $\$ 100,000$.

## Student Employment Program

There are three types of on-campus and off-campus student employment programs: Federal Work-Study (FWS), State Work-Study (SWS), and Institutional Student Employment (ISE). All student employment programs are handled in the same manner; however, eligibility requirements differ for each. Students must be enrolled in a degree-seeking program, pursuing their first undergraduate degree, and registered for a minimum of six credits per semester to maintain eligibility. Students must meet satisfactory academic progress requirements as well as financial aid eligibility guidelines for all student employment programs.
For more information about student employment visit: www .morris.umn.edu/studentemployment.

## Loan Programs

Student loans are sources of financial aid which must be repaid. UMM offers student loans as part of the financial aid award after reviewing eligibility for grants, scholarships, and work-study. Students must complete a Free Application for Federal Student Aid (FAFSA) to be eligible for federal loans.
For more detailed information visit www.morris.umn.edu /financialaid.

## Federal Loan Programs

Federal Perkins Loan-The Federal Perkins Loan is a low-interest ( 5 percent), need-based loan program available to students who have exceptional financial need (the lowest EFC). There is no origination fee and interest does not accrue while a student is enrolled at least half time.
Ford Federal Direct PLUS Loan-Parents of a dependent student may apply for a Ford Federal Direct Parent Loan for Undergraduate Students (PLUS) Loan, a non-need-based program that allows a parent to borrow any amount up to the cost of attendance minus other financial aid awarded.
Ford Federal Direct Subsidized Loan-The Ford Federal Direct Subsidized Loan is a need-based loan program subsidized by federal funds that allows students to borrow money interest-free while in school at least half-time.
Ford Federal Direct Unsubsidized Loan-The Ford
Federal Direct Unsubsidized Loan is a non-need-based loan program. Students are charged interest on this loan, but have the option to defer paying the interest while in school at least half time

## Alternative Loan Programs

UMM recognizes that not all students and their families will be able to meet the financial burden of paying for an education, even with the assistance of traditional aid resources. UMM cannot recommend an alternative loan program since each student's needs are unique; students should evaluate each loan program to determine the best loan for their educational plans.

## American Indian Programs

For more information about American Indian programs, visit www.morris.umn.edu/financialaid/scholarshipswaivers /americanindian.
Minnesota Indian Scholarship Program (MISP)—Students who possess one-fourth or more Indian ancestry, are Minnesota residents, and have financial need should apply with the Minnesota Office of Higher Education. In order to qualify for this scholarship, students must be eligible to receive the Federal Pell or Minnesota State Grant. Recipients will receive an official notification of an award from the MISP.
Tribal (Bureau of Indian Affairs-BIA) ScholarshipStudents who are enrolled with a state or federally recognized tribe are encouraged to apply for BIA funds by directly contacting their BIA Higher Education Program. The amount awarded is based on financial need and availability of funds through the BIA. Students are encouraged to apply with their tribe as early as possible. Recipients will receive an official notification of an award from the BIA.
Ethel M. Curry American Indian Scholarship-The Ethel M. Curry American Indian Scholarship is awarded to students who are admitted to the University of Minnesota, Morris as a first-year freshman. To be considered for the Ethel M. Curry American Indian Scholarship students must complete the American Indian Tuition Waiver Application providing proof of American Indian heritage. Students will be given priority if they are one-fourth American Indian, enrolled in a federallyrecognized tribe, and a Minnesota resident. Recipients will be notified by the Financial Aid Office.
Shakopee Mdewakanton Sioux Community Endowed Scholarship-The Shakopee Mdewakanton Sioux Community (SMSC) Endowed Scholarship was established in 2008 through a generous gift from the Shakopee Mdewakanton Sioux Community. The SMSC scholarship program is designed to recruit and retain talented American Indian students with demonstrated financial need to the University of Minnesota.

## Other Aid Programs

## Morris Academic Partnership (MAP)

UMM offers the Morris Academic Partnership (MAP) program in which faculty select academically talented, qualified third-year students to assist them in scholarly and creative projects. Selected MAP students undertake assignments intended to enhance their intellectual competence and increase their interest in graduate or professional study.

## Morris Student Administrative Fellows (MSAF)

UMM offers the Morris Student Administrative Fellows (MSAF) Program, in which academic and administrative staff select academically talented, qualified students to assist them in administrative and managerial projects. Selected
students undertake assignments intended to enhance their intellectual competence and increase their interest in graduate or professional study.

## Multi-Ethnic Mentorship Program (MMP)

The Multi-Ethnic Mentorship Program (MMP) is an opportunity for second-year students of color to work with UMM faculty and/or staff on a year-long project and/or research endeavor.

## Undergraduate Research Opportunities Program (UROP)

The Undergraduate Research Opportunities Program (UROP) benefits students by allowing them to work with a faculty member on research, scholarly, or creative projects. Students develop detailed knowledge of research methods and have unique access to the faculty and facilities of the entire University of Minnesota system.

## Veterans Education Benefits

UMM is approved by the Minnesota State Approving Agency to participate in all Veterans Education Assistance Programs. These programs include Veterans Administration (VA) benefits for those who have served on active duty and their eligible dependents, as well as members of the Reserve and National Guard.

## Minnesota War Orphans Tuition Waiver

Students who have lost a parent through death as a result of a military service-related injury or disease may be eligible for a full-tuition waiver and assistance to help with other educational expenses at a Minnesota institution. Contact the director of financial aid for coordinated veterans' services support at UMM.

## Vocational Rehabilitation

Students may be eligible for vocational rehabilitation if they have a physical or mental disability that makes it difficult for them to find or keep a job. If a student is determined eligible for services, Minnesota's vocational rehabilitation program considers the student's eligibility for other financial aid and may fund some direct costs such as tuition, student service fees, books, supplies, and equipment.

## Registration

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## Registration

Once a student is admitted to UMM, campus staff and faculty are available to assist the student in registering for courses and in getting oriented to the services, resources, and requirements of the University. Students are responsible for registering for classes each term. Registration and up-to-date registration publications and information are available on the Office of the Registrar website at www.morris.umn.edu /services/registrar.
Class Schedule-The online Class Schedule lists course offerings with class times, rooms, instructors, and prerequisites. The Class Schedule is available online at www morris.umn.edu/services/registrar/register.html.

## New Student Registration

Designated registration periods are held on campus in summer for entering first-year students and transfer students who plan to enroll fall semester. Faculty advisers assist new students with academic planning and course selection, and guide them through the process of online registration. New students should have official transcripts from all postsecondary institutions attended (including college credit earned while in high school) sent to the Office of Admissions at least two weeks prior to the assigned registration session. This will assist advisers with recommending appropriate courses.
UMM offers a comprehensive new student orientation program that provides information on UMM's educational opportunities, services, and resources. Returning students help new students find their niche in campus life. New Student Orientation is held just before the beginning of the academic year. Students entering UMM spring semester are provided with orientation information at the beginning of the semester.

## Registration for Subsequent Semesters

Students are notified via email, the official form of communication, about registration each semester. Comprehensive information is available on the web at www .morris.umn.edu/services/registrar/register.php. All students with fewer than 60 completed credits must meet with adviser and receive registration approval from them. It is recommended that all students meet with their adviser to discuss registration every semester.
For all UMM students, long-range academic planning between students and their advisers occurs during the spring semester, prior to registration for the subsequent fall semester. This long-range planning or Annual Planning provides an opportunity for significant discussion of the breadth and quality of students' liberal education; career objectives, interests, and plans; and technical details of degree requirements. Students who will be freshmen or sophomores in the fall plan their next year; those who will be juniors plan their two remaining years. Seniors are invited to attend
"Senior Meetings" at the beginning of Fall Semester to plan their final year. For students with fewer than 60 semester credits (freshmen and sophomores), notification of the adviser's approval of the Annual Plan is required in the Office of the Registrar before students may register for fall semester.
Students are encouraged to register early to secure a seat in a class. The registration queue allows seniors to register first, then juniors, and so on. If insufficient enrollment occurs in a course, it may be cancelled to allow the instructor to teach other, more-heavily subscribed courses.

## Holds on Students' Records

Certain holds on students' records will prevent them from registering. For example, these can result from failure to comply with academic regulations or financial obligations to the University. Holds are fully explained in the University Policy, available at http://www.policy.umn.edu/Policies /Education/Education/REGISTRATIONHOLD.html.
Students are sent information about their holds prior to registering. Additional holds may be added after this notification and can be checked via the Student One Stop under "Quick Links."

## Change in Registration

The essential deadline for students to make changes to their class registration is the 10th class day of fall or spring semester. Additional deadlines and details are published on the Office of the Registrar website at http://www.morris .umn.edu/services/registrar/canceladd.html.
Canceling classes after the cancellation deadline requires approval from the Scholastic Committee and will be granted only for extenuating nonacademic reasons. Additional information can be found at www.morris.umn.edu /Scholastic/drop_classes.html
Students who receive any type of financial assistance are advised to check with the financial aid staff before canceling a class. The tuition and fees refund schedule is published on the Student One Stop website.

## Withdrawals

Students may withdraw from classes without special permission through week nine of the semester (week four of half-term classes, week two of May session, week three of summer term). If a student withdraws from a course during the first two weeks of classes, that course registration is not recorded on the student's transcript. If a student withdraws during week three through week nine, a symbol of W appears on the transcript. Detailed course cancellation deadlines are online at www.morris.umn.edu/services/registrar /canceladd.html.
Withdrawal after the cancellation deadline requires college approval and will be granted only for extenuating nonacademic reasons.

## Discretionary Course Cancellation-One-time Drop

Each student, during his or her undergraduate enrollment at the University of Minnesota, may withdraw from a course after the deadline once-up to and including the last day of class for that course-without proof of extenuating circumstances. This "one-time-drop" must be processed at the Office of the Registrar. A symbol of W appears on the transcript. This rule is part of the University Grading and Transcript policy at www.policy.umn.edu/Policies /Education/Education/GRADINGTRANSCRIPTS.html.

## Canceling Out of College

Students who choose to drop all of their classes must notify the Office of the Registrar. Detailed information and forms are available at www.morris.umn.edu/services/registrar /withdraw.html.
Cancellation processing includes notification of other campus offices and may involve financial aid repayment. Until an official notice of cancellation is received in the Office of the Registrar, spaces in the classes are reserved, and tuition and fees charges continue to accrue regardless of nonattendance.

## Refunds

In response to the federal Higher Education Amendments of 1992, the University of Minnesota has established a refund policy that follows federal regulations. UMM has a four-week refund period.
Week one of both fall and spring semesters ends the following week, on the same day of the week that classes began. This allows students whose first course meeting is the Monday of week two at least one day of class before a penalty for cancellation is imposed.
Students are entitled to a full or partial refund or credit of tuition, student services fees, and special course fees as follows. (Refund schedules, including May session and summer session, can also be found on the web at www .morris.umn.edu/services/business/refundschedules .html.)

## Refund Schedule <br> (for day school courses) <br> $100 \%$ through the 6th class day $75 \%$ through the 10th class day $50 \%$ through the 15th class day $25 \%$ through the 20th class day $0 \%$ after the 20 th class day

The Office of Admissions, the Office of Financial Aid, the Business Office, and the Office of the Registrar work together to verify the date of cancellation. Any aid that has been received by the student is recovered first, as required by the aid programs involved. The Business Office cashier either processes a refund to, or collects the balance from, the student depending upon remaining funds and outstanding obligations to the University. Refund examples are available upon request by contacting the Office of Financial Aid.

Students participating in approved study abroad or student teaching, internships, or other individual projects at remote off-campus locations may be granted a waiver of the student services fees (with the exception of nonrefundable fees) for the period of their absence from the campus. Students should contact the Office of the Registrar for further information on student services fee waivers. Prorated room and board rebates are also available in many cases. See the Student Life Handbook for details at www.morris.umn.edu/services.

## Re-Enrollment After an Absence

Students at Morris who do not register for two consecutive semesters (excluding summer) become inactive. They must contact the Office of Admissions for approval to regain active status before registering for another term. Once readmitted, the Office of the Registrar provides the information needed to register for classes.

## Student Records Privacy

Regents' policy, federal law, and state law regulate release of student information to third parties. University policy regulates sharing of information within the University.
Briefly, some student information is designated as directory information and is a matter of public record. This includes name, mailing address, email address, telephone number, dates of registration and registration status, major, adviser, college and class, academic awards received and degrees received.
A currently enrolled student has the right to suppress this information. To suppress directory information, students need to update their personal information online at the UMM Student One Stop website at www.morris.umn.edu /onestop/ and click on "Directory Suppression." Once logged in, they should select "Directory Suppression" from the dropdown menu. Once a suppression is put on, it will remain on until the student requests its removal. For assistance, contact the Office of the Registrar, 212 Behmler Hall.
Students have the right to review their educational records and to challenge the contents of those records. The regents policy on student educational records is available for review online at www.umn.edu/regents/policies/administrative /Student_Education_Records.pdf. Additional information is available from the Office of the Registrar.

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## Student Services and Opportunities

At UMM, students will find a wide range of activities and services that will enhance their education and enrich their personal experience. They will become members of a learning community that is continually changing and growing. UMM is a friendly campus where students will come to know many fellow students and staff members on a first-name basis. Each person is not just another student, but an individual responsible for making his or her own decisions and using the many resources of the campus to make the most of her or his education.
Many of the services and extracurricular opportunities available at UMM are described in the following pages. Campus services from Financial Aid to Health Service support students during their college experience. Varied social, educational, and recreational programs extend learning beyond the classroom and provide a full range of night and weekend activities. Opportunities include participation in more than 85 student clubs and organizations where students write for the campus newspaper, deejay on the student radio station, and pursue interests from theatre to international affairs. Intercollegiate athletics, intramurals, club sports, and personal fitness opportunities are available for women and men, teams and individuals. Each of these services and activities enhances the UMM college experience. For the most complete listing of resources and student services on the Morris campus, see the UMM website at www.morris.umn .edu/CurrentStudents.

## Academic and Information Resources

## Briggs Library

Rodney A. Briggs Library occupies a position at the heart of the UMM campus from physical, virtual, and intellectual perspectives. Located just a few steps from the Student Center in the middle of campus, the library building houses more than 250,000 volumes, as well as journals, music scores, DVDs, CDs, videos, and other materials. More than 50 networked computers are available, with wireless access throughout the building. The library is also a federal documents depository and maintains a collection of children's books and materials to support UMM's highly rated teacher education program. In addition to housing the UMM Archives and West Central Minnesota Historical Research Center, the library includes a growing number of additional special collections (print and digital) to support historical and other specialized research. Extensive online resources are provided via the library's website. This site serves as the gateway to the library's more than 130 subscription databases and 30,000 online journals, and provides links to other scholarly resources. The library's interlibrary loan service has a high success rate of obtaining materials not available locally. Open 94 hours a week (with extended hours during exam weeks), the library provides a variety of quiet study areas as well as group activity space.

Briggs Library staff provide reference assistance in person, by phone, email, or instant message. The library also sponsors and co-sponsors a variety of events, discussion groups and programs that are popular with both the UMM and greater Morris communities.

## Computing Services

Computing Services supports UMM instructional, research, and administrative programs. It provides the UMM campus network, including wireless access points in all residence halls; central Internet, web, and email services; the computing help desk; and student labs with Macintosh and Windows computers. Some computer labs are open 24 hours a day during the academic year.
The Computing Services main facility is located in Behmler Hall 10. The help desk is in HFA 123.
Access to UMM computing facilities is free to all students. Software available on Computing Services' lab computers includes Internet utilities for email, web browsing, and web page creation; word processing, spreadsheet, and other office productivity programs; and academic discipline-specific tools, such as statistical packages and geographic information systems. All UMM students are granted email accounts and students may retain their University of Minnesota email accounts after graduating from UMM.
The University library's extensive online resources and student services are accessible directly from high-speed, switched ResNet network connections in every UMM residence hall room. Students can also use wireless networks in most buildings on campus.
Additional information is available online at the Computing Services website, www.morris.umn.edu/technology.

## Media Services

Instructional and Media Technologies supports the teaching, research, and outreach mission of the UMM campus by providing a wide range of instructional technology services. The department provides a one-stop shop for all faculty, students, and staff requiring instructional technology help. Primary services include user support for computer software, classroom technology support, instructional technology support of course management systems including streaming and podcasting modules for on-line courses, interactive video conferencing, and media production. Most general purpose classrooms are available for walk-in use and are equipped with computers, data projectors, screens, sound systems, and touch button control panels. A 12-station digital media lab is available for faculty teaching classes in studio art, broadcasting, and theatre scene design. The lab also is available to all UMM students who are interested in digital media production. Supported software includes Adobe Creative Suite, Final Cut Pro, iMovie, InDesign, Dreamweaver, PowerPoint, and other digital imaging programs. Instructional and Media Technologies offers campus-wide workshops and individual tutoring on the use of
these programs throughout the year. Individual accounts can be set up on the shared video server for storing and protecting large video files.
The department provides a pool of equipment for instructional use that includes Mac and PC laptop computers, data projectors, digital still and video cameras, and portable video production equipment. Students may check out this equipment on a short-term basis-at no cost-for use on class presentations and individual media projects.
Instructional and Media Technologies supports and maintains the interactive television network for the campus. Activities requiring the use of interactive video networks to connect with other networks worldwide can be requested through the department office.
Costs for media assistance and production services, except for consumable materials, are not charged to academic units, student organizations, and registered students engaged in instructional activities.
Instructional and Media Technologies is located In HFA 123. The technology help line phone number is 320-589-6150. For more information go to www.morris.umn.edu/media.

## Office of the Registrar

The mission of the Office of the Registrar is to provide a service-oriented environment that promotes and supports the academic goals of students, faculty, and staff in accordance with University and federal guidelines. The Office of the Registrar handles a wide variety of functions including degree clearance, transfer credit evaluation, registration, class scheduling, grades, transcripts, enrollment verification and certifications and all updates to the Academic Progress Audit System (APAS). Assistance is available on a walk-in basis, via the web, by telephone, or by appointment. The office is located at 212 Behmler Hall, 320-589-6030. The Office of the Registrar has a comprehensive website that provides current information at www.morris.umn.edu/registrar.

## Health and Wellness

 Resources
## Health Service

Health Service is an outpatient healthcare clinic providing service to UMM students. It is located in Clayton A. Gay Hall.
All students registered for six credits or more may use Health Service through a mandatory student health service fee paid with each semester's tuition and fees. Students have on-campus access to physicians and nursing staff, medical treatment, routine laboratory tests, immunizations, and some prescription drugs. All Health Service records are confidential.
Students should report emergencies and illnesses requiring a physician's care directly to Health Service. The student health service fee does not pay for medical or surgical inpatient services at a hospital.
Health insurance is required for students enrolled for six credits or more. For those students not covered by parents' policies or alternate coverage obtained elsewhere, UMM
offers an insurance policy. Health insurance coverage must be verified each semester or students are automatically enrolled in the student health insurance program.

## Student Counseling

Students face more than just academic challenges while attending UMM. Many of them face the passage into adulthood. Student Counseling at Morris helps students through this period of change on intellectual, physical, spiritual, emotional, occupational, and social levels. Counseling staff help students become aware of potential problems, pitfalls, and opportunities during this exciting, challenging, and sometimes difficult transition in life.
Students are offered short-term, personal counseling for personal concerns, or help with academic major and career decision-making. Many students use this service to share feelings and to discuss problems in a comfortable and confidential setting. All students are entitled to this service free of charge.
Student Counseling is committed to working closely with student leaders. In an advisory capacity, the counseling staff supports the resident advisers and Peer Health Educators. Peer Health Educators (PHE) are a select group of volunteer students who provide information and programs about physical, emotional, and sexual health and wellness issues to their fellow students. PHE meets in the Wellness Center on the ground floor of Gay Hall, next to the Health Service.
Student Counseling is UMM's testing center for institutional placement exams (mathematics and language), exams for credit (CLEP and DSST), and national undergraduate and graduate school admission or licensing exams (ACT, GRE Subject, MAT, LSAT, PCAT, and teacher certification exams [NTCA]). Questions regarding test registration and procedures can be answered by the staff. Student Counseling also provides clinical and personality testing inventories for UMM students.
Student Counseling staff also serve as a confidential resource for students who feel victimized by sexual, racial, or GLBT harassment. When students believe they have been harassed, they can speak to staff in a completely confidential and safe environment.

## Students With Disabilities

Because UMM is a small, student-centered college, it is a suitable choice for students with disabilities. Students with disabilities receive personal attention and are accommodated on an individualized basis.
UMM's Disability Services office is located in 360 Briggs Library. Along with the Academic Success Center, Disability Services provides support for students with physical, mental, and/or cognitive disabilities. Disability Services staff work with students to ensure that they receive appropriate accommodations and learn self-advocacy skills.
The UMM campus is a mixture of old and new structures, and some of the older buildings on campus are only partially accessible. All teaching facilities and the library, student center, administration building, and food service building are accessible and have elevators. Students requiring wheelchair
access to inaccessible buildings are served by faculty and staff at alternate locations. There is accessible living space in both conventional residence halls and campus apartments.
Students with disabilities are responsible for providing documentation and requesting accommodation far enough in advance for accommodations to be made. Persons with disabilities seeking assistance or information should contact Disability Services in 360 Briggs Library, 320-589-6163, or dsoaac@morris.umn.edu. Visit the Disability Services web page for more information at www.morris.umn.edu /services/dsoaac/dso.

## Diversity and Equity Resources

## International Student Support

The University of Minnesota, Morris provides a unique opportunity for international students by offering a rigorous, liberal arts experience with access to the research capabilities of one of the nation's most comprehensive university systems. Faculty members make student learning and development their highest priority, giving students a chance to develop close, collaborative working and learning relationships with their professors. The Center for International Programs provides academic and advising support for students on campus.
There are a wide variety of activities and clubs available to students while they are on campus. The International Student Organization, supported by both the Center for International Programs and the Multi-Ethnic Student Union, is a great place to start getting involved. A week-long orientation program takes place before the beginning of the fall semester to help international students plan their academic program, get settled in their housing, and begin to understand the culture of American society and west central Minnesota.

## Multi-Ethnic Student Program

The Multi-Ethnic Student Program (MSP) is dedicated to working with student affairs and academic offices to meet the specific concerns and needs of U.S. students of color. MSP was instituted in response to the educational and socioeconomic problems fostered by racism and prejudice in society. MSP works to ensure a stable, strong, and supportive environment for students of color by providing academic assistance and other quality student support services designed to improve opportunities to participate fully in the life of the University and to successfully transition from college to career.

## Resource Center for Gender, Women, and Sexuality

## Gay, Lesbian, Bisexual, Transgender, and Ally Resources

The Resource Center for Gender, Women, and Sexuality, located in the basement of the Multi-Ethnic Resource Center, is home to the Commission on Women, Queer Issues Committee, E-Quality, Morris Feminists, and Women of

Color. The center is staffed on a volunteer basis by students, faculty, and staff. The center has a computer, equipment for PowerPoint and other presentations, a comfortable meeting space, and a lending library with books, videos, and pamphlets.
The Queer Issues Committee, comprised of students, faculty, and staff, works to address systemic concerns of the gay, lesbian, bisexual, transgender (GLBT) community and provides a GLBT Ally training called Safe Zone.
E-Quality, UMM's GLBT and allied student organization, seeks to promote understanding of the GLBT community through social events, educational programs, and political activism. The group sponsors Coming Out Week in October and Pride Week in April, among other events and programs.

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## Commission on Women

The Commission on Women (CW) was founded in 1988 and seeks to strengthen the community by enriching women's working and learning environments and creating a campus environment that is respectful, inclusive, and productive for all University employees and students. Over the years, the CW has acted as a catalyst for women's equity and an advocate for fair treatment of women in academic and campus life. The CW partners with other campus programs and offices in promoting dialogue, challenging norms and values that demean or devalue women, and supporting constructive change. Notable achievements and activities include establishment of the Gender, Women, and Sexuality Studies major in 2001, annual Women's Week keynote speakers, significant grant awards to faculty, staff, and students related to research and programming that support the CW mission, and a variety of advocacy actions including staff gender balance and pay equity, development and recommendation of consistent and supportive backfill policies, coordination and support of campus and community resources for student parents, and an annual luncheon celebrating the accomplishments of UMM women. In addition to these ongoing efforts, the coordinator for the Commission represents the CW in the campus governance system, holding ex-officio membership on four of UMM's Campus Assembly committees. Additional information is available on the web at www.morris.umn.edu/comwomen.

## Students With Children

The Student-Parent Subcommittee of the Commission on Women was established to provide information and support to students who are also parents. The subcommittee's goal is to support these students in the challenging, sometimes
competing tasks of parenting and succeeding in college. The subcommittee works with area agencies to provide student parents with resources and programming, maintains a student parent website and email group, and hosts social activities to help students make connections with one another.
In 2008 student parents successfully gained recognition as a registered student organization: The Parent Pack. The group seeks to educate the campus about the needs of student parents, provide a safe atmosphere for family support, and act as an information and services resource.

## Student Life, Activities, and Engagement

## Residential Life

Living on campus at UMM means being part of an active living and learning community. Residence hall living gives students a unique opportunity to meet new friends and interact with a variety of people. Living on campus means being close to classes and facilities and encourages involvement in college activities. All residence hall rooms have direct, high-speed UMM computer network accesswith one connection for each resident. Wireless access is available in residence halls and in many locations across campus. Visit www.morris.umn.edu/wireless.
Variety makes living on campus attractive. UMM has five residence halls, ranging from small, traditional settings to larger, contemporary settings. Apartment living is also available in furnished, two-bedroom units designed for four students. Residential life at UMM includes the following options.
Clayton A. Gay Hall accommodates 235 students with 35 students living on each floor. There are two separate lounge areas and kitchenette-utility rooms on every floor. Gay Hall is coeducational by wing, floor, or alternating rooms and has open visitation.

## David C. Johnson Independence Hall (DCJI)

accommodates 250 students in double rooms with 20-30 students living in each wing. There are kitchenette-utility areas on each floor. DCJI Hall is coeducational by either alternating rooms or wings and has open visitation.
Pine Hall, known for its unique, private location near the Humanities Fine Arts building, houses 85 students. A kitchen and game room are located on the ground floor. All floors have an open guest policy and are coeducational by alternating floors.
Spooner Hall is a traditional-style residence hall. Designed to accommodate 90 upper level students, it features large rooms and a comfortable atmosphere distinguished by the Inner Lounge, which is noted for its charm and warmth. Spooner Hall is coeducational by alternate floors and has open visitation.
The apartment complex at UMM offers facilities for 284 upper level students. The four-person apartments have wall-to-wall carpeting, two double bedrooms, a kitchen-living room, and a private bath. They provide the flexibility of offcampus living arrangements with the convenience of being on campus.

Students living in the residence halls may choose to have single rooms, if space is available, at a slightly higher rate than that for double rooms. The residence halls are served by a central Food Service facility that is within easy walking distance. The apartments have cooking facilities in each unit.
For more information about on-campus housing, contact the Office of Residential Life, University of Minnesota, Morris, MN 56267-2134 or visit the UMM Housing website at www .morris.umn.edu/services/reslife.

## Student Center

The Student Center serves as a community center for UMM students, faculty, staff, alumni, and guests. The Student Center includes three primary gathering places: the Turtle Mountain Cafe, a popular location for lunch, studying, socializing, and meetings; Oyate Hall, a large multipurpose room with a fireplace lounge and panoramic view of the mall; and Edson Auditorium, home to many campus performances and events. In addition, the Student Center provides a campus information center, lounge and study space (including a 24hour student lounge and computer lab), offices and meeting places for student activities and organizations, the Academic Center for Enrichment, KUMM Radio, and other student focused programs and functions.
The facility is the center for cocurricular activity on the campus. The activities, events, and functions that take place in the Student Center-club meetings, concerts, conferences, forums, and world-class performances and lectures-enrich student life and are an integral part of the UMM experience.

## Student Activities

The Office of Student Activities coordinates and supports UMM's cocurricular social, educational, cultural, and recreational programs. It provides professional assistance to student organizations and is perhaps the single best source of information and technical expertise for individuals or groups of students who would like to get something done, see something happen on campus, or simply become involved. By participating in student organizations, UMM students develop leadership and organizational skills, meet new people, make a difference on campus, and have fun.
UMM has more than 85 student organizations, clubs, committees, and special interest groups. These organizations provide opportunities for involvement in the academic, social, cultural, religious, and recreational activities of the campus, as well as in local, national, and international issues. At the beginning of each year, UMM sponsors an Activities Fair that serves as a showcase for the many student organizations. The Activities Fair provides new students with an opportunity to meet students active in a particular organization and learn about the group's activities and events, gain an understanding of each organization's purposes and goals, and join the organizations that match their interests.
A complete list of student organizations is available online at www.morris.umn.edu/webbin/StudentActivities.

## Morris Campus Student Association

The Morris Campus Student Association (MCSA) exists to represent the interests of students on the Morris campus of the University of Minnesota. The central policy-making body of UMM, the Campus Assembly, consists of faculty, staff, and elected student representatives. These students, along with other elected or appointed student representatives, form the student government, the MCSA Forum. The Forum provides most of the recommendations for student membership on campus committees. It is the major source for expressing student opinion and initiating legislative action to promote and protect student interests. First-year students can become involved in the MCSA through the First-Year Council.

## Campus Activities Council

The Campus Activities Council (CAC) is the major activities and events planning organization on the UMM campus. Through funds provided by the Activities Fee, CAC offers a wide variety of cultural, social, recreational, and educational programs. CAC events range from professional music, theatre, and dance performances to an annual lecture series, free weekly films, stand-up comedy, live music, and communitybuilding activities. Each year CAC works to "bring the world to UMM."
Involvement in CAC may range from attending and enjoying a variety of events to becoming an active member of any of the five student committees: Concerts, Performing Arts, Homecoming and Traditions, Films, and Convocations (lectures). Each committee selects, organizes, and promotes events in its program area. Committees also work with other campus organizations to present special events.

## Campus Media

KUMM-the U-90 Alternative (89.7 FM) and The University Register provide the campus community with campus news, information, student opinions, and entertainment. KUMM broadcasts alternative radio 7 days a week, 24 hours a day during the academic year. The student newspaper, The University Register, is published weekly throughout the academic year and is available in campus news boxes or online. KUMM and The University Register are student-run organizations staffed by hundreds of dedicated volunteers.
The Counterweight, a monthly conservative student
publication, began publishing on campus in 2004.

## Office of Community Engagement

The Office of Community Engagement provides students with many opportunities to get involved in the regional and broader community. Students interested in working with community members on projects that benefit the community can do so in a number of ways, from group to individual projects, one-time to ongoing projects, and work that incorporates everything from direct service to community building to research. The office sponsors monthly and annual service events, a dialogue series about community issues, service-learning courses in many disciplines on campus, and projects tailor-made for specific individual students, residence hall floors, athletic teams, or student organizations. Office staff can help students choose and develop opportunities that make the most sense given their interests, skills, goals, and majors/minors.

## Campus Events and Activities

In addition to the activities presented by the Campus Activities Council, a variety of other options for cultural enrichment and entertainment are available. A large number of student organizations and residence hall groups organize events and programs of their own. The UMM symphonic winds, choirs, jazz ensembles, and theatre also present outstanding performances.
Several week-long themes are addressed through a variety of program activities on campus each year. Early in the fall, Homecoming activities include the traditional football game, a dance, and more. The Morris Feminists student organization addresses women's issues and recognizes women's accomplishments during Women's Week. Black History Month and Cultural Heritage Week focus campus attention on the issues, accomplishments, culture, history, and art of U.S. people of color.

## Fine Arts Programs

The Campus Activities Council (CAC) Performing Arts Series sponsors several performances by artists of national and international stature each year. In addition to the dance, music, and theatre series, CAC and the UMM Jazz Ensembles cosponsor the annual spring Jazz Festival featuring professional guest artists and jazz at its finest.
The UMM studio art and art history faculty arrange regular exhibits in the Humanities Fine Arts (HFA) Gallery during the year. These exhibits include original works of artists from many periods and mediums, as well as paintings, drawings, prints, and sculptures by UMM students and faculty.
University theatre students and faculty produce classical and contemporary plays each semester during the academic year. In addition, the Meiningens, a student group dedicated to providing theatre experience for its members, offers dramatic productions.
Concerts are scheduled throughout the year by the UMM Symphonic Winds, University Choir, Concert Choir, and Jazz Ensembles. Student and faculty recitals-vocal and instrumental-are scheduled frequently for student and community enjoyment.
Displays of rare books are exhibited in the library. Included are general and specialized exhibits of books ranging from the medieval period to modern times.

## Sports and Recreation

Recreational activities and organized sports are important features of life at UMM. Intercollegiate and intramural athletic programs contribute to participants' general education. Opportunities for personal fitness, recreation, and team competition include state of the art fitness facilities in the Regional Fitness Center, intercollegiate and club sports, intramural leagues, wellness and sports science courses, and indoor and outdoor recreation clubs. Through these athletic and recreational experiences, students have the opportunity to improve their level of personal fitness. The staff in
wellness and sport science, intramurals and recreation, and the Regional Fitness Center are dedicated to helping each individual participant realize this goal.
Intercollegiate Athletics-UMM is an NCAA Division III member of the Upper Midwest Athletic Conference. The UMM Cougars compete in eight sports for men and nine sports for women. Men's varsity sports include cross country, soccer, football, golf, basketball, baseball, tennis, and track and field. Women's varsity sports include soccer, cross country, volleyball, golf, basketball, softball, swimming and diving, tennis, and track and field.
Intramural Sports-Men's, women's, and coed intramural leagues are offered each semester in a variety of sports including flag football, basketball, volleyball, slow pitch softball, kickball, and badminton. Weekend tournaments and opportunities for individual competition typically include 3 -on-3 basketball, disc golf, tennis, 4-on- 4 basketball, and the annual Tinman Triathlon.
Sports Clubs-A number of sports clubs have been organized as a result of student-faculty interest. Men's and women's rugby, ultimate Frisbee, fencing, karate, and ground quidditch have many enthusiastic members. Many of the clubs travel to other colleges and host tournaments at UMM.
Regional Fitness Center-The Regional Fitness Center's recreation and fitness facilities serve members of the UMM and surrounding communities. Cardio and state-of-the-art strength machines, water and land group fitness classes, aerobics courses, court time, and a walking/running track offer year-round indoor recreation and fitness opportunities. Swimmers and divers of all levels can spend many hours in the regulation NCAA/AAU pool, diving tank, or warm water pool.
UMM students registered for six credits or more are members of the Regional Fitness Center through a student fee paid each semester with tuition and fees. Students, faculty, and staff are encouraged to use the Regional Fitness Center and Physical Education Center facilities.
Students in residence halls have access to recreation facilities, including sand volleyball courts, pool tables, and table tennis.
Finally, for outdoor enthusiasts, there are excellent recreational facilities for fishing, hunting, boating, and skiing within a few miles of the Morris campus. An outdoor recreation club is active on campus.

## Alumni Association

The UMM Alumni Association offers students opportunities for networking with alumni across the United States and around the world. Alumni often are willing to assist students in locating internships and jobs and to offer advice about the "real world."
UMM students have access to the publication Profile, which is produced by the UMM Office of External Relations in cooperation with the UMM Alumni Association.
Students can visit the UMM Alumni Association at 106 Welcome Center, or on the web at www.morris.umn.edu /alumni.

## Campus Safety and Security

UMM's campus safety and security programs cover the academic buildings, residence halls, student service facilities, and campus grounds. UMM Campus Police emphasize crime prevention by minimizing crime opportunities and encouraging students and employees to be responsible for their own and others' security. Campus safety programs include violence prevention programming, annual training on security measures and emergency/crisis management for residence life staff, regular lighting surveys of exterior campus lighting, and 24 -hour access phones in public areas within campus buildings and parking areas.
UMM publishes an annual Campus Safety and Security Report in compliance with federal legislation, now known as the Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act. This legislation requires all public and private colleges receiving federal financial aid to provide annual information on campus safety services, crime reporting and the University's response, data regarding crimes occurring on campus, and relevant policies and procedures. The report is available online at www.morris .umn.edu/services/police.

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## College Regulations <br> Grading and Transcripts

The complete University Senate grading policy can be found online in the University's Policy Library at http://policy.umn.edu. More information about transcripts can be found online at www.morris.umn.edu/services/registrar/transcript.php.

| Grading Policy |  |
| :---: | :---: |
| A ..........4.000..........Represents achievement that is outstanding relative to the level necessary to meet course requirements. |  |
| A-......... 3.667 |  |
| B+........ 3.333 |  |
| B...........3.000........... Represents achievement that is significantly above the level necessary to meet course requirements. |  |
| B-......... 2.667 |  |
| C+......... 2.333 |  |
| C..........2.000..........Represents achievement that meets the course requirements in every respect. |  |
| C- ..........1.667 |  |
| D+.........1.333 |  |
| D...........1.000.......... Represents achievement that is worthy of credit even though it fails fully to meet the course requirements. |  |
| S.................................Represents achievement that is satisfactory (equivalent to a $C$ - or higher. The $S$ does not carry grade points and is not included in GPA calculations, but the credits count toward the student's degree program if allowed by the department. |  |
|  credit, or was not completed and there was no agreement between the instructor and student that the student would be awarded an I. Academic dishonesty is grounds for an F or N for the course. The F carries 0.00 grade points and is included in GPA calculations; the $N$ does not carry grade points and is not included in GPA calculations. (At the Morris campus if the student receives the penalty of an " F " grade in the course, the student cannot withdraw from the course.) |  |
| I.................................Incomplete, a temporary grade that indicates coursework has not been completed. The instructor assigns an I when, due to extraordinary circumstances, a is prevented from completing coursework on time. (At the Morris campus the student must have successfully completed a substantial portion of the course's work) An I requires a written agreement between the instructor and student specifying the time and manner in which the student will complete the course requirements during the student's next term of enrollment. For undergraduates and non-degree seeking students, work to make up an I must be submitted within one year of the final examination; if not submitted by that time, the I will automatically change to an F (if A-F registration) or N (if S-N registration). The instructor is expected to turn in the new grade within four weeks of the date work is submitted. When an I is changed to another symbol, the lis removed from the record. Once an I has become an F or N, it may be converted to any other grade by petition of the instructor (or department if the instructor is unavailable). |  |
| K.............................. Indicates the course is still in progress and a grade cannot be assigned at the present time. |  |
| NG ...........................No grade required. |  |
| T............................... Transfer credit or test credit. |  |
| V.............................Visitor, indicates registration as an auditor or visitor; does not carry credit or grade points. |  |
|  | ... Withdrawal, indicates a student has officially withdrawn from a course. If a student withdraws from a course during the first two weeks of classes, that course registration is not recorded on the student's transcript. Withdrawal in the seventh (eighth week at the Morris campus) or later week of classes (fourth or later in summer terms) requires college approval. Each student may, once during his or her under-graduate enrollment, withdraw from a course without college approval, and receive a W, at any time up to and including the last day of class for that course. |
| $\qquad$ | ... Indicates a student may continue in a sequence course in which a grade cannot be determined until the full sequence of courses is completed. The instructor submits a grade for each $X$ when the student completes the sequence. |

1. This policy became effective in the fall of 1997 for the Crookston, Morris, and Twin Cities campuses, replacing all previous grading policies. It may not be applied retroactively to any grades or symbols awarded before that time.
2. The University has two grading systems, A-B-C-D-F (with pluses and minuses) and S-N. Students may receive grades only from the grading system under which they have registered for a course. For undergraduates, an S grade is equivalent to a C - or higher.
Each campus, college, and department determines to what extent and under what conditions each grading system is used, may specify what courses or proportion of courses must be on one system or the other, and may limit a course to either system.
3. When both grading systems are available, students must choose one when registering for a course.
4. Instructors must clearly define for a class, at one of its earliest meetings, the performance necessary to earn each grade or symbol.
5. No student may receive a bachelor's degree unless at least 75 percent of the degree-qualifying residence credits carry grades of $\mathrm{A}, \mathrm{B}, \mathrm{C}$, or D (with or without pluses or minuses). Each campus, college, and department may choose not to accept academic work receiving a $D$ (with or without a plus or minus).
6. The University's official transcript, the chronological record of the student's enrollment and academic performance, is released by the University only at the student's request or in accord with state or federal statutes; mailed copies include the University's official seal printed on them.
7. The University calculates a grade point average (GPA) for each student, both at the end of each grading period and cumulatively. GPA is calculated as the ratio of grade points
earned divided by the number of credits earned with grades of A-F (including pluses and minuses). Transcripts report the periodic and cumulative GPA for each term.
8. A student may repeat a course once. Both grades for the course appear on the transcript, but the course credits may not be counted more than once toward degree and program requirements. Only the last enrollment for the course counts in the student's grade point average.
9. Students may petition UMM's scholastic committee or other appropriate body about this policy up to one calendar year after the grade was assigned.
10.The grades on the previous page (with grade points as indicated) and symbols are used on transcripts.

## Academic Dishonesty

Academic dishonesty in any portion of the academic work for a course shall be grounds for awarding a grade of F or N for the entire course.

## Academic Transcript

The transcript is the chronological record of the student's enrollment and academic performance. The University of Minnesota campuses share a student records computing system, which includes course information from all of the University of Minnesota campuses the student has attended. Coursework is displayed in a manner consistent with policy as well as with the unique policies of the college of registration. Transfer work is noted with the name of colleges or universities attended and the total number of credits accepted in transfer by the University.
In compliance with the federal Family Educational Rights and Privacy Act, transcript requests must contain the student's signature. Transcripts will not be issued without the student's proper authorization. Grades cannot be given to the student by telephone. Students must have met all financial obligations to the University before official transcripts can be released for any purpose.
More information including cost, request forms, and instructions are available on the web at www.morris.umn .edu/services/registrar/transcript.php. Questions can be directed to the Office of the Registrar at 320-589-6030.

## Classes, Schedules, and Final Examinations

## Mandatory Attendance at First Class Session

Students must attend the first class meeting of every course in which they are registered, unless they obtain prior approval from the instructor for an intended absence before the first class meeting; without such prior approval, a student may lose his or her place in the class to another student.
If a student wishes to remain in a course from which he or she has been absent the first day without prior approval, the instructor should be contacted as soon as possible. In this circumstance, instructors have the right to deny admission to the class if other students have been admitted and the course is full. Instructors are encouraged, however, to take
into account extenuating circumstances (e.g., weather) which may have prevented a student from attending the first class. Absence from the first class session that falls during a recognized religious holiday (e.g., Rosh Hashanah) does not require instructor approval, but the instructor must be notified of the absence and the reason; in this instance, the place for the student will be retained.
Students must officially cancel any course for which they have enrolled and subsequently have been denied admission. Instructors have the discretion to fail any student who does not officially cancel a course.

## Class Attendance

In addition to officially sanctioned excuses, an instructor may excuse a student for any reason the instructor deems acceptable. Instructors have the responsibility of informing their classes of attendance policies.
Students should not be penalized for absences due to unavoidable or legitimate circumstances. Such circumstances include, but are not limited to, verified illness; participation in group activities sponsored by the University, including athletic events; serious family emergencies; subpoenas; jury duty; military service; and religious observances. It is the responsibility of the student to notify faculty of such circumstances as far in advance as possible and to obtain an official excuse.
At UMM, official excuses, which faculty are obligated to honor, are available from either the Health Service, in the case of verifiable illness, or the Office of the Vice Chancellor for Student Affairs, in the case of a personal and family emergency or when the student is performing a function in the interest of the University. Even in these cases students remain responsible for making up the work that they have missed and faculty are responsible for making a reasonable effort to assist students in completing work covered during excused absences.

## Standard Class Schedule and Class Period

A standard class schedule at the University of Minnesota, Morris consists of 65 -minute classes on Monday, Wednesday, Friday (MWF) or 100-minute classes on Tuesday, Thursday (TTh) with an appropriate change period between classes. Classes of longer than 65 or 100 minutes are permitted, subject to University Senate policies governing the relationship between contact hours, credits, and student workload.
Examinations during the term (e.g., mid-terms) may be given only during the regular class sessions; they may not be held at times other than the regularly scheduled class period, subject to the following conditions:

- Exceptions may be made by instructors only for the purpose of giving make-up examinations.
- Any examinations outside of regular class time during the term must be approved by the vice chancellor for academic affairs and dean.
- Any examinations to be held outside of regular class time must be listed on the final exam link found on the registration website.
- Accommodation must be provided to any student who encounters an academic conflict, such as between an examination scheduled outside of regular class time and the regular class period of another course, or if two exams are scheduled to be held simultaneously outside of regular class time.
- Take-home examinations are specifically exempted from this policy.


## Overlapping Classes

No student is permitted to register for classes that overlap. Classes that have any common meeting time are considered to be overlapping, as are any back-to-back classes that have start and end times closer together than 10 minutes.
Only under extenuating circumstances are petitions for overrides for such conflicts permitted; these petitions require the signatures of all faculty members involved. The decision to approve or disapprove such an override petition is entirely discretionary with each faculty member involved. Approved "time conflict" petitions must be submitted in person to the Office of the Registrar.

> Class Schedule-The online Class Schedule lists course offerings with class times, rooms, instructors, and prerequisites. The Class Schedule is available online at www.morris.umn.edu/services/registrar /register.html.

## Final Examination Policy

The examination week is part of the regular school year and must be taken into account by students in planning for any other activities or work outside of school hours. The final examination schedule is on the registration website. Final examinations for summer session are scheduled during the regular meeting time of the course on the last day. Students are expected to know the times for their final examinations and to attend the examinations as scheduled.
Students who have final examinations scheduled at conflicting times, or who have three or more examinations in one calendar day, should contact the Office of the Vice Chancellor for Academic Affairs and Dean. Students are expected to make the appropriate rescheduling arrangements with the instructors by the end of the second week of the term so that conflicts are eliminated well in advance of the final examination period. Instructors must agree to give an alternative final examination to these students.
Instructors are not permitted to hold their final examinations ahead of the regularly scheduled time except under unusual circumstances and by approval of the appropriate division chairperson. These regulations, which require faculty to abide by the final examination schedule, are not, however, intended to prohibit faculty from accommodating the special needs of students by offering examinations at other times. If a final is given at another time, faculty should also offer a final at the scheduled time.
According to the Senate Committee on Educational Policy, the final exam is the last exam of the term, whether or not that exam is cumulative. The intent of the rule is to avoid having
significant exams during the last week when out-of-class work would also normally be due. Faculty may not schedule an exam in the last week of class in lieu of an exam in the finals week. Thus, while a unit exam during the last week of class plus a cumulative final during final's week is discouraged, it would be acceptable. Additionally, lab practicums may be given during the last week of classes. Term papers, take-home tests, and other out-of-class work that is assigned before the last week of class can be expected to be due the last day of the regular class. The rule also seeks to exclude take-home final exams being handed out and due during the last week-which, in effect, would be the same as having a final exam the last week. Ideally, faculty would accept out-of-class work on the day of the scheduled final exam, if no final exam is scheduled.
It is University policy to prohibit classes, Universitysponsored trips, or extracurricular events on study day and during the final examination period. Under certain rare circumstances, exceptions to the prohibition on trips or events are possible. An exemption granted pursuant to this policy shall be honored and students who are unable to complete course requirements during final examination period as a result of the exemption shall be provided an alternative and timely means to do so. For more information on the process of requesting an exemption, refer to www.policy.umn.edu /Policies/Education/Education/EXAM.html or contact the Scholastic Committee at ext. 6011 or 204 Behmler Hall.

## Repeating a Course

Credit will not be awarded twice for the same or an essentially equivalent course. Students may repeat a course once. However, students who receive a grade of S, C, or better may repeat a course only if space permits. When a student repeats a course, 1) both grades for the course will appear on the official transcript, 2) the course credits may not be counted more than once toward degree and program requirements, and 3 ) only the last enrollment for the course will count in the student's GPA. Transfer courses from other University of Minnesota campuses that are the same or essentially equivalent courses may be considered repeat courses for purposes of grade replacements. Introductory courses from within the University system are reviewed by the transfer specialist with faculty consultation. Advanced courses must be approved by the faculty in the discipline of the course.

## Special Ways to Earn Credit or Demonstrate Proficiency

## Examinations for Credit

Credit for acquired knowledge that is comparable to the content of specific University courses may be obtained by special examination. Special examinations for credit may provide official University recognition for a variety of previous educational activity (classes at unaccredited, international, private proprietary, vocational/technical, or armed services schools; certificate learning; foreign study or travel; noncredit-based transfer work; training programs; job experience; independent preparation). The examination administered by a department may be a typical final
examination, an oral test, written papers or projects, or any other combination of work that satisfies the examiners that the student has adequately achieved the values of the course. Special examinations do not allow credit for high school-level courses or for reading, writing, or speaking a native language at the introductory or intermediate level.
Minimum standards for awarding credits by examination are determined by the academic department giving the examination. No department is required to give examinations for credit.
Credit by special examination falls under the jurisdiction of the Scholastic Committee. Assistance with determining eligibility and completing the Request for Special Examination form is available at the Scholastic Committee Office, 320-589-6011. An appropriate faculty member will be contacted to give the examination. Faculty are encouraged but are not required to support the request. The discipline giving the examination determines the material to be covered. Students have the right to review course syllabi or course texts prior to taking the examination. When the request is approved, a special nonrefundable fee is paid before the examination is given. Additional information is available at http://policy.umn.edu/Policies/Education/Education /DEPTCREDITEXAM.html.
Credits earned by examination do not count as resident credit. The instructor reports the results to the Office of the Registrar on the Request for Special Examination form.
A student must do "C-" quality work on the examination to earn credit; a notation is then placed on the transcript showing the course and credits earned. The grade will appear on the transcript as " T " designating "test credit" and will not count in the GPA. If the student fails to do "C-" quality work on the examination, no notation is made on the transcript.

## Portfolio Evaluation

This method of evaluation involves faculty review of a portfolio in which the student translates prior learning experiences into educational outcomes and documents those experiences for academic credit. A special fee is required. For more information, contact the Scholastic Committee Office, 320-589-6011.

## Placement Examinations

Placement examinations in math, French, German, and Spanish are administered by the Counseling Office, require no fee, and yield no credit or grade. These examinations may be taken by appointment. Proficiency examinations in other languages are arranged through the Scholastic Committee Office, 320-589-6011.

## Nationally Administered Examinations for Credit

The Scholastic Committee, with the concurrence of the appropriate discipline, recognizes and awards credits based on nationally administered examinations that are taken as part of the Advanced Placement (AP) Program, the College Level Examination Program (CLEP), and the International Baccalaureate (IB) Program. Qualifying scores are established by the Scholastic Committee based on all-

University policy. The national examinations are reviewed every five years. The Scholastic Committee has approved the use of AP, CLEP, and IB credits in the General Education Requirements; faculty have approved the use of CLEP and AP credits in specific majors.

## Advanced Placement Examinations

Entering freshmen may receive credit in more than 30 subjects for qualifying scores of 3 or higher on Advanced Placement examinations. Nonresident credit is awarded when UMM processes an official report from the AP Program. Students who have taken AP examinations should submit an official transcript of their scores to the Admissions Office. Entering freshmen who seek credit or advanced placement through evidence other than the AP scores should contact the Scholastic Committee Office, 320-589-6011.

## CLEP

Registered students are awarded credit for obtaining satisfactory scores on the nationally standardized CLEP general examinations. These credits may be counted toward the 60 -credit liberal arts requirement and the 120 credits required for graduation. CLEP credits do not satisfy the residency requirement. Four of the CLEP general examinations may be taken for credit: Humanities, Mathematics, Natural Sciences, and Social Science. To earn credit, a student must attain national qualifying scores.
The CLEP general examinations are available to freshmen during freshman orientation week and by arrangement. Students may sign up for examinations by contacting Student Counseling. A fee is charged.
Students may also earn credit by successfully passing the CLEP subject examinations, which measure achievement in specific college courses. There are more than 30 CLEP subject examinations covering the content of a variety of courses ranging from Spanish to psychology. UMM allows credit for most. A special fee is charged. To earn credit a student must attain the national qualifying score, based on a norm group of college students who have already passed the course for which the examination is intended. A chart of subject examinations and qualifying scores can be found at www.morris.umn.edu /Scholastic.
If a student has earned or is registered for college credits in the area of the examination before taking it, he or she receives only the difference between these credits and the credit maximum permitted. If a student has previously earned and/or is registered for more credits than the area of the examination awards, no credit is given for successful completion of the test. However, a student is permitted to receive credit for courses taken after successful completion of a CLEP examination in a particular subject area.
Students who have taken CLEP examinations elsewhere should submit an official transcript of their scores to the Office of the Registrar, to be processed for appropriate credit allocation. Students are notified of scores received and credit granted.

## International Baccalaureate

Students who complete an international baccalaureate (IB) diploma with a score of 30 or higher and have no examination scores lower than 4 are awarded 8 credits for each of three higher-level examinations, plus 2 credits for each of three subsidiary exams, for a total of 30 credits. No credit is given for subsidiary-level exams other than those included as part of the IB diploma, but students may receive credit for any higher-level exams with a score of 5 or higher. The Scholastic Committee has approved use of IB credits to meet specific general education requirements. Use of IB credits in the major is determined through discussions between students and faculty in each major. To receive credit, students who have completed IB examinations should provide an official record of their scores to the Office of the Registrar.

## Military Service School Experience

UMM does not grant college credit for military service. The Scholastic Committee does, however, grant credit for military service school experience when formal training courses have substantial liberal arts content and have counterparts in the normal liberal arts curriculum. In evaluating such training, the Scholastic Committee uses the Guide to the Evaluation of Educational Experiences in the Armed Forces published by the Commission on Accreditation of Service Experiences of the American Council on Education. To obtain credit, a student must verify the service school attendance as well as successful completion of the work for which credit is requested. For more information, contact the Scholastic Committee Office, 320-589-6011.

## Organizational Sponsored Instruction

The University of Minnesota, Morris may grant credit for formal educational programs and courses sponsored by noncollegiate organizations if they have substantial liberal arts content and have counterparts in the normal liberal arts curriculum. In evaluating such training, the Scholastic Committee uses the Guide to Educational Programs in Non-Collegiate Organizations of the American Council on Education and similar guidelines published by other national agencies. To obtain credit, a student must verify successful completion of the work for which credit is requested. For more information, contact the Scholastic Committee Office, 320-589-6011.

## Academic Progress Requirements

The minimum academic progress requirements are based on two measures: the cumulative GPA measures performance over time; the term GPA measures performance within the term. The authority for administering the requirements and taking necessary action rests with the Scholastic Committee. (The Financial Aid Office monitors separate financial aid Satisfactory Academic Progress [SAP] requirements. For more information, see www.morris.umn.edu/financialaid /academicprogress.)
All students must maintain both a 2.000 cumulative GPA and a 2.000 term GPA to be in good standing.

## University of Minnesota Probation and Suspension Policy

For more information, see policy.umn.edu/Policies /Education/Education/ACADPROBATION.html.

## Probation

- A student will be placed on probation (and will remain on probation) if either the term or the cumulative GPA is below 2.000. A student on probation will have a hold placed on his or her record and must see an adviser in order to register.
- Academic contract. Colleges may develop contracts specifying additional requirements that students enrolled in that college must meet to be removed from probation or to register for classes while on probation. The academic contract may include GPA expectations more rigorous than the 2.000 term and cumulative GPA minimum standard, where programmatically warranted and where clearly communicated to the student. If the student meets the conditions of the contract, and the term and cumulative GPA are at least 2.000, the student will be removed from probation. Even if the contract conditions are met, the student must still meet the minimum GPA requirements of this policy. If the conditions of the contract are not met, the student will be suspended.
Students on probation return to good standing by earning a term GPA and cumulative GPA of 2.000 .


## Student Alert Systems

UMM's Academic Alert/At Risk Student Intervention Team, working in collaboration with the Scholastic Committee, provides broad-based support for student success at UMM. The team coordinates intervention strategies and support for students who are at risk academically, working with faculty and staff from a variety of UMM programs.

## The Official University Policy

1. Instructors are required to provide mid-term alerts for all 1XXX courses to students who, on the basis of performance to date in the course, appear to be in danger of receiving a grade of $\mathrm{D}, \mathrm{F}$, or N . Such notification will be provided no later than the seventh week of class, and earlier if possible, to allow students to improve their classroom performance or to withdraw by the eighth week. Midterm alerts will not be recorded on transcripts.
2. Instructors are encouraged to provide mid-term alerts for all other courses.
3. The provision of mid-term alerts is a courtesy to the student. Failure to receive a mid-term alert does not create the right for a student to contest a grade in a course.
UMM faculty are encouraged to alert all students in their classes who are earning a C- or less. The University has provided a web-based system to notify students and their advisers, but other methods of notification may be used. For additional details about the alert system, see policy.umn.edu/Policies/Education/Education /MIDTERMACADPERFORMANCE.html and www.morris .umn.edu/Scholastic/AcademicAlert/AboutAlerts.html.

## Exemption From Regulations

Students having difficulty meeting academic regulations should contact the Scholastic Committee Office, 320-589-6011. The Committee acts on exceptions to requirements in the General Education Requirements (GER) and to policies governing grading, cancel/add, and credit limits. For exceptions in the major, students should consult discipline faculty.

## Grievance Procedures

Students with complaints about an instructor or criticisms about course content, procedures, or grading should, in almost all instances, bring the matter directly to the instructor. Where this is clearly inappropriate or when such action does not bring about a mutually satisfactory solution, the student should take the problem to the chairperson of the division administratively responsible for the course (see the Academic Division Structure section). The chairperson will attempt to resolve the matter informally.
Students may bring academic complaints regarding the University's provision of education and academic services affecting their role as students. Such complaints must be based on a claim that there has been a violation of a University rule, policy, or established practice. UMM procedures for handling student academic complaints are available through the UMM Office of the Vice Chancellor for Academic Affairs and Dean and at www.morris.umn.edu /services/acad_affairs/aavarious.html. Resolution of complaints under this policy may include reinstatement or corrective action for the benefit of the student, including refunds, but may not award monetary damages or direct disciplinary action against any employee of the University. Other issues, such as concerns related to University employment and University admissions decisions, do not fall under the student academic complaints policy. This policy does not limit the University's right to change rules, policies, or practices related to the provision of academic services and education.

## Equal Opportunity

The University of Minnesota shall provide equal access to and opportunity in its programs, facilities, and employment without regard to race, color, creed, religion, national origin, gender, age, marital status, disability, public assistance status, veteran status, sexual orientation, gender identity, or gender expression.
Inquiries regarding compliance may be directed to:

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U of M Office of Equal Opportunity and
Affirmative Action
274 McNamara Alumni Center, 200 Oak Street S.E.
Minneapolis, MN 55455
612-624-9547
Website: www.eoaffact.umn.edu
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UMM Office of Human Resources/Equal Opportunity and Affirmative Action
306 Behmler Hall, 600 East 4th Street
Morris, MN 56267
320-589-6024
Website: www.morris.umn.edu/services/hr /EqualOpportunity.html
Students may seek confidential assistance from student counseling:

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Student Counseling
235 Behmler Hall, 600 East 4th Street
Morris, MN 56267
320-589-6060
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Faculty and staff may seek confidential assistance from the Employee Assistance Program:

Steven's Community Medical Center, Behavioral Medicine
400 East 1st Street,
Morris, MN 56267
320-589-1313
Please contact UMM Campus Police immediately if a crime has been committed at 320-589-6000.

## Disability Accommodation

To request disability accommodation or to request these materials in alternative formats, please contact UMM Office of Human Resources/Equal Opportunity and Affirmative Action, 306 Behmler Hall, 600 East 4th Street, Morris, MN 56267, 320-589-6024.

## Bias Incidents

Members of the University of Minnesota community have the right to be free from discrimination by any agent or organization of the University for reasons of actual or perceived race, color, creed, religion, national origin, gender, identification, age, marital status, disability, public assistance status, veteran status, and/or sexual orientation. The University of Minnesota, Morris does not tolerate such incidents and will seek resolution of such matters.
Any student, acquaintance of a student, or group within the University community who has experienced bias, discrimination, or hostility, should report it by completing the University Bias/Discrimination/Harassment Reporting form at www.eoaffact.umn.edu/services/biasreportform.html.

## For More Information

For more information and resources, see the UMM website for reporting and responding to bias incidents and hate crimes at www.morris.umn.edu/services/hr/Bias_Incidents.htm.

## Academic Integrity and Student Disciplinary Action Procedures

The Board of Regents has adopted a University-wide Student Conduct Code that specifically prohibits scholastic dishonesty; disruptive classroom conduct; falsification; refusal to identify and comply; attempts to injure or defraud; threatening, harassing, or assaultive conduct; disorderly conduct; illegal or unauthorized possession or use of weapons; illegal or unauthorized possession or use of drugs or alcohol; unauthorized use of University facilities and services; theft, property damage, and vandalism; unauthorized access; disruptive behavior; hazing; rioting; violation of University rules; and violation of federal or state law. The Student Conduct Code is available through the University Policy Library at www.umn.edu/regents/policies/academic /Student_Conduct_Code.html.
The UMM Campus Assembly has enacted policies and procedures to maintain a climate of academic integrity and responsible behavior on the Morris campus. These policies and procedures are governed by a Committee on Academic Integrity and a Student Behavior Committee.
The major objective of the disciplinary system at the University of Minnesota, Morris is to maintain standards of conduct and order commensurate with the educational goals of the institution. These procedures help students understand and accept the consequences of their behavior in relation to themselves and others. The procedures are designed to guarantee the rights of the accused and to protect the welfare of all members of the University community.

## Student Behavior Committee Disciplinary Action

On the Morris campus, formal disciplinary action is the responsibility of a faculty-student committee of the Campus Assembly. The constitution of the University of Minnesota, Morris makes explicit the role of the Student Services Committee in oversight, consistent with the regents policy, of student conduct processes on the Morris campus. To meet these responsibilities, each year the chair of the Student Services Committee appoints a Student Behavior Committee consisting of three students and three faculty. One of the three faculty serves as a voting chair. A nonvoting administrative secretary is appointed by the chancellor.

## Administrative Disciplinary Action

It is desirable that some instances of student misconduct be settled directly within the appropriate administrative unit. These persons and agencies investigate allegations of misconduct and work with the concerned parties to reach an administrative resolution of the dispute whenever possible. If at any time the accused party requests a formal hearing process, the issue can be referred to the Student Behavior Committee. Where disciplinary action taken by administrative units is involved, the accused to the dispute can, for cause, appeal decisions to the Student Behavior Committee.

## Student Academic Integrity

Scholastic honesty is of fundamental importance to the functioning of any community of scholars. Although the pursuit of knowledge is always a communal project, individual academic achievement must be the result of a person's own efforts and abilities. Members of an academic community are responsible for their own personal and academic development and for fostering an academic climate in which all members draw from and give back to the community. The University is charged with implementing those policies that will help bring about such an academic climate. However, the ultimate responsibility for creating a community of scholars, in which mutual self-respect flourishes, lies with the individual members of the community. Each member must, therefore, act according to the highest standards of academic honesty.
Academic honesty entails producing original work, accurately attributing authorship, and acknowledging the work of others, including the work of collaborators, when appropriate. Academic honesty extends to behavior that supports the academic honesty of others. The integrity of an academic community demands that students and faculty alike display honesty, trust, fairness, respect, and responsibility.
The maintenance of academic integrity is a joint student and faculty responsibility. The procedures in the link below apply to all academic work pursued at the University, including work submitted to fulfill course requirements (both in- and out-of-class work), as well as independent academic endeavors. These include but are not limited to inclass examinations, quizzes, tests, laboratory tests, reports, laboratory reports, "take-home" examinations, research projects, papers, art work, internships, and assistantships. It is incumbent upon course instructors assigning work to be submitted in fulfillment of course requirements to explain, either verbally or in the course syllabus, what constitutes academic dishonesty and plagiarism. Any special conventions regarding quotation, paraphrasing, footnoting, use of outside materials, collaboration, and related matters shall be carefully explained by the instructor.
The linked procedures below are for addressing academic integrity violations, including securing evidence of violations, reporting violations, and adjudicating disputes about academic integrity. These procedures are designed to secure both the rights of students to due process, as well as the authority of faculty members and university administrators to enforce standards of academic integrity.
Procedures for academic integrity violations are available at www.morris.umn.edu/Scholastic/AcademicIntegrity /AIProcedures7-21-2011.pdf.

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## Academic Information

UMM is committed to providing as many learning opportunities for students as possible. The faculty are dedicated not only to teaching, but also to research, writing, creative work, and involvement in state, regional, national, and international professional organizations. Many encourage student collaboration on research projects, and UMM students may have opportunities to coauthor scholarly articles or papers with faculty.
UMM offers 33 majors as well as areas of concentration (self-designed majors), interdisciplinary, and preprofessional programs. Programs and courses in education, the humanities and fine arts, the social sciences, and science and mathematics provide an excellent background for any major. Students can complement their coursework through the Honors Program, study abroad, internships, field trips, and directed studies. In addition, many lectures, concerts, films, and special programs are offered on campus to enhance the educational experience.

Helping students make the most of their education is UMM's primary goal. UMM's programs challenge students to think critically, make decisions wisely, develop their creativity, and increase their awareness of the world around them.

## Program Planning

Students are responsible for planning programs that will satisfy their own educational and professional goals. Academic advisers, faculty, Career Center, Student Counseling, and Academic Advising staff are available to assist with program planning, and students should seek this assistance to assure well-organized and balanced programs of study as well as to avoid planning errors. In preparing their programs, students should use both this version of this catalog in conjunction with the online planning materials available on the Academic Advising website and in the UMM Class Schedule.
This catalog was published in March 2011. Links to the most current information about major requirements and courses can be found in the online catalog at www.catalogs.umn edu/morris.

## Credits

Information on workload expectations assists students in understanding the necessary time to allocate for their courses. Outlining workload expectations also allows for greater consistency across the curriculum, as well as identifies areas where the expectations are not necessarily applicable due to the nature of the course being taught.
Each credit represents an average of three hours a week of a student's time and effort, with one hour in class, two hours of preparation, or three hours of laboratory work, for example.
A student with fewer than 30 completed credits is classified as a freshman; 30 to 59 completed credits, a sophomore; 60 to 89 completed credits, a junior; 90 completed credits or more, a senior.

At least 120 credits are required for graduation. Students must complete at least 15 credits per semester on average to graduate within four years. The University expects most undergraduate students to complete their degree within four years.
Full details about student academic work per credit are included in the University Policy "Expected Student Academic Work per Credit" found at www.policy.umn.edu /Policies/Education/Education/STUDENTWORK.html.

## Maximum Credits for Registration

The maximum number of credits per semester for which a student is allowed to enroll without approval is 20 . Scholastic Committee approval is required for a student to enroll for 21 or more credits in a semester. The registrar, on behalf of the Scholastic Committee, acts on petitions from students to register for more than 20 credits.

## Academic Progress Audit System (APAS)

APAS, which stands for Academic Progress Audit System, is a computerized report that provides helpful information about degree and course requirements. It helps determine how each student's courses satisfy those requirements, shows progress toward their completion, and serves as a graduation check. It is one of the most important tools students use to stay on track for graduation. Students are encouraged to review their APAS online:

- prior to registering for classes to see what requirements need to be completed
- after registration to see how the new classes actually do meet requirements
- once grades are in to see if there are any courses that no longer count toward graduation
- regularly during the senior year prior to graduation

APAS reports and information on how to read them are available online at www.morris.umn.edu/services /registrar/apas.php.

## Graduation Planner

Graduation Planner is an online academic planning tool that allows students to explore degree requirements, plan courses, and create customized plans that help them stay on track for graduation. It is useful for students who have declared majors and for those who would like detailed information for major exploration. Advisers are able to view student plans and provide feedback. The goal of Graduation Planner is to simplify the degree planning process and stimulate meaningful interaction with advisers.
The Graduation Planner works together with APAS to help students plan for graduation in a timely manner and to explore a variety of majors, minors, and/or licensure programs. Information about the Graduation Planner can be found at www.morris.umn.edu/services/registrar/grad.php.
Advisers may view Graduation Plans and APAS reports for their advisees using "My Active Advisees."

## Student Academic Support

The Student Academic Support offices and services at UMM are dedicated to promoting academic development, enrichment, and success for UMM students beginning when students commit to UMM and continuing beyond graduation. The coalition of offices include:

- The Office for Academic Success, which includes the Academic Success Center and Disability Services, located in 360 Library;
- Academic Advising and Career Services, the Academic Center for Enrichment (ACE), and Retention as one connected unit, located in the lower level of the Student Center and 110 Library.

Although each of the six offices has individual emphases and primary duties, connecting them recognizes the ways in which students can gain through interactions with all.

## Office for Academic Success

## 360 Briggs Library <br> 320-589-6010

The Office for Academic Success includes both Disability Services and Academic Success Center services for students seeking academic assistance; tutoring; and support for students, faculty, and staff with physical, mental, or cognitive disabilities.

## Academic Success Center <br> 360 Briggs Library <br> 320-589-6179

The services provided by UMM's Academic Success Center (ASC) help students achieve their academic goals, whatever they might be. ASC programs are available free of charge to all students at UMM.

The ASC cooperates with various disciplines to provide peer tutors for most courses offered at UMM. The ASC also offers drop-in hours for tutoring in mathematics, runs evening Study Tables to help with study skills, and staffs the Mastering Skills for College Success course, which teaches academic strategies. Students can receive counseling on specific topics, such as time management and reading efficiency. Students who are not native English speakers also can receive assistance and support at the ASC.
Visit the ASC website at www.morris.umn.edu/services /dsoaac/aac.

## Disability Services <br> 360 Briggs Library <br> 320-589-6163

Students with disabilities receive personal attention and are accommodated on an individualized basis to best serve their academic needs. UMM's Disability Services office is located in 360 Briggs Library. Along with the Academic Success Center, Disability Services provides support for students with physical, mental, and/or cognitive disabilities. Disability Services staff work with students to ensure that they receive appropriate accommodations and learn self-advocacy skills.

Students with disabilities are accommodated through a variety of means such as alternate print formats, alternate testing, note-takers, building orientation, classroom relocation, priority registration, sign language interpreters, and lectures and books in audio format. A strong peer-tutoring program, under the direction of the Academic Assistance Center, offers additional academic support. Disability Services also maintains a computer workstation that is equipped with software such as JAWS, Kurzweil, Naturally Speaking, and ZoomText.
Students with disabilities are responsible for providing documentation and requesting accommodation far enough in advance for accommodations to be made. Persons with disabilities seeking assistance or information should contact Disability Services in 360 Briggs Library, 320-589-6163, or dsoaac@morris.umn.edu. Visit the Disability Services web page for more information at www.morris.umn.edu /services/dsoaac/dso.

## Academic Advising and Career Services <br> 110 Library 320-589-6065

## Academic Advising

Academic advising by faculty is considered an integral part of UMM's central mission. Connections between students and faculty outside the classroom contribute to a successful educational experience. For more information, visit www .morris.umn.edu/academic/advising.

## Faculty Advisers

Academic Advising, 110 Briggs Library, is responsible for coordinating the advising program. Adviser assignments are based on students' particular needs and academic interests. Faculty advisers help with academic planning, encouraging students to pursue their interests within the liberal arts. Firstand second-year students are required to discuss their course selections with their advisers each semester. Students must prepare an academic plan: freshmen for their sophomore year and sophomores for their final two years. Advisers can help students enhance their college experience by clarifying academic goals, talking through ways to meet requirements, and considering the effects of their choices on preparing for a career or graduate school. Students also work with advisers to plan academic enhancement opportunities such as study abroad, internships, and research projects. Visit the Academic Advising web page at www.morris.umn.edu/academic /advising.

## Changing Advisers

Advisers have expertise in the general education program as well as in the discipline of the major and can provide important information about career preparation or further study. Students are encouraged to change advisers as their interests change. Contact Academic Advising any time to arrange to have a different adviser assigned.

## Undecided Majors

It is not uncommon for students to begin college undecided about their major or to change majors after they begin. Assistance to students who are deciding on a major is available through individual appointments, Academic Advising's online program, Career Services resources, and interest inventories available through Student Counseling. Students are encouraged to work with their advisers to consider options and how they relate to careers.

## Career Services

Career Services offers a variety of career planning, field experience education, and job and graduate/professional school transition services. These services are available to both current students and alumni who need assistance in establishing career planning and job search strategies.
Career planning activities offer the opportunity to evaluate skills, values, and interests that affect career decision making. Career planning may include personal counseling, exploring the Career Resource Library, occupational testing, and participation in life/work planning, career fairs, and outreach groups.
Field experience education at UMM is offered through an internship program. Internships provide the opportunity to earn credit for study and work in one's chosen field. UMM has established internships in business, counseling, public relations, television and radio production, social work, public administration, computer programming, education, scientific research, and many other fields.
Career transition services assist students and alumni in seeking employment or admission to graduate or professional schools. These services include providing information about job vacancies in education, government, business, and industry; arranging on- and off-campus interviews between employers and candidates; collecting and maintaining current information about salary and employment trends; and offering assistance with résumé and letter writing, job search, and interviewing techniques.
For more information, visit www.morris.umn.edu/services /career.

## The Academic Center for Enrichment

5 Student Center

320-589-7014
The Academic Center for Enrichment (ACE) offers guidance and information for students interested in expanding their academic and intellectual experiences beyond the traditional classroom. The ACE office coordinates the following enrichment programs: study abroad, honors, national scholarships, National Student Exchange, and all of UMM's undergraduate research opportunities. All UMM students are eligible to participate in these academic enrichment activities and the ACE office works to increase student awareness of these opportunities. Students who are Morris Scholars work with the ACE staff to explore opportunities that are supported by their stipends. The ACE office is staffed by faculty
advisers who are available to answer student questions and help students identify which enrichment programs fit their interests. The ACE office is located in Room 5 of the Student Center. Call 320-589-7014 or visit the ACE website at www morris.umn.edu/ACE.

## Undergraduate Research Opportunities Program (UROP)

The Undergraduate Research Opportunities Program (UROP) is a competitive, merit-based program throughout the University of Minnesota that offers financial awards to undergraduates for research, scholarly, or creative projects undertaken in partnership with a faculty member. Students may apply for awards twice a year. UROP awards include stipends (up to $\$ 1,400$ ) and expense allowances (up to $\$ 300$ ). All full-time undergraduates at UMM are eligible to apply. All UMM faculty may serve as UROP sponsors. Further information about UROP awards may be obtained from the ACE office, 5 Student Center, or by consulting the ACE website at www.morris.umn.edu/ACE

## Morris Academic Partners (MAP)

UMM has established a program for advanced students called Morris Academic Partners (MAP). Receiving a stipend of \$2,000 for the year, Morris Academic Partners undertake assignments that enhance their intellectual competence and increase their interest in graduate or professional study. Projects involve assisting faculty and professional staff in their research and/or teaching and are more complex than typical work-study assignments. Students entering their third year of study are nominated by faculty for a Morris Academic Partnership and are named by the appropriate division chairperson with the concurrence of the dean. Further information about the MAP program may be obtained from the Office of the Vice Chancellor for Academic Affairs and Dean, 315 Behmler Hall; online at www.morris.umn.edu /services/acad_affairs/mapguide.htm|; or in the ACE office in 5 Student Center.

## Undergraduate Research Symposium

The UMM Undergraduate Research Symposium (URS) is a one-day, all-campus conference held each spring during which students from across the campus are invited to present their research for their peers and the wider community. All UMM students are eligible to participate and acceptance into the symposium is competitive. For more information on the URS, please visit the ACE office in 5 Student Center or the ACE website at www.morris.umn.edu/ACE.

## Study Abroad

UMM is committed to preparing students to become global citizens and to deepening their understanding of world issues. Because firsthand knowledge of other societies and cultures builds international awareness, UMM encourages students to study abroad as part of their academic program.
The ACE office and study abroad adviser provide overseas study, work, and travel information for students. In addition to consulting with ACE advisers and reviewing guides on
foreign study and travel, students are encouraged to meet with the study abroad faculty adviser in their major to discuss study abroad options relevant to specific disciplines.
As a part of the University system, UMM students have access to an especially broad range of programs all over the world. These programs are offered by UMM, other campuses of the University, and other colleges and universities nationwide. Most UMM federal and state financial aid is available for study abroad and scholarships are offered by the University and nationally specifically targeted for study abroad.
CIP is located in the ACE office in 5 Student Center. More information on study abroad is available at the ACE Office, 5 Student Center, and on the ACE website at www.morris .umn.edu/ACE.

## National Student Exchange

UMM is a member of the National Student Exchange (NSE). NSE is an undergraduate exchange program within the United States and Canada. With more than 175 colleges and universities participating in NSE, students have a wide variety of courses, programs, facilities, and environments to meet diverse academic and personal needs and interests. Students may participate in an exchange with another NSE college or university for a semester or a year.
For information about NSE participating institutions, application materials, costs, and eligibility, contact the ACE office, 5 Student Center, consult the ACE website at www .morris.umn.edu/ACE, or email the NSE campus coordinator at NSE@morris.umn.edu.

## National Scholarships

UMM encourages eligible students to apply for prestigious national scholarships, including the Rhodes, Fulbright, Truman, Marshall, Mellon, National Security Educational Program (NSEP), Gates-Cambridge, Jack Kent Cook, Udall, and others. These academic scholarships cover a wide range of fields and assist in the pursuit of graduate and/or professional study as well as career development. They also typically carry a generous stipend or financial award. Public information sessions are periodically held on campus for students to learn more about these scholarships, including eligibility requirements and application procedures. A team of faculty and staff advisers mentors students in the complex and highly competitive application process.
For information on national scholarships, contact the ACE office, 5 Student Center, or consult the ACE website at www morris.umn.edu/ACE.

## Honors Program

The Honors Program is 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. Typically, students apply to the program in the spring semester of their freshman year and begin coursework in their sophomore year, but other timetables are possible. While everyone may apply, academic success in the fall semester, faculty recommendations, and a short essay may be used to limit
admission to those students with the proven motivation and likely ability to succeed in the program. Applications are available at the Academic Center for Enrichment, 5 Student Center. Students wishing to register for an honors course must be enrolled in the Honors Program. If spaces remain in an honors course at the end of registration, non-honors students may enroll with the permission of the instructor.
To graduate with honors, participants must 1) complete IS 2001H-Honors: Traditions in Human Thought, usually in the fall of their sophomore year; 2) complete 8 elective credits in honors at UMM; 3) successfully complete a multidisciplinary senior honors project; and 4) earn an overall UMM GPA of 3.50 or higher.

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.
The senior honors project is a substantial scholarly or creative work that demonstrates students' intellectual engagement and their ability to articulate and defend their choices regarding methodology and subject matter to a panel of three faculty members from different disciplines, including the project's adviser. It is the responsibility of the student to secure a project adviser, identify two other faculty panelists in consultation with the project adviser, and register for at least two credits of IS 4994—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.

## Morris Student Administrative Fellows

The Morris Student Administrative Fellows program is designed to enable academically talented, qualified students to assist administrative or faculty offices with administrative and managerial projects. Students undertake assignments intended to enhance their intellectual competence and increase their interest in graduate or professional study. The program pays a stipend directly to the student's financial aid account. Further information about the Morris Student Administrative Fellows program may be obtained from the Office of the Vice Chancellor for Academic Affairs and Dean, 315 Behmler Hall; or online at www.morris.umn.edu /services/acad_affairs/MSAFP_Guidelines.htm.

## Retention

## Lower Level Student Center 320-589-6048

The Retention Office works with various offices, faculty, and students creating partnerships to instill a culture of retaining and graduating students. Among other duties, the retention coordinator facilitates Academic Alert (with the faculty coordinator of that program), works with internal surveys and national data, conducts student exit interviews and surveys, and intervenes with individual students. The retention coordinator is a resource for faculty concerned about students who may be having trouble finishing graduation requirements, thinking about transferring or dropping out of college, or other issues that may impact success.

## Multicultural Mentorship Program

The Multicultural Mentorship Program was developed to increase the retention and graduation rates of students of color at UMM. Students with second-year standing ( 30 to 60 semester credits) are matched with faculty/staff who have similar academic and career interests. Participants enjoy a yearlong working relationship with their mentors and have an educationally meaningful experience. A yearly stipend of $\$ 1,000$ (paid in two installments at the end of each semester) is awarded to selected students for work supervised by their mentors. Further information about the Multicultural Mentorship Program may be obtained from the Multi-Ethnic Student Program Office, 110 Multi-Ethnic Resource Center.

## Directed Study and Internships

The term "directed study" refers to those on- or off-campus learning experiences individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum. Directed study courses (with 1993, 2993, 3993, or 4993 course numbers) should be arranged before the term begins, but may be added to the registration later up to and including the last day of classes. Note, however, that the financial aid deadline for awarding aid based upon enrolled credits applies to all courses including directed studies and internships and is the 10th class day of the term. UMM sets the maximum credit limit per student for directed studies at 10 credits. An "internship" is a supervised opportunity to apply academic learning at a field site. It is arranged between a student, an on-site supervisor, and a University faculty member. UMM sets the maximum credit limit per student for internships at 32 credits. For more information about finding an internship, contact the Career Center at 320-589-6065. Directed study and internship offerings include the following courses:

```
Discipline Directed Study-1993, 2993, 3993,4993
(1-5 cr per semester)
Interdisciplinary Directed Study-IS 1993, 2993, 3993,
4993 (1-5 cr per semester)
Helping Profession Internship-IS 3796 (1-16 cr per
semester)
Interdisciplinary Internship-IS 3996 (1-16 cr per semester)
Prior Learning Directed Study-IS 3893 (1-4 cr per semester)
Prior Learning Internship-IS 3896 (1-16 cr per semester)
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A special Directed Study Approval form or Internship Approval form and Learning Contract are required for registration. These forms, available at the division offices or online, essentially establish a contract between the student and the supervising faculty member. The contract includes a statement of the objectives of the project, the methods to be employed, and the procedures for evaluating the project.

In addition to faculty evaluation, student evaluation of the project is mandatory. When the work of the project is completed, the faculty member will provide the student with an evaluation questionnaire, which is part of the approval form. The student completes the questionnaire and delivers it to the Office of the Vice Chancellor for Academic Affairs and Dean. The faculty member will not submit a grade until the student's evaluation of the project has been completed.

## May Session

May session is a three-week term-scheduled after spring semester ends-that is part of the larger summer term at UMM. It is designed to offer unique courses especially suited to a short, intense time frame. Courses include, but are not limited to, short-term domestic and international study programs; topics that are innovative, experimental, interdisciplinary, and examined in greater depth; or special internships. Course offerings and enrollment requirements are determined by the UMM Summer Session Office.

## Majors Offered

The University of Minnesota, Morris offers the following majors:
American Indian Studies
Anthropology
Art History
Biology
Chemistry
Communication, Media, and Rhetoric
Computer Science

## Economics

Elementary Education
English
Environmental Science
Environmental Studies
French
Gender, Women, and Sexuality Studies
Geology
German Studies
History
Latin American Area Studies
Liberal Arts for the Human Services
Management
Mathematics
Music
Philosophy
Physics
Political Science
Psychology
Social Science
Sociology
Spanish

## Sport Management <br> Statistics <br> Studio Art <br> Theatre Arts

Specific requirements for UMM majors are listed in the Academic Division Structure and Program and Course Descriptions sections of this catalog. Completion of a given major, however, usually involves fulfillment of more than the minimum requirements. Once a student has selected a major, she or he should seek the counsel of a faculty member in the discipline to plan a well-organized and balanced program.
Often students enter college undecided about their major. General education requirements, many of which are completed during the first two years, introduce students to disciplines from which they choose a major.

## Individualized Majors <br> ("Areas of Concentration")

Students may choose to complete an area of concentration. This is an individualized, often interdisciplinary, group of courses that meets the requirements for a major. Examples of these individualized majors include: actuarial science, American studies, animal behavior, art therapy, biostatistics, digital media studies, forensic science-biochemistry emphasis, forensic science-biology emphasis, forensic science-chemistry emphasis, international studies, and peace studies. Students must fill out the appropriate forms and request final approval. Area of concentration forms are available online at www .morris.umn.edu/services/acad_affairs/aavarious .html\#areaconcentration.

## Teacher Education

The requirements for teacher education programs are listed in the Academic Division Structure and Program and Course Descriptions sections of this catalog. These programs are selective. An admission process must be completed for entry into either the elementary or secondary education programs.
Students who intend to pursue licensure as an elementary or secondary school teacher should contact the Division of Education as early as possible in their college career.
Both education programs are state and nationally accredited. They follow a model in which students progress through coursework and field experiences as a cohort. Programs are highly interactive and reflective. They emphasize the integration of theory and practice, leadership, diversity, and technology. State and national standards are met through developmental, constructive, and collaborative programs.

## Preparation for Professional Degrees in Other Colleges

Undergraduate liberal arts coursework is required for admission to professional schools in fields such as engineering, pharmacy, law, and medicine. Students on the Morris campus have the opportunity to complete a broad range of liberal arts courses that prepares them to apply for admission at the bachelor's degree level to various professional schools at the University of Minnesota and other prestigious universities across the nation.
UMM advisers work with students on a regular basis to plan an academic program that supports the student's academic interests and goals. The Academic Advising Office provides detailed guides to preparatory course work at UMM that is recommended by the University of Minnesota professional schools. In addition, professional school catalogs, the best source of information about requirements, are available online at www.catalogs.umn.edu.
It is recommended that students who intend to apply for professional programs at the bachelor's degree level complete the UMM degree requirements. Many students change their educational objectives during the course of study in preparation for a professional school, in which case the credits earned can be applied toward UMM graduation requirements. Admission to professional programs is highly competitive and applicants may be competing against others who have already earned bachelor's degrees or have at least three years of preparation before they apply. Simply completing the minimum preparation requirements does not guarantee admission.
Students are urged to consult the catalog of the professional school they plan to attend for information about the admission requirements, application deadlines, and procedures. Most professional schools require a minimum GPA, a satisfactory score on a standardized aptitude test, and letters of recommendation. Online and self-study courses related to the health sciences offered through the University of Minnesota, Twin Cities are also available to UMM students.
UMM offers preparatory coursework, either as the full program of the bachelor of arts degree or as preliminary courses, for the following professional schools of the University of Minnesota:

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## Dentistry

Students planning to earn the doctor of dental surgery degree at the School of Dentistry on the Twin Cities campus must complete a minimum of 87 semester credits in a sciencebased liberal arts curriculum emphasizing biology, chemistry, mathematics, and physics for admission to the professional program. The majority of students entering the program have completed four or more years of college and a bachelor's degree. The minimum GPA required for admission is 2.70 , however, acceptance is on a competitive basis and an average well above this is usually necessary to be admitted.
Students seeking admission to the School of Dentistry must apply through the American Association of Dental Schools Application Service by December 1. Information and registration for the Dental Admission Test (DAT) are available online at www.ada.org. Scores from the DAT are required as part of the application and must be submitted to the School of Dentistry by December 1 of the academic year preceding the fall term in which enrollment is sought. The supplemental School of Dentistry application deadline is also December 1, however, students are encouraged to apply early by September 1. Applications are considered on a rolling basis.

## Engineering

Students at UMM can pursue the study of engineering through any of three established paths. 1) A dual-degree program, formally arranged with the University of Minnesota, Twin Cities (UMTC), provides the opportunity for students to earn a bachelor of arts from UMM and a bachelor of science degree from the UMTC. 2) A pre-engineering curriculum option allows students to attend UMM for two years, taking the mathematics, chemistry, physics, computer science, and composition courses required in engineering programs and then transfer to UMTC. 3) Students considering an advanced degree in engineering can complete a bachelor of arts degree in one of the sciences at UMM and then enroll in a graduate engineering program at UMTC or elsewhere. Each of these options is described below.

## Dual-Degree Program

Students in the dual-degree program take courses for three years at UMM and two or three years from the College of Science and Engineering (CSE) on the Twin Cities campus. While at UMM, students can major in mathematics, physics, chemistry, or statistics; choose electives; and complete the UMM general education requirements. Students then transfer to CSE, provided they meet the minimum GPA required for transfer (which currently ranges from 2.50 to 2.80 depending on the specific engineering program). CSE engineering programs include aerospace and mechanics, biobased products, biomedical, biosystems and agricultural, chemical, civil, computer, electrical, geological, materials science, and mechanical engineering. Each student should work closely with a faculty adviser to identify which UMM major and CSE engineering program best fit together to match the student's interests and specific program requirements. Students who successfully complete the program earn a bachelor of arts degree from UMM and a bachelor of science degree from CSE.

## Pre-Engineering Program

The pre-engineering program is a well-articulated arrangement with the University of Minnesota College of Science and Engineering in which students attend UMM for two years, taking the core mathematics, physics, chemistry, computer science, and composition courses that are the standard preparatory courses for the CSE engineering programs. Since the course requirements do vary slightly from one engineering program to another, each student should work closely with a faculty adviser in the selection of both required and elective courses. (Many students choose electives that satisfy the general education requirements of both UMM and CSE so that they have the option of graduating from UMM rather than transferring.) After two years at UMM, students can transfer to CSE, provided they meet the minimum GPA required for transfer (which currently ranges from 2.50 to 2.80 depending on the specific engineering program). Students can then complete a bachelor of science in engineering within two to three years.

## B.A./Graduate Degree Program

A bachelor of arts degree in one of the basic sciences is excellent preparation for a graduate degree in engineering. It is not necessary to have an undergraduate degree in engineering to enroll in an engineering graduate program either at the University of Minnesota or elsewhere. At the University, a student with a bachelor of arts in one of the basic sciences can usually complete a master of science in engineering in two years. A doctorate degree takes several more years.

## Law

A bachelor's degree is required for admission to law school, but no specific preparatory program or major is prescribed. Students are advised to plan a rigorous bachelor's program that provides a broad background in the humanities, mathematics, sciences, and social sciences. Students should select an academic major based on their special area of interest and abilities to ensure a depth and breadth of knowledge in one field. Students can be and have been admitted to law school with majors across the curriculum. Students are encouraged to take courses that require independent thought and writing, including work in other languages, and to develop their skills in oral and written expression through course work or activities.
The University of Minnesota Law School on the Twin Cities campus makes the following statement about its admission policy: "Admission is limited to applicants who demonstrate potential for success in law study and in the profession." A strong scholastic record and scores from the Law School Admission Test (LSAT) are key factors for admission. Various factors such as work experience; career goals; positions of leadership; racial, ethnic, or economic backgrounds; and public service are also considered.
All applicants must first register with the Law School Data Assembly Service (LSDAS). The service acts as a repository for the student's application, academic transcripts, LSAT test
scores, and letters of recommendation. LSDAS summarizes the student's transcripts and sends them to each law school to which the student applies.
Register with the LSDAS online at www.lsac.org. Other required materials include a personal statement, a resume highlighting extracurricular activities and community service, and an application fee.
It is preferred that applicants register with the LSDAS and take the LSAT at least six weeks before the April 1 application deadline; however, students are encouraged to apply as early as October 1. Normally applicants take the LSAT in December of their senior year in college. The LSAT/ LSDAS Information Bulletin and application are available in Student Counseling.

## Medicine

Students planning to enter a school of medicine must complete a bachelor's degree with a well-balanced liberal arts program before admission. Required premedical courses in the bachelor's degree program include composition, biology, chemistry, mathematics, and physics. The three Minnesota medical schools are the University of Minnesota Medical School in Minneapolis, the University of Minnesota Medical School in Duluth, and the Mayo Medical School in Rochester. Requirements of the various medical schools vary and change frequently. First-year UMM premedical students should check the websites of the schools they are interested in and work closely with their faculty adviser and the UMM premedicine advising committee.
All three Minnesota medical schools participate in the American Medical College Application Service (AMCAS). The AMCAS application should be filed as early as the webbased application becomes available, usually in early May. Premedical students should begin application procedures for medical school during their junior year. Supplemental application materials may be required, depending on the individual school, so students should carefully review the instructions in the application materials.
Students using AMCAS are required to take the Medical College Admission Test (MCAT). This test is also required or strongly recommended by most medical schools in the United States. Students take the MCAT online and it is recommended that students take the MCAT in the spring or summer after their junior year. Registration materials and more information about MCAT can be found on the MCAT website. Applications for AMCAS and MCAT information are available at Student Counseling.

## Nursing

Students planning to transfer into a bachelor of science in nursing (BSN) program at any of the several universities in Minnesota that offer the degree need to first complete required courses in biology, chemistry, composition, nutrition, psychology, and statistics. Because these requirements vary, it is important for students to consult early with the admissions offices at the specific schools to which they plan to apply. The Morris community provides numerous opportunities to gain work experience in the healthcare field and this may
be important in the admissions process. The length of BSN programs varies from two to three years following completion of the prerequisite coursework. Because admission to these programs is very competitive, students are encouraged to apply to multiple programs.
For greater flexibility, students may also consider finishing their bachelor of arts degree in a non-nursing major, such as biology or chemistry, at UMM, then applying to the master of nursing program at the University of Minnesota, Twin Cities. This 16 -month program gives the student eligibility to become a licensed registered nurse (RN). Successful applicants have completed prerequisite courses in chemistry, human anatomy and physiology, microbiology, abnormal psychology, and statistics, combined with a strong liberal arts background. Admission is highly competitive. Most successful applicants have work experience beyond their bachelor's degree. For more information, students should contact the University of Minnesota School of Nursing. Additionally, many other universities offer post-bachelor nursing programs and master's programs in nursing; students are encouraged to look beyond the University of Minnesota, Twin Cities for opportunities in this field.

## Pharmacy

Students planning to apply to the University of Minnesota College of Pharmacy (Twin Cities or Duluth) must complete specified general education coursework, including composition, biology, chemistry, mathematics, physics, economics, psychology, and sociology to be eligible for admission. The admission process is selective. A bachelor's degree is preferred (fewer than 20 percent of accepted students do not have a degree). Applicants who have a Pharmacy College Application Service (PharmCAS) GPA of 3.00 , or 3.20 over the most recent 60 semester credits (see www.pharmcas.org are eligible to apply for admission. The criteria used to evaluate and select applicants for admission include the student's educational background and GPA, PCAT scores, diversity factors, work experience, community service, oral and written communication skills, and letters of recommendation. Information and registration for the Pharmacy College Admission Test (PCAT) and scored writing subtest are available online at www.pcatweb.info. The PCAT exam is offered on the Morris campus in October and January. Pre-registration is required and materials are available in the UMM Student Counseling Office.
Applicants to the program on either the Duluth or Twin Cities campuses must submit the PharmCAS application www.pharmcas.org, with transcripts, letters of reference, and PCAT scores. The supplemental application should be submitted no later than the February 16 deadline. Further information about the supplemental application can be found on the College of Pharmacy website at www.pharmacy.umn edu. Admission to the College of Pharmacy is on a rolling basis with priority given to students who apply early because the class may fill much earlier than the deadline.
Highly qualified candidates are then invited to campus for an interview prior to the admission decision.

## Physical Therapy

Students must complete a bachelor's degree (no major preferred) to be eligible for admission to the graduate physical therapy program at the University of Minnesota, Twin Cities. Required undergraduate coursework includes biology courses with labs, anatomy, human physiology, inorganic chemistry with labs, physics, general psychology, abnormal psychology, calculus, and statistics (including ANOVA and regression analysis). All courses must be taken for a letter grade. Students are also expected to be skillful with word processing applications and spreadsheets. Admission is very competitive; a minimum GPA of 3.00 is required. While at UMM, students are encouraged to complete a strong liberal arts program. Exposure to a physical therapy setting through volunteer work or employment (minimum 100 hours) is an important prerequisite. For more information, see www.physther.umn edu.

## Veterinary Medicine

Admission to the College of Veterinary Medicine is highly competitive. Approximately 90 students are admitted each fall semester and are selected through an evaluation process including: 1) academic measures, such as GPA and VMCAS score; 2) non-academic measures, such as animal experience; and 3 ) a behavioral interview. First priority is given to Minnesota residents and to students from states and provinces where reciprocity applies to the veterinary program (North Dakota, South Dakota, and Manitoba, Canada).
To qualify for admission to the College of Veterinary Medicine, students must complete required courses including English composition, biology, chemistry, mathematics, physics, and a strong liberal arts background. Most students complete their bachelor's degree before entering veterinary school but may seek admission during the academic year in which their pre-veterinary requirements are complete. Consultation with a UMM adviser is essential for proper course planning. The University of Minnesota is a part of the national application service through the Veterinary Medical College Application Service (VMCAS). Instructions and applications for VMCAS are available online at www.cvm umn.edu/education. The deadline for submitting the VMCAS application is October 1; three letters of evaluation must be submitted along with the VMCAS application. The Graduate Record Examination (GRE) is also required for admission. Students must take the GRE by October 1 and the results must reach the College of Veterinary Medicine office by October 31. An early admission program to the College of Veterinary Medicine is available to qualified UMM freshmen interested in food animal medicine. Students should consult their adviser for details. For more detailed information and application materials, contact the Office of Student Affairs and Admissions, College of Veterinary Medicine.

## Honors and Awards

Honors and awards recognize exceptional scholarship and related achievements within the student body. Such scholarship can be demonstrated in a variety of ways. General academic excellence, as traditionally measured by the grade point average (GPA), is one way. Exceptional scholarship, however, may not always be reflected by the GPA. For this reason, UMM also recognizes creative scholarship as demonstrated in a particular discipline.

## University Honors

## Graduation With Distinction

To qualify for a degree with distinction or high distinction, a student must have completed 60 or more semester credits at the University. For the purposes of meeting the grade point average standards, only University coursework will be counted. To graduate "with distinction," a student must have a cumulative GPA of 3.750 or higher at the time the student graduates. To graduate "with high distinction," a student must have a cumulative GPA of 3.900 or higher. The GPA alone will be used in determining the granting of degrees "with distinction" or "with high distinction."

## Graduation With Honors

Students graduating with honors are those who have successfully completed the UMM Honors Program. (See Honors Program above for detailed program requirements.)

## Chancellor's Award

This award is presented to outstanding students on the basis of academic excellence and contribution to campus life. The Executive Committee of the Morris Campus Student Association and student members of the Campus Assembly nominate students for this award. Nominees are endorsed by the Functions and Awards Committee. UMM's chancellor makes the final selection.

## Dean's List

The Dean's List recognizes students who have achieved an outstanding academic record during a given semester. To qualify, students must have earned a GPA of 3.666, have registered for a minimum of 12 credits (two-thirds on the A-B-C-D-F grading system), and completed all credits for which they were registered during that semester. The Dean's List is announced each semester by the vice chancellor for academic affairs and dean; a notation is put on the student's transcript, and a certificate is sent to each student named on the list. Announcements are also sent to the hometown newspapers of students named to that semester's Dean's List.
There are instances in which coursework may extend beyond a single academic semester or a serious illness or justifiable emergency may make it impossible for work to be completed by the end of a semester. In such cases, students who meet all other Dean's List criteria stated above may petition the Functions and Awards Committee in writing for an exception; petitions must be filed within two weeks after the beginning of the next semester for which students register. Students who seek such exceptions should consult with the Office of the Registrar for more information.

## Scholar of the College Award

This award is presented annually to students who have demonstrated distinguished scholarly work by making valuable contributions in one or more of the academic disciplines. Nominations are made by the faculty, reviewed by the Functions and Awards Committee, and approved by the Campus Assembly.
In addition to the above scholastic honors, the University of Minnesota, Morris recognizes campus-wide student leadership through the following awards:

## Campuswide Awards

## Bos Research Award

This award is presented annually to enhance the undergraduate research experiences of UMM students. The funds may be used to cover costs associated with the pursuit of undergraduate research. All UMM students are eligible to participate. Funds are awarded by the dean, with the amount of dollars distributed and the number of recipients to be determined each year according to the dean's discretion and the amount of funding available. The award is in honor of Angela Bos '01, a distinguished alumna of UMM.

## Owen and Frances Tate Award

This award provides matching dollars to cover travel expenses for students presenting scholarly work at symposia and professional meetings, engaging in artistic activities, conducting research projects, or performing outside of the UMM campus community. It was established by the Tate family to honor the memories of Owen and Frances Tate, lifelong residents of Big Stone County, and to support UMM student learning activities that do not have other funding sources available.

## American Indian Salt Springs Award

This award is presented to outstanding American Indian students on the basis of academic excellence and contribution to the Indian and campus community. To be eligible, the student must return to UMM the following year.

## Allen W. Edson Award

This award is presented annually in recognition of a student's total contribution to campus life. Selection is made by the Executive Board of the Morris Campus Student Association, student members of the Campus Assembly, and the faculty. Allen Edson was superintendent of the University of Minnesota West Central School of Agriculture (WCSA) and Experiment Station on the Morris campus from 1947 to 1958. He joined the WCSA staff in 1921.

## Edith Rodgers Farrell Memorial Award for Undergraduate Research

This award is granted to a graduating senior whose research is judged to be excellent by a jury of faculty. Edith Rodgers Farrell was a professor of French and advocate of undergraduate research. She served UMM from 1985 until her death in 1997.

## Arnold Henjum Scholar-Athlete Award

This award is presented to a senior male athlete on the basis of academic and athletic excellence and integrity. This award honors Arnold Henjum, professor of education from 1964 to 1992, who made innumerable contributions to Minnesota public education.

## Women's Honors Athlete Award and Men's Honor Athlete Award

Recipients of this award are selected by a committee of coaches on the basis of academic and athletic achievement. Nominees have a grade point average of 3.00 or higher.

## Willis Kelly Award

This award is presented annually to a senior female athlete who most exemplifies the spirit of competition in women's athletics at UMM. The award is in memory of Willis Kelly, a physical education coach and athletic director at UMM for more than 20 years. She became the first director of women's athletics in 1975 and served as director of men's and women's athletics from 1982 until her retirement in 1987.

## Curtis H. Larson Award

This award is conferred upon the graduate chosen as senior class speaker. The selection is made by the faculty and graduating seniors. Established in honor of the late Curtis H. Larson, UMM's first class speaker in 1964, who died in an automobile accident while serving as a Peace Corps volunteer in Ecuador.

## Student Leadership Award

This award is presented annually to recognize student achievements in the life of the campus. These awards recognize students who are leaders of student organizations, committees, and special groups whose activities or programs are coordinated with or administered by Student Activities or Residential Life.

## Mary Martelle Memorial Award

Presented annually to a student and to a staff member deemed to have made outstanding contributions to campus life, this award perpetuates the memory of Mary Martelle, senior secretary in the Office of Student Activities from 1965 until her death in 1976. Nominations are made by the entire campus community and the recipients are determined by the Functions and Awards Committee.

## David Minge Internship Award

This award supports students seeking Washington, D.C., internships-educational opportunities that former Congressman David Minge values as important and insightful components in learning about public policy process at the federal level. Preference is given to internship participants who integrate the study of peace, justice, conservation, the environment, rural affairs, or similar issues.

## Discipline-Based Honors

In addition to the above scholastic honors, the University of Minnesota, Morris recognizes campuswide student leadership through the following awards:

## Abbott Award in Physics

This award is presented to a graduating senior majoring in physics who has the greatest potential for achieving a professional career in physics or a physics-related field. The award was established by Robinson Abbott, professor of biology from 1961 to 1991, and his wife, Rose Marie, who taught biology courses at UMM, to recognize the importance UMM has played in their lives. All four Abbott children graduated from UMM, three with majors in physics.

## Alumni Award for Outstanding English Major

This award is given to an English major in his or her last year at UMM whose performance in English classes has been consistently superior and who has made positive contributions to the discipline or major in and beyond the classroom.

## Art History Book Award

This award is given to a graduating art history major in recognition of academic excellence and potential for further achievement in the arts.

## Natalie Benoit Memorial Award

This award is presented to a junior or senior who has demonstrated ability and shows promise as a serious art student. Established in memory of Natalie Benoit by her parents, George and Joan Benoit, former Morris residents. Natalie was an art major studying at Penn State at the time of her death in an accident.

## Chemistry Undergraduate Research Award

The Chemistry Undergraduate Research Fund (CURF) provides support for students who are majoring in chemistry/ biochemistry and have an interest in carrying out research in chemistry/biochemistry or a closely related field. The awardee has demonstrated outstanding aptitude for research in the chemistry discipline's Introduction to Research course and the potential for continued success.

## Chris Berg Memorial Award

This award is presented annually to an outstanding senior majoring in economics who has demonstrated academic excellence in that field by the economics/management faculty in memory of their late colleague.

## Clemens "Johnny" Brauer Memorial Award

This award supports geology majors by providing financial assistance to cover field study expenses. The award honors the memory of Clemens Brauer, associate professor of geology from 1966 to 1981, who emphasized fieldwork as an important part of a geology major. His students and the campus knew him as "Doc Rock." He passed away in May 2003.

## Rodney A. Briggs Library Student Art Award

This award recognizes talented UMM students and creates a permanent, quality, library art collection. UMM art faculty identify up to 10 works from each of the two student art shows. A committee of two library staff, two library student assistants, and an Academic Services Support Committee member select one piece from each of the art shows.

## Keith Carlson Memorial Jazz Award

This award is presented annually to the most outstanding jazz musician at UMM. This award was established in memory of Keith Carlson by Jack and Ethel Carlson.

## Freshman Chemistry Award

This award honors a first-year student's outstanding performance in a chemistry class. It is given by the Chemical Rubber Company.

## spdf Chemistry Award

This award is presented annually to a senior chemistry major who has demonstrated outstanding scholarship, potential, and service in chemistry.

## Brion Dalager Memorial Award

Established by the family and friends of the late Brion Dalager, UMM music student from 1969 to 1972, this award is given annually to students who have demonstrated outstanding ability on a band instrument.

## Mimi Frenier Award in Gender, Women, and Sexuality Studies

This award is granted annually to a junior or senior gender, women, and sexuality studies major in recognition of high academic achievement and social, political, and civic activism. It was established by colleagues, students, alumni, friends, and the UMM Commission on Women in recognition of Professor of History Mariam Frenier's dedication to UMM and in appreciation for her contributions to the development of the gender, women, and sexuality studies major. She served UMM from 1973 until her retirement in 2004.

## Dimitra Giannuli Memorial Award

Based on the excellence of a paper written for any of the history courses offered at UMM, this award was established by colleagues, friends, family and alumni in memory of Dimitra Giannuli, associate professor of history. She served UMM from 1992 until her death in 2003.

## Gieske Academic Award

Offered annually to outstanding political science majors in their senior year, recipients will have an exceptional record of accomplishment at UMM as well as strong prospects for success after graduation. The award is in memory of Millard R. Gieske, professor of political science from 1963 to 1991, a respected leader in many professional organizations and the author of many political works.

## Honors and Awards

## Gieske Internship Award

This award supports political science students who pursue legislative internships in Washington, D.C., or at the Minnesota State Capitol. It honors the memory of Millard Gieske, UMM professor of political science.

## Lois P. Hodgell Printmaking Award

Presented annually to a student who demonstrates creative potential in the field as well as a technical understanding of a variety of print processes, this award honors Lois P . Hodgell, who was a professor of art at UMM from 1962 until her retirement in 1993. The award recipient must show outstanding achievement in printmaking.

## Horizon Award

The Horizon Award is awarded annually to an outstanding sophomore psychology major. Recipients who receive this award have exceptional records of accomplishments at Morris and strong ambitions for their academic careers.

## Raymond J. Lammers Award in the Language Arts

Established in memory of Raymond J. Lammers, professor emeritus of theatre, this award is presented to seniors majoring in and demonstrating an outstanding undergraduate career in one of the following disciplines: theatre, English, foreign language, or communication, media, and rhetoric. Professor Lammers was one of the first Morris faculty members and figured prominently in the creation of the theatre major and theatre program.

## Dik Munson Art Award

This award is presented to outstanding first- and second-year students in studio art who demonstrate creative potential in future discipline coursework. This award is intended for purchase of materials and supplies for the recipient's artwork and experimentation with new media.

## Outstanding Graduate Award in Psychology

The Outstanding Graduate in Psychology Award is given annually to a senior graduating with a psychology major. Recipients who receive this award have excelled in the following areas: scholarship, research experience, and participation in the psychology discipline.

## Jay Y. Roshal Award

This award is presented to a senior majoring in biology who demonstrates promise and interest in a career in the biological sciences. The award is in honor of the late Jay Y. Roshal, professor of biology at UMM from 1960 to 1983, and the first chairperson of the Division of Science and Mathematics.

## William R. Scarborough Memorial Award

This award is presented annually to a senior enrolled in either the elementary or secondary education program, this award recognizes a student's demonstrated competence and potential for becoming an outstanding member of the teaching profession. William Scarborough joined the UMM
faculty in 1966, made many contributions to public education in Minnesota, and served as chairperson of the Division of Education until his death in 1979.

## Schneider National Award

Presented to an economics or management student who has demonstrated outstanding research abilities and maintained academic excellence. The award is funded by Schneider National, Incorporated.

## Sociology/Anthropology Book Award

Awarded to an outstanding sociology and/or anthropology student, this honor recognizes academic excellence and active engagement in the fields of sociology and anthropology.

## Ted Underwood Award in History

This award is presented to a graduating senior with a major or minor in history or a history concentration in the social science major who has demonstrated distinguished academic performance in history. The award is named for Dr. Ted L. Underwood, history faculty member from 1967 until his retirement in 1999.

## Wawokiya Award

The Wawokiya (Lakota for "one who helps") Award is awarded annually to an outstanding senior psychology major. Recipients who receive this award have strong records of accomplishment at Morris and sincere interest in helping others.
For more information about these and other awards, contact the respective division chairperson.

## Degree Completion

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## Degree Completion

## Bachelor of Arts Degree

Degrees from the University of Minnesota are granted by the Board of Regents upon the recommendation of the faculty of the University school or college, in this case the Morris campus, in which the student is enrolled. Requirements vary among the undergraduate colleges of the University, and students must meet all course, credit, and grade point average requirements of the college in which they are enrolled. The Morris Catalog is in effect for nine years; this catalog is in effect from fall 2011 through the end of summer session 2020. However, students may choose to use the catalog in effect their first term and year at UMM (provided it has not expired) or any subsequent catalog.

The General Education requirements completed under any previous catalog, including expired catalogs, may be used to complete the bachelor of arts degree. Permission to use the major requirements from an expired catalog must be obtained from the faculty. If a degree application is on file with accompanying documentation that defines requirements to be completed, reasonable effort will be made to allow students to graduate based on that agreement. All other degree requirements-total credits, residency, GPA calculation, etc.-follow semester standards and policies in place at the time the degree is awarded.
Students in elementary education and secondary education licensure must complete licensure requirements and apply for licensure within seven years from the time of admission to the licensure program.
Students must apply to graduate by the 10th class day of spring semester. There is a commencement ceremony in May of each academic year.

## Degree Requirements

Requirements for the bachelor of arts (B.A.) degree at the UMM consist of two parts: general education and the major. General education consists of three parts: Intellectual Community, Skills for the Liberal Arts, and Expanding Perspectives. Students enrolled in their first semester at UMM are expected to enroll in an Intellectual Community (IC) course. Transfer students who have completed 12 credit hours or more of courses as a degree-seeking student at a college or university would be exempt from this requirement. All students must meet the requirements listed in Skills for the Liberal Arts and in Expanding Perspectives. The major is a field of specialization with requirements specified by faculty in that discipline or academic area.
The Skills component of general education helps students acquire the intellectual and communication skills needed for successful advanced work. The Expanding Perspectives component helps students gain enough understanding of the principal areas of human endeavor to continue learning and to have a sense of the limits of their knowledge. Work in the major helps students learn in depth and makes them reasonably expert in one area.

In order to lay the foundation for learning early, students are expected to complete a significant part of the Skills component during their first and second years of college. The emphasis is on establishing an intellectual framework for future work-a framework consisting of writing, linguistic reasoning, and artistic skills. Students continue to develop these skills in advanced courses. It should be noted that in most Skills categories, the requirements may also be met through assessment of prior learning, transfer of credit, individual projects, testing, and other means. These methods may be especially helpful in the case of nontraditional students.

The Expanding Perspectives component aims to produce liberally educated people who are able to understand how knowledge is acquired in many different fields. These people usually have broad interests and know where to obtain information on almost any subject. They can solve problems because they bring ideas and techniques from one field to bear on another in innovative ways. In a world of diverse peoples, activities, and value systems, all of which are increasingly interrelated, it is especially important that college graduates have breadth as well as depth in their education and that they expand the horizons of their knowledge.
Expanding Perspectives is divided into two parts. One consists of a traditional core of liberal studies roughly organized around the subjects of history, social sciences, humanities, fine arts, and the biological and physical sciences. The other addresses contemporary themes, which are grouped under the heading, The Global Village. The goal is to expand students' perspectives on human diversity, people and the environment, the international scene, and issues of ethical and civic responsibility. In some cases, students may also satisfy Expanding Perspectives requirements through independent study, transfer credit, internships, study abroad, special examinations, and other means. Students gradually fulfill the Expanding Perspectives requirements throughout their college career.
During the freshman year, students should explore possible majors or fields of specialization, keeping in mind that, in a liberal arts degree program, the major is more of an intellectual "home base" than preparation for a specific occupation.

Transfer students with degrees from other colleges must complete the UMM degree requirements in order to have a major or minor appear on the UMM transcript. Majors and minors do not appear on the transcript unless they are part of a degree program. Licensure graduates from other colleges who wish to add a teaching major or minor do not need to complete the UMM degree program.
Courses taken to complete general education requirements may also apply to requirements in the major. However, all students must complete 60 credits of general education that are not drawn from the discipline of the major.

## Specific Provisions

## 1. General Education Requirements (60 credits)

## Goals of the General Education

## Requirements

I. Intellectual Community: To foster development of a liberal arts intellectual community through the introduction of intellectual and practical skills and through active student-faculty engagement in course material.
II. A. College Writing: To understand the writing process through invention, organization, drafting, revising, and editing; and develop writers who can write about a range of ideas for a variety of readers.
B. Foreign Language: To develop some fluency in the skills of speaking, listening, reading, and writing in a second language; and critical insight into another culture.
C. Mathematical/Symbolic Reasoning: To strengthen students' ability to formulate abstractions, construct proofs, and utilize symbols in formal systems.
D. Artistic Performance: To introduce an understanding of the creative process through individual performance, and demonstrate skill in such activities as composition, theater, dance, studio art, and music.
III. A. Historical Perspectives: To increase students' understanding of the past, the complexity of human affairs, the ways in which various forces-economic, cultural, religious, political, scientific-influence efforts to control events, and the ways historians verify and interpret their findings.
B. Human Behavior, Social Processes, and Institutions: To increase students' systematic understanding of themselves as functioning humans, their individual similarities to and differences from others, their awareness of the nature and significance of their conscious experience, and the forces that shape their interpersonal attachments and interactions; or to increase students' understanding of methods of analyzing modern society or some significant legal, political, economic, religious, social, or scientific component of it.
C. Communication, Language, Literature, and Philosophy: To expand students' capacity to understand, analyze, discuss, and evaluate discourse concerning the complexity of the human condition through the study of languages and works of thought and imagination.
D. Fine Arts: To develop students' understanding, analysis, and appreciation of the arts.
E. Physical and Biological Sciences: To increase students' understanding of the structure and dynamics of the physical and biological worlds, and of the scientific method.
F. The Global Village: To increase students' understanding of the growing interdependence among nations, peoples, and the natural world.

1. Human Diversity: To increase students' understanding of individual and group differences (e.g., race, gender, class) and their knowledge of the traditions and values of various groups in the United States.
2. People and the Environment: To increase students' understanding of the interrelatedness of human society and the natural world.
3. International Perspective: To increase students' systematic understanding of national cultures substantially different from those in which they received their prior schooling.
4. Ethical and Civic Responsibility: To broaden and develop students' capacity to question and reflect upon their own and society's values and critical responsibilities, and to understand forces, such as technology, that cause them to modify these views and often mandate creation of new ways to resolve legal, social, and scientific issues.

## Provision i

UMM courses designated as appropriate for meeting general education requirements are those which, if passed successfully, demonstrate the student's competency in a given skill or area.

Students are required to complete a minimum of 60 credits of general education coursework outside the discipline of the major and must meet the requirements listed below. The requirements may be met not only through UMM courses, but also by transfer of credit, examinations for proficiency or credit, assessment of prior learning, individual projects, and other means. For details, students should consult with their advisers.
In some instances the specific general education requirements may be met using fewer than 60 UMM credits. If this occurs, then introductory or advanced elective courses from any discipline outside the major-with the exception of courses in elementary or secondary education, wellness and sport science, or accounting courses in management-may be used to fulfill the remaining credits of the 60 -credit general education requirement.
Note: The designation following each category below, e.g., "IC," for Intellectual Community, appears at the beginning of the parenthetical information for each course that is appropriate for that category.
I. Intellectual Community (IC)**-One two-credit course.
II. Skills for the Liberal Arts-One to five courses.*

These requirements emphasize the development of the intellectual skills, the communication skills, and the framework for learning needed for successful advanced work. Because new students need this foundation early, they are expected to complete many of these requirements during their first and second years.
A. College Writing (CW)-One course.*
B. Foreign Language (FL)-Proficiency in a single language other than English at the level equivalent to the first full year of college language study. This requirement can be met in any one of the following ways:

- Successfully completing a beginning language II course
- Achieving an appropriate score on a placement exam
- Passing a special examination, such as AP or CLEP, or
- For non-native speakers of English, successfully petitioning the Scholastic Committee for an exemption.
Placement tests are given by language disciplines to determine the level of proficiency of a student with prior coursework. Students who plan to complete courses in the same language that 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, they may follow the recommendation of their language instructor as to the proper entry course.
C. Mathematical/Symbolic Reasoning (M/SR)-One course.*
D. Artistic Performance (ArtP)-One course.
III.Expanding Perspectives-Eight courses of at least two credits each.
A. Historical Perspectives (Hist)-One course.
B. Human Behavior, Social Processes, and Institutions (SS)-One course.
C. Communication, Language, Literature, and Philosophy (Hum)-One course.
D. Fine Arts (FA)-One course.
E. Physical and Biological Sciences (Sci-without lab; Sci-L-with lab)-Two courses, at least one with lab.
F. The Global Village-Two courses, one from each of two areas.

1. Human Diversity (HDiv)
2. People and the Environment (Envt)
3. International Perspective (IP)***
4. Ethical and Civic Responsibility (E/CR)

* $\quad$ This requirement may be fulfilled through exemption.
** Students who do not successfully complete IC should contact the Scholastic Committee Office (320-589-6011) for information on completing the requirement.
*** International students should contact the Scholastic Committee Office for an exemption.


## Provisions ii through iv

Provision ii-Goals will be used to match courses to general education requirements (see below).
Provision iii-Only courses of two or more credits will satisfy an Expanding Perspectives requirement.
Provision iv-A course can satisfy only one of the general education categories.
Each major can provide students with a statement about how a student majoring in that area will formally acquire computing and writing skills. Students should contact their faculty adviser for current information.

## 2. Major or Area of Concentration

The major at UMM is defined as an intensive and coherent program of study reflecting the structure of one or more fields of knowledge. The major complements the essential skills and the broad base of knowledge provided by general education.
The purpose of the major is to ensure that each student pursues a particular field of knowledge in depth, investigates advanced theories and schools of thought, and becomes competent in using the language and methods of inquiry of the field. It is through such concentrated study that a student begins to master a body of knowledge and comes to understand the nature of expertise in the chosen field, including both its power and its limitations.
Students complete a major by fulfilling the requirements as specified elsewhere in this catalog. Virtually all academic majors include a capstone experience appropriate to the discipline. Faculty members in the discipline determine the shape and form of the experience. Capstone experiences are credit bearing and usually are assigned as part of a required course. Some students may choose instead to complete an area of concentration, which is an individualized, often interdisciplinary, group of courses that meets the requirement of study in depth of a specific field of knowledge. (Students who wish to complete an area of concentration must have the program approved by appropriate faculty advisers, division chairs, and the vice chancellor for academic affairs and dean. A copy of the approved program must be filed with the Office of the Registrar. Detailed procedures and forms are available from the Office of the Vice Chancellor for Academic Affairs and Dean or online at www.morris.umn.edu/services/acad _affairs/aavarious.html.
Transfer students with degrees from other colleges must complete UMM degree requirements in order to have a major appear on the UMM transcript. Majors do not appear on the transcript unless they are part of a degree program. Licensure graduates from other colleges who wish to add a teaching major do not need to complete the UMM degree program. A signature from the Division of Education on the licensure application form, along with a transcript of the courses completed, is sent to the Minnesota Department of Education.

## 3. Minor or Area of Emphasis

The minor shares the essential characteristics of the major but differs from it quantitatively. It indicates a special interest and expertise beyond general education and provides sufficient skills and knowledge of the field to form a basis for further study. The requirements for minors are listed in this catalog under the appropriate academic discipline.
Students may choose instead to complete an area of emphasis, a self-designed minor, following the same procedures used to define an area of concentration.
A minor is not required for graduation.
Transfer students with degrees from other colleges must complete the UMM degree requirements in order to have a minor appear on the UMM transcript. Minors do not appear on the transcript unless they are part of a degree program.

## 4. Minimum Required Credits ( 120 credits)

A student can fulfill the course requirements for graduation in most programs within the 120 -credit minimum, but some combinations of general education courses, major, and teacher education licensure programs may require more than 120 credits. The 120 credits required must include a minimum of 60 credits of general education outside the discipline of the major.
No major or program may require students to take more than 40 of the 120 credits required for graduation in any one discipline.
Any course that carries credit in one University of Minnesota college will carry credit in all other University colleges, at least as an elective. Some courses that carry University credit may not count toward college or program degree requirements, or may, if a student changes programs, exceed the credit limits from the areas identified in the following paragraph and thus not count toward the degree.
No more than 8 credits in Music Ensembles (Mus 1300 through Mus 1340); no more than 4 credits in SSA 12xx skills courses; no more than 4 credits in Varsity Athletics (SSA 1401 through SSA 1412); no more than 32 credits from internship (IS 3796, 3896, 3996); and no more than 4 credits in Psychology Field Experience (Psy 4896) may be applied to the 120 -credit degree requirement. The use of the grade of $D$ in the major may be restricted by the discipline.

## 5. Quality of Work

The cumulative GPA required for graduation is 2.000 . A minimum GPA of 2.000 (or higher if indicated by the discipline) is required in the major or area of concentration and in the minor or area of emphasis in order to graduate. Both the cumulative GPA and the major/minor GPA include all, and only, University of Minnesota coursework.

## 6. Credits from Graduating Campus (Residency)

More information is available at www.policy.umn.edu /Policies/Education/Education/ DEGREEREQUIREMENT.htmI.
Students must complete the following minimum number of credits at the campus from which they expect to graduate before a degree will be granted.
I. To be eligible for a University undergraduate degree, a student must complete at least 30 semester credits awarded by the University campus from which he or she is seeking to graduate.
II. At least 15 credits of the last 30 credits earned prior to the awarding of a University degree, must be awarded by the University campus from which a student is seeking to graduate.
III. Students must complete at least half of upper-division major work ( $3 \times x x$ courses or higher) on the campus from which they are seeking to graduate. Study-abroad credits earned through programs sponsored by the University are considered resident credit.
IV. In order to have a minor recorded on a University transcript, a student must take at least three upper division credits in the minor field at the campus from which he or she will receive the degree.

## Academic Division Structure

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## Academic Division Structure

Disciplines (i.e., departments or fields such as English, physics, or psychology) are grouped administratively into four divisions-Education, Humanities, Science and Mathematics, and Social Sciences-to help integrate the various areas of study into a liberal arts curriculum, provide a forum for faculty discussion of common programs and interests, and encourage the planning of interdisciplinary academic programs. In addition, there are interdisciplinary courses, internships, and majors that cross divisional lines; these are found under Interdisciplinary Studies and fall under the direct responsibility of the vice chancellor for academic affairs and dean.
There are also courses from disciplines across the campus offered through Continuing Education. Such courses serve two distinct purposes. Some Continuing Education courses are on topics not found elsewhere in the curriculum and are designed for regularly enrolled students. Other Continuing Education courses are offered primarily to off-campus students enrolled in such programs as extension classes or through GenEdWeb, an online program targeted to academically talented high school students. Courses offered through Continuing Education are designated as such in the last sentence of the course description. All courses offered through Continuing Education have an academic home in one of UMM's disciplines.
Courses are listed alphabetically by discipline. Each discipline description includes, as appropriate, requirements for the major and/or the minor. Teacher education licensure requirements can be found in the Education, Elementary and Education, Secondary sections.

## Division of Education

Education (page 100)<br>Education, Elementary (page 101)<br>Education, Secondary (page 105)<br>Sport Studies and Athletics (page 188)

In education programs, students can study education and its role in society; complete a major and teaching licensure in elementary education with an optional preprimary or middle level specialty; prepare to teach one or more liberal arts subjects at the secondary school level; and/or prepare for graduate study in education.
Intercollegiate athletics, lifetime physical activity classes, coaching endorsement, and courses addressing sports management and various wellness issues are offered in the sport studies and athletics discipline.
Many students enrolled at UMM, no matter what their area of study, participate in intercollegiate athletic competition, which is directed by the sport studies and athletics faculty.
Division of Education programs are enhanced through faculty commitment to personalized instruction, use of current instructional technologies, student research, and opportunities for student and faculty participation in multicultural and international educational experiences.

# Division of the Humanities 

Art History (page 77)

Art, Studio (page 79)
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World Languages (page 194)
The Division of the Humanities is composed of 10 disciplines offering a major, as well as supplementary courses in dance and the humanities, e.g., the literature and thought of the non-English-speaking world in translation.
Since the time of the ancient Greeks and Romans, the disciplines in the humanities have been central to the meaning of a liberal education. These disciplines investigate important questions about the nature of human beings and their cultures, and examine alternative views concerning the meaning and direction of life.
In addition to its curricular programs, the Division of the Humanities sponsors and directs a varied program of cocurricular activities, organizations, and events for the campus and surrounding communities, including:

- Student art exhibitions, an active student Art Club, and Art Gallery exhibits of works by professional artists
- Scheduled poetry readings; the Prairie Gate Press; foreign and American films; the Writing Room to help students develop creative and expository writing skills; lectures on literary and language subjects; French, German, and Spanish student clubs with a variety of projects; opportunities for language students to travel and study abroad
- A varied program of musical events, including symphonic winds, orchestra, jazz ensemble, and choir concerts, as well as recitals by students and faculty; opportunities to work with well-known composers and artists in residence; tours
- A philosophy colloquium in which internationally distinguished philosophers participate
- A number of opportunities in communication, media, and rhetoric, including sponsorship of speakers and discussion groups, student attendance at conferences, and participation in the student organization Communication Club, as well as the UMM Intercollegiate Speech Team, which competes at several meets each year
- Annual offering of faculty- and student-directed plays; opportunities to work with professional troupes in residence; annual theatre tour to New York or London, when feasible
The Division of the Humanities provides students with opportunities to participate in the varied curricular and cocurricular programs described above. Through participation in these programs either as employees or volunteers, scores of students each year discover for themselves the meaning and value of a liberal education.
Finally, the Division of the Humanities offers its students one of UMM's most beautiful and useful facilities, the Humanities Fine Arts Center-a building to which Progressive Architecture granted its First Design Award with the following citation:

It gives architectural form to a powerful new direction in education-the school being integrated into the community. This project shows how the school can be a model for community development.

## Division of Science and Mathematics

Biology (page 83)<br>Chemistry (page 86)<br>Computer Science (page 92)<br>Environmental Science (page 118)<br>Geology (page 132)<br>Mathematics (page 159)<br>Natural Science (page 165)<br>Physics (page 168)<br>Statistics (page 190)

Whether interested in biology, chemistry, computer science, geology, mathematics, physics, or statistics, students find that programs in UMM's Division of Science and Mathematics offer excellent preparation for employment in a related field, graduate study, or teaching in junior or senior high school. Courses leading to Minnesota secondary education licensure are offered in chemistry, physics, life science, earth and space science, and mathematics. The sciences form an integral part of UMM's preprofessional programs in the health, medical, and engineering fields and contribute to general education studies.
Students have many opportunities to work closely with their professors. Students have conducted research on humancomputer interaction, program optimization, and evolutionary computation. They have helped develop a variety of methods for the analysis of statistical data, such as a loglinear model of educational data and the representation of three-dimensional copulas in terms of two-dimensional marginals. Students researched the physics of highly excited atoms, studied emissions of astronomical masers, performed observational optical astronomy, and modeled the behavior of materials with computers. They have investigated the role of fire in prairies, invasive species in forests, macroinvertebrate communities in prairie pothole lakes, regulation of cell
cycles and bioluminescence, genetics of endangered species, microbial resistance to antibiotics, vertebrate embryogenesis, and effects of changing climate and atmosphere on forest trees. They have studied the geology of glacial deposits in Minnesota, analyzed the fossils and sediments of the Cretaceous Seaway in South Dakota, and contributed to faculty field research in the Rocky Mountains of Colorado and Idaho. They have conducted research on the breakdown of pesticides, the preparation of novel chemical compounds, and the development of new chemical reactions both at UMM and in universities and laboratories across the country. Students are encouraged to publish results of their research with faculty or to present their findings at conferences or seminars. Many students at some time serve as teaching assistants, earning a financial stipend while assisting professors in tasks such as helping with laboratory courses, tutoring beginning students, assisting with greenhouse maintenance, and operating the UMM telescope.
In geology and biology, field trips are an integral part of the learning process. Students and faculty have traveled to the Florida Keys, to central and coastal Belize, to the volcanoes of Hawaii, to the deserts of Arizona and New Mexico, to western Canada and Alaska, and throughout Minnesota and surrounding regions of the Upper Midwest, in seeking a better understanding of our Earth's natural environments, landforms, and processes.
Students will find other ways to enhance their studies in the sciences. The Geology, Math, ACM Computer Science, Biology, ACS Chemistry, and Physics and Engineering Clubs provide an opportunity for students and faculty who share mutual interests to meet informally and participate in related activities. In addition, visiting scientists frequently come to campus to discuss current scientific problems and topics with UMM faculty and students.

## Division of the Social Sciences

## Anthropology (page 75)

Economics (page 97)
Gender, Women, and Sexuality Studies (page 128)
Geography (page 131)
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Liberal Arts for the Human Services (page 150)
Management (page 155)
Political Science (page 170)
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Social Science Major (page 177)
Sociology (page 181)
The social sciences consist of the branches of study dealing with the structure of society and the activities of its members. The Division of the Social Sciences includes the disciplines of anthropology, economics, geography, history, management, political science, psychology, and sociology. In addition, its courses are incorporated into the interdisciplinary programs in American Indian studies, environmental studies, Latin

## Academic Division Structure

American area studies, and European studies, It also offers majors in gender, women, and sexuality studies and liberal arts for the human services; and a social science major for teacher licensure. The social sciences coursework is oriented toward liberal education studies that prepare students to broadly understand human behavior, the institutions created by humans, and the resulting interactions.
Many of the social science disciplines encourage various kinds of fieldwork. Students intern on the local as well as state and national levels.
A hallmark of the social sciences at UMM is undergraduate research. Students author or coauthor research papers and projects with faculty and present papers at professional conferences. Many students serve as research and teaching assistants. They go beyond the boundaries of a strict "classroom" education to explore and gain firsthand experience with the professional tools of their field.
UMM's Division of the Social Sciences has many resources that lend themselves well to establishing individual and group learning experiences. These include a wide variety of service learning opportunities, internships, and field studies programs.
Close student-faculty rapport is an important aspect of social sciences study. Individualized attention is emphasized and faculty members encourage students to work with them on a one-to-one basis in order to create programs and access opportunities that best suit students' needs and interests.

## Interdisciplinary Programs

African American Studies (page 71)
American Indian Studies (page 72)
Environmental Studies (page 120)
European Studies (page 124)
Latin American Area Studies (page 148)
UMM offers interdisciplinary majors and/or minors-whose educational objectives are realized through the integration of courses from two or more disciplines-in African American studies, American Indian studies, environmental studies, European studies, Latin American area studies, liberal arts for the human services, and gender, women, and sexuality studies. Interdisciplinary course offerings not associated with an interdisciplinary major or minor involve in-depth material of two or more traditional academic disciplines or divisions, and some include subject material of a very broad nature that cannot properly be regarded as a part of a traditional discipline or division.

## Major and Minor Programs and Course Descriptions

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## Course Numbers and Designators

## Major and Minor Programs and Course Descriptions

## 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 2 xxx are for undergraduates in their second year of study, courses numbered 3 xxx are for undergraduates in their third year of study, and $4 x x x$ 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 2011. The most current version of all UMM course descriptions can be found online at onestop2.umn.edu/courses/mo/designators.jsp.

## 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 3332—African American Women Writers, HDiv (4 cr)
Engl 3522-Harlem Renaissance, HDiv (4 cr)
Hist 3356-Civil Rights Movement, 1954-1974, 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)
Engl 4017-Research Seminar: Tricksters-Conjurers in American Indian and African American Literature, HDiv (4 cr)
Fren 1311-West African Francophone 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: Littèrature migrante, IP (4 cr)
Hist 3301—Red, White, and Black: Race/Culture in Early America, HDiv ( 4 cr )
Soc 2101—Systems of Oppression, HDiv (4 cr)
Soc 3121—Sociology of Gender and Sexuality, 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 periodically)
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 2501 (or 1131), two from 2201, 2202, 2211, 2212, or \#; spring, offered periodically) 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 periodically) Study of African American literature. Particular attention given to issues of gender, class, power, "passing," and the racialized body.
Engl 3332. African American Women Writers. (HDiv; 4 cr; prereq 1011 or equiv or \#; fall, offered periodically)
If African Americans struggled to achieve equality and recognition in the racist United States, the situation was even more difficult for African American women, who had to contend with the sexism in both the white and black communities. This course examines the writings of prominent African American women.
Engl 3522. Harlem Renaissance. (HDiv; 4 cr; prereq 2501 (or 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.
Engl 4017. Research Seminar: Tricksters-Conjurers in American Indian and African American Literature. (HDiv; 4 cr ; prereq two from 31xx-35xx, \#; fall, spring, offered periodically)
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.
Fren 1311. West African Francophone Cinema. (IP; 4 cr ; does not count toward the Fren minor; fall, spring, offered periodically) 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. Meets Francophone Studies (FRS) requirement for the French major.
Fren 3041. Francophone Studies: Francophone Worlds. (IP; 4 cr; prereq or coreq 3011 or \#; fall, spring, offered periodically)
Readings in a variety of cultural and literary texts from among Frenchlanguage 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 periodically)
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: Littèrature migrante. (IP; 4 cr; prereq or coreq 3011 or \#; fall, spring, offered periodically)
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.
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 periodically)
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.
Soc 2101. Systems of Oppression. (HDiv; 4 cr; prereq 1101 or Anth 111 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 and ageism.

Soc 3121. Sociology of Gender and Sexuality. (HDiv; 4 cr; prereq 1101 or Anth וווו or \#; fall, every year)
Introduces students to the sociological study of gender and sexuality. Focuses on gender difference and gender inequality. Analyzes 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. Following a theoretical overview, examines how gender and sexuality affect everyday experiences.
Soc 3141. Sociology of Deviance. (E/CR; 4 cr; prereq 1101 or \#; spring, every year)
Introduces students to the sociological study of deviance. Explores the social reality of deviance within contemporary society and examines the social construction of deviant categories. Focuses on images of deviance as social constructs, rather than as intrinsic elements of human behavior. Investigates the complex relationships between individual behavior and social structure, with a focus on power, inequality, and oppression. Also, examines the socio-cultural definitions of morality and behavior.

Soc 3251. African Americans. (HDiv; 4 cr; prereq 1101 or Anth 1ו1ו; fall, spring, offered periodically)
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.

## 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 $\mathrm{D}+$ 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 approval of the American Indian Studies coordinator(s), a capstone course in a different major may be substituted for AmIn 4901 if it contains primary American Indian content (e.g., Engl 4017Research Seminar: Tricksters-Conjurers in American Indian and African American Literature).
AmIn 1101—Introduction to American Indian Studies, HDiv (4 cr)
Anth 1111-Introductory Cultural Anthropology, SS (4 cr)
or Soc 1101—Introductory Sociology, SS (4 cr)
AmIn 3402-Representations from the Field: American Indian Ethnography and Ethnohistory, HDiv ( 4 cr )
or Anth 3402-Representations from the Field: American Indian Ethnography and Ethnohistory, HDiv ( 4 cr )
Anth 3451 -Contemporary American Indians, HDiv (4 cr)
or Soc 3451-Contemporary American Indians, HDiv (4 cr)
or Engl 2411—Representations of American Indians in Popular and
Academic Culture, HDiv (4 cr)
Eng1 3311—American Indian Literature, HDiv (4 cr)
Hist 2251—American Indians and the United States: A History, HDiv (4 cr)
AmIn 4901—Senior Project in American Indian Studies (4 cr)

## Elective Courses

Students must complete at least 12 credits from the electives listed below, subject to the following restrictions:

1. At least 8 credits must be selected from Primary American Indian Studies courses.
2. No more than 4 credits of directed studies (x993) may be applied to the major.
3. No more than 3 credits of ceramics (ArtS 1039, ArtS 1050) may be applied to the major.
4. No more than 8 credits of American indigenous languages may be applied to the major.
Take 12 or more credit(s) from the following:

## Primary American Indian Studies Electives

Take 8 or more credit(s) from the following.
AmIn 1001—Beginning Dakota Language I, (4 cr)
AmIn 1002-Beginning Dakota Language II, FL (4 cr)
AmIn 1011—Beginning Anishinaabe Language I, ( 4 cr )
AmIn 1012—Beginning Anishinaabe Language II, FL (4 cr)
AmIn 2311-American Indians of the Great Plains: Victims and Victors, HDiv (4 cr)
AmIn 2993-Directed Study, (1-5 cr)
AmIn 3993-Directed Study, (1-5 cr)
Anth 3452-American Indian Women, HDiv (4 cr)
Anth 3455-North American Archaeology, SS (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)
Hist 3381-History of American Indian Nationalism and Red Power, 1920-Present, Hist (4 cr)
Soc 3452-American Indian Women, HDiv (4cr)

## Related American Indian Studies Electives

Take no more than 4 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 3301—U.S. Multicultural Literature, HDiv (4 cr)
Hist 3451—Facing West, HDiv (4 cr)
Pol 3234 -Race, Class, and Power: Social Movements and Interest Groups in U.S. Politics, HDiv (4 cr)
Psy 3542-Multicultural Psychology, HDiv (4 cr)
Soc 2101—Systems of Oppression, HDiv (4 cr)
Soc 3121—Sociology of Gender and Sexuality, 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.
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 complete at least 16 credits from the electives below, subject to the following restrictions:

1. Students must have at least one course from two of the disciplines below.
2. No more than 4 credits of directed studies (x993) may be applied to the minor.
3. No more than 8 credits of an American indigenous language may apply to the minor.
Take 16 or more credit(s) from the following:
AmIn 2311—American Indians of the Great Plains: Victims and Victors, HDiv (4 cr)
AmIn 2993-Directed Study, (1-5 cr)
AmIn 3993-Directed Study, (1-5 cr)
Anth 3452-American Indian Women, HDiv (4 cr)
Anth 3455-North American Archaeology, SS (4 cr)
Engl 3301—U.S. Multicultural Literature, HDiv (4 cr)
Engl 3311—American Indian Literature, HDiv (4 cr)
Eng1 4017—Research Seminar: Tricksters-Conjurers in American Indian and African American Literature, HDiv ( 4 cr )
Hist 2251-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 3359 - Native Strategies for Survival, 1880-1920, HDiv (4 cr)
Hist 3381-History of American Indian Nationalism and Red Power, 1920-Present, Hist (4 cr)
Soc 3452-American Indian Women, HDiv (4 cr)
AmIn 3402-Representations from the Field: American Indian Ethnography and Ethnohistory, HDiv (4 cr)
or Anth 3402-Representations from the Field: American Indian Ethnography and Ethnohistory, HDiv (4 cr)
Anth 3451-Contemporary American Indians, HDiv (4 cr)
or Soc 3451-Contemporary American Indians, HDiv (4 cr)
or Engl 2411-Representations of American Indians in Popular and Academic Culture, HDiv (4 cr)

## Indigenous Language

Take no more than 8 credit(s) from the following:
AmIn 1001—Beginning Dakota Language I, ( 4 cr )
AmIn 1002—Beginning Dakota Language II, FL (4 cr)
AmIn 1011-Beginning Anishinaabe Language I, (4 cr)
AmIn 1012—Beginning Anishinaabe Language II, FL (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 Course Descriptions

Amln 1001. Beginning Dakota Language I. ( 4 cr ; fall, every year) An introduction to speaking, writing, and reading Dakota language and an overview of Dakota culture.

AmIn 1002. Beginning Dakota Language II. (FL; 4 cr; prereq 1001 or \#; spring, every year)
A continuation of 1001 with greater emphasis on conversation and culture.
AmIn 1011. Beginning Anishinaabe Language I. (4 cr; fall, every year) An introduction to speaking, writing, and reading Anishinaabe language and an overview of Anishinaabe culture.
Amln 1012. Beginning Anishinaabe Language II. (FL; 4 cr ; prereq 10II; spring, every year)
A continuation of 1011 with greater emphasis on conversation and culture.
Amln 1101. Introduction to American Indian Studies. (HDiv; $4 \mathrm{cr} ;$ 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 1801. American Indian Song and Dance. (IC; 2 cr; prereq new college student in the first semester of enrollment at UMM; fall, offered periodically)
An academic and active exploration of song and dance traditions from American Indian tribes.
AmIn 2011. Intermediate Anishinaabe Language I. (Hum; 4 cr ; prereq 1012 or placement or \#; fall, offered periodically)
Review of the essential structural patterns of the Anishinaabe language; continued development of oral, aural, reading, and writing skills based on cultural and literary texts appropriate to this level.

AmIn 2012. Intermediate Anishinaabe Language II. (Hum; 4 cr; prereq 2011 or placement or \#; spring, offered periodically)
Review of the essential structural patterns of the Anishinaabe language; continued development of oral, aural, reading, and writing skills based on cultural and literary texts appropriate to this level.
AmIn 2311. American Indians of the Great Plains: Victims and Victors. (HDiv; 4 cr ; credit will not be granted if credit has been received for Anth 2311 or Engl 2311; summer, offered periodically)
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.

AmIn 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.

## AmIn 3402. Representations from the Field: American Indian

 Ethnography and Ethnohistory. (HDiv; 4 cr; =[Anth 3402]; prereq Anth $11 ו 1$ or Soc ו1ו'; fall, offered periodically)Same as Anth 3402. An analysis of ethnographic and ethnohistoric materials focusing on specific American Indian cultures.

Amln 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.

AmIn 4901. Senior Project in American Indian Studies. (4 cr; prereq ו10, Amln major, \#; fall, every year)
A culminating research project in American Indian Studies.
Anth iוו. 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 3402. Representations from the Field: American Indian

Ethnography and Ethnohistory. (HDiv; $4 \mathrm{cr} ;=[\mathrm{Am} \ln 3402]$; prereq $11 ו 1$ or Soc 1101; fall, offered periodically)
Same as AmIn 3402. An analysis of ethnographic and ethnohistoric materials focusing on specific American Indian cultures.

Anth 3451. Contemporary American Indians. (HDiv; 4 cr; =[Soc 3451]; prereq וווו or Soc וl 110 \#; fall, odd years)
Same as Soc 3451. The cultures of contemporary Indian tribes in the United States. Government policies, gaming, urban populations, education, selfdetermination, and identity.
Anth 3452. American Indian Women. (HDiv; 4 cr; =[Soc 3452]; prereq וווו or Soc 1101 or \#; fall, offered periodically)
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 וווו 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 periodically) 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.
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 periodically)
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 1011 or equiv; fall, offered periodically)
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 2501 (or 1131), two from 2201, 2202, 2211, 2212, or \#; spring, offered periodically) 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 2501 (or 1131), two from 2201, 2202, 2211, 2212, or \#; fall, spring, offered periodically) Study of American Indian literature written in English. Particular attention given to language, identity, land, and sovereignty.
Engl 4017. Research Seminar: Tricksters-Conjurers in American Indian and African American Literature. (HDiv; 4 cr ; prereq two from 31xx-35xx, \#; fall, spring, offered periodically)
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.
Hist 2251. American Indians and the United States: A History. (HDiv; 4 cr; spring, every year)
The experience of the original Americans and their interaction with later immigrants.
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 3381. History of American Indian Nationalism and Red Power, 1920-Present. (Hist; 4 cr; A-F only; spring, even years) Documents the history of American Indian Nationalism and the origins of the Red Power Movement in the late 1960s. Explores the rise of the Society of American Indians, the Indian Defense Association, National Congress of American Indians, and the rise of the Red Power Movement. Students learn about the changing nature of how the U.S. Government and Native Nations developed into a globalized transnational and intertribal political debate in the 20th century. Provides students with a critical overview of the peoples, places, and events that have impacted Tribal and U.S. relations.
Hist 3451. Facing West. (HDiv; 4 cr; fall, spring, offered periodically) 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 3234. Race, Class, and Power: Social Movements and Interest
Groups in U.S. Politics. (HDiv; 4 cr; prereq 1201; fall, even years) A broad overview of social movements and interest groups. Using a case study approach, the class considers the question of when and why social movements and interest groups in American politics arise and what makes them more or less successful.
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 world views, 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) Introduction to the field of sociology, the exploration of societies, and how societies operate. Sociology broadens social insights, fosters critical thinking, guides analytical thinking, and develops writing skills. By actively thinking about issues facing societies today, students learn to examine life situations and the influence of societies and groups on people's lives, careers, hopes, fears, and personalities. Emphasis on how society is stratified: how organizations and institutions influence the way people think, talk, feel, and act and how different groups (e.g., racial and ethnic) and divisions (e.g., gender and social class) within society have different access to power and privilege. People live their lives in relation to social and physical environments; sociologists study these environments and their effects on people's experiences and behavior.

Soc 2101. Systems of Oppression. (HDiv; 4 cr ; prereq 1101 or Anth $1 ו 11$ 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 and ageism.
Soc 3121. Sociology of Gender and Sexuality. (HDiv; 4 cr; prereq 1101 or Anth 1111 or \#; fall, every year)
Introduces students to the sociological study of gender and sexuality. Focuses on gender difference and gender inequality. Analyzes 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. Following a theoretical overview, examines how gender and sexuality affect everyday experiences.

Soc 3451. Contemporary American Indians. (HDiv; 4 cr; =[Anth 3451]; prereq 1101 or Anth $1 ו 1 ו$ 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; $4 \mathrm{cr} ;$ =[Anth 3452]; prereq 1101 or Anth וווו or \#; fall, offered periodically)
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

Anth 1111-Introductory Cultural Anthropology, SS (4 cr)
Anth 2101—Physical Anthropology, Sci-L (4 cr)
Anth 2103—Archaeology, SS (4 cr)
Anth 4411 -Seminar in Anthropological Methodology, E/CR (4 cr)
Anth 4901-Seminar in Anthropological Theory, SS (4 cr)

## Elective Courses

An additional 16 credits in anthropology and sociology courses, 12 of which must be in courses $3 x x x$ or above. No more than 8 credits can be from Soc courses.
Take no more than 4 credit(s) from the following:
Anth 2501—Medical Anthropology—An Overview, SS (4 cr)
Soc 1101—Introductory Sociology, SS (4 cr)
Soc 2101—Systems of Oppression, HDiv (4 cr)
Anth 1xxx, 2xxx
Soc 1xxx, 2xxx
Take 12 or more credit(s) from the following:
AmIn 3402-Representations from the Field: American Indian Ethnography and Ethnohistory, HDiv (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 and Ethnohistory, 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 3701—Forensic Anthropology, Sci-L (4 cr)
Soc 3103-Research Methodology in Sociology, SS (4 cr)
Soc 3111—Sociology of Modernization, IP (4 cr)
Soc 3112—Sociology of the Environment and Social Development, Envt ( 4 cr )
Soc 3121—Sociology of Gender and Sexuality, HDiv (4 cr)
Soc 3122—Sociology of Childhoods, HDiv (4 cr)
Soc 3123—Sociology of Aging, HDiv (4 cr)
Soc 3124—Sociology of Law, SS (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 3403-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 $3 \mathrm{xxx}, 4 \mathrm{xxx}$

## 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 4411—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 2 xxx 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:
AmIn 3402-Representations from the Field: American Indian Ethnography and Ethnohistory, HDiv (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 and Ethnohistory, 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 3701-Forensic Anthropology, Sci-L (4 cr)
Soc 2101—Systems of Oppression, HDiv (4 cr)
Soc 3103-Research Methodology in Sociology, SS (4 cr)
Soc 3111—Sociology of Modernization, IP (4 cr)
Soc 3112-Sociology of the Environment and Social Development, Envt (4 cr)
Soc 3121—Sociology of Gender and Sexuality, HDiv (4 cr)
Soc 3122—Sociology of Childhoods, HDiv (4 cr)
Soc 3123-Sociology of Aging, HDiv (4 cr)
Soc 3124-Sociology of Law, SS (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 3403-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 $2 \mathrm{xxx}, 3 \mathrm{xxx}, 4 \mathrm{xxx}$
Soc $2 \mathrm{xxx}, 3 \mathrm{xxx}, 4 \mathrm{xxx}$

## 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 and Anth 3402 for credit in American Indian studies.
Anth ו1ו1. 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 1811. Contemporary Chinese Culture and Society. (IC; 4 cr; prereq new college student in their first semester of enrollment at UMM; fall, offered periodically)
Overview of the cultural unity and diversity of contemporary Chinese society in relation to globalization and modernization. Focus is largely on the social changes and everyday life in the post-reform era (1978 to the present). Topics include Chinese politics, economic development, labor migration, family life, marriage, religion, ethnicity, and popular culture. Also, examination of the globalizing forces that help produce cross-cultural imageries of China.
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.

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 2453. American Indians, Anthropology, and Museums. (HDiv; $4 \mathrm{cr} ;$ prereq 1111 or Soc 1101; fall, offered periodically)
Analyze the role of museums and their development as significant sites in which to examine power and privilege, culture, identity, representation, and historical memory. Explore different types of museums, and their early origins as 'cabinets of curiosities.' In the late 19th and early 20th centuries, early modern anthropologists and ethnographers descended upon Indian reservations to record Native languages and songs and collect cultural objects and information, in order to capture 'authentic' American Indians and cultures they believed would disappear entirely. Explore what has become known as salvage anthropology or ethnography and ideas surrounding terms such as 'authenticity' and 'culture.'
Anth 2501. Medical Anthropology-An Overview. (SS; 4 cr; prereq 111 or Soc 1101 or \#; spring, offered periodically)
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 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 32O4]; prereq 111 or Soc 1101 or \#; spring, every year)
Same as Soc 3204. Examines the globalization of food systems utilizing a political ecology perspective 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 111 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 and Ethnohistory. (HDiv; 4 cr ; $=$ [Amln 3402]; prereq 111 or Soc 1101; fall, offered periodically)
Same as AmIn 3402. An analysis of ethnographic and ethnohistoric 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, selfdetermination, and identity.

Anth 3452. American Indian Women. (HDiv; 4 cr; =[Soc 3452]; prereq וווו or Soc 1101 or \#; fall, offered periodically)
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 iווו 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 וווו or Soc 1101 or \#; fall, 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; $4 \mathrm{cr} ;=[\mathrm{Soc} 3602]$; prereq וווו or Soc 1101 or \#; spring, every year)
Same as Soc 3602. Study of the social, economic, and political positions of women in Latin American countries. Topics include class and ethnic differences, women in the labor force, and women's participation in political movements through the lens of feminist theory.
Anth 3603. Latin American Archaeology. (SS; 4 cr; prereq וווו 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 3701. Forensic Anthropology. (Sci-L; 4 cr; prereq 2101 or Biol 2102; fall, odd years)
Recovery, identification, and analysis of human skeletal remains, including investigation techniques, identification of age, sex, ancestry, and cause of death. Two $65-\mathrm{min}$ lectures and one 2 -hour lab weekly.
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.

Anth 4411. Seminar in Anthropological Methodology. (E/CR; 4 cr; A-F only; prereq וווו 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 4501. Archaeological Fieldschool. (SS; 4 cr [max 8 cr]; prereq \#; summer, offered periodically)
Experience in archaeological fieldwork, including excavation, survey, artifact processing, and living under field conditions.
Anth 4901. Seminar in Anthropological Theory. (SS; 4 cr; A-F only; prereq וווו or Soc 1101, 4 addtl cr in Anth or Soc; spring, every year) Examines the historical development of anthropological theory, influences that shaped historical and contemporary anthropological theories, and major debates regarding their interpretation.
Anth 4993. 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

Students are required to take 2 semester(s) of any second language.
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 or Two Courses (in 2 different media)

Basic Studio is preparation for advanced work in studio art. The three related parts must be taken concurrently and in sequence. Two 1xxx 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 Courses (in 2 different media)

Take exactly 2 course(s) totaling 6 or more credit(s) from the following: ArtS 1001—Visual Studies for Non-Majors: Drawing, ArtP (3 cr)
ArtS 1002—Visual Studies for Non-Majors: Digitally Assisted Design, 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)
ArtS 1005-Visual Studies for Non-Majors: Photography, ArtP (3 cr)
ArtS 1039—Ceramics I, ArtP (3 cr)
ArtS 1040—Ceramics II, ArtP (3 cr)
ArtS 1050-Beginning Ceramics, ArtP (3 cr)
ArtS 1300-Watercolor Painting, ArtP (3 cr)

## Elective Courses

Take 24 or more credit(s) 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 3112—Art and the Byzantine Empire, FA (4 cr)
ArtH 3113-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 -American Art from the End of Modernism to the
Postmodern 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 3xxx, 4xxx

## 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 credit(s) 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 3112—Art and the Byzantine Empire, FA (4 cr)
ArtH 3113-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—American Art from the End of Modernism to the Postmodern 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 3xxx
ArtH 4xxx

## Art History Course Descriptions

ArtH ו101. Principles of Art. (FA; 4 cr ; fall, spring, 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 וIIו. 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 1801. Memorials and Memorialization. (IC; 2 cr ; prereq new college student in their first semester of enrollment at UMM; fall, offered periodically)
In what ways have cultures throughout time sought to commemorate life and death through visual form? And why has memorialization become so potent in recent decades? Consider various forms of memorials, including monuments, tombstones, quilts, and tattoos, and examine how these visual media express that which may elude words.
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, odd 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 3112. Art and the Byzantine Empire. (FA; 4 cr; prereq any 1xxx ArtH course or jr status or \#; fall, even years)
A chronological and socio-political exploration of the development of art within the Byzantine Empire. The various roles that this art took within and beyond the borders of Byzantium.

ArtH 3113. Islamic Art and Culture. (FA; 4 cr; prereq any 1xxx ArtH course or jr status or \#; spring, 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 ; prereq any 1xxx ArtH course or jr status or \#; spring, odd 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; prereq any 1xxx ArtH course or jr status or \#; spring, even 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; prereq any 1xxx ArtH course or jr status or \#; spring, odd 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)
An investigation of the fascinating trends of Mannerist and Venetian Renaissance art, considered through the lenses of art theory, biography, social history, and style.

ArtH 3171. Baroque Art. (FA; 4 cr; prereq any 1xxx ArtH course or jr status or \#; spring, odd 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, odd 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. American Art from the End of Modernism to the Postmodern 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, even 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, even years)
Survey of Chinese arts 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 periodically)
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 periodically)
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.
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 4901. Capstone Assessment of Student Experience in Art History. (1 cr; S-N or audit; prereq ArtH major, \#; 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 cocurricular 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 $\mathrm{S}-\mathrm{N}$ unless offered $\mathrm{S}-\mathrm{N}$ 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

Complete 12 credits
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

Complete 12 credits
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

Complete 12 credits
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

Complete 12 credits
ArtS 1050-Beginning Ceramics, ArtP (3 cr)
ArtS 2050—Advanced Ceramics, ArtP (3 cr)

## -or- Drawing

Complete 12 credits
ArtS 3100—Advanced Drawing I, ArtP (3 cr)
ArtS 3110—Advanced Drawing II, ArtP (3 cr)

## -or- Photography/Digital Imaging

Complete 12 credits
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

## Complete 6 credits

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

## -or- Painting

Complete 6 credits
ArtS 2301—Beginning Painting I, ArtP (3 cr)
ArtS 2302—Beginning Painting II, ArtP (3 cr)

## -or- Sculpture

Complete 6 credits
ArtS 2401—Beginning Sculpture I, ArtP (3 cr)
ArtS 2402—Beginning Sculpture II, ArtP (3 cr)

## -or- Ceramics

Complete 6 credits
ArtS 1050—Beginning Ceramics, ArtP (3 cr)
ArtS 2050—Advanced Ceramics, ArtP (3 cr)

## -or- Drawing

Complete 6 credits
ArtS 3100 —Advanced Drawing I, ArtP (3 cr)
ArtS 3110—Advanced Drawing II, ArtP (3 cr)

## -or- Photography/Digital Imaging

Complete 6 credits
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 2xxx, 3xxx, 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—American Art from the End of Modernism to the
Postmodern 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.

## A 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)
-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)

## 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 1080, ArtS 1070]; no elective cr for ArtS majors or minors; fall, spring, offered periodically)
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 periodically)
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 periodically)
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 periodically)
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 periodically)
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 periodically) 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.

ArtS 1040. Ceramics II. (ArtP; 3 cr [max 9 cr]; prereq 1039 or 1050; fall, spring, offered periodically)
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.
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.
ArtS 1102. Basic Studio Drawing II. (ArtP; 2 cr; prereq 1101, coreq 1104, 1106; 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, 1106; 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 periodically)
An introduction to various painting techniques in watercolor.
ArtS 1801. Mural Project and Public Art. (IC; $2 \mathrm{cr} ;$ prereq new college student in their first semester of enrollment at UMM; fall, offered periodically)
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 1802. 2D Studies in Printmaking. (IC; 2 cr; prereq new college student in their first semester of enrollment at UMM; fall, offered periodically)
Introduces two-dimensional design concerns through the study of traditional printmaking techniques. Referencing the rich history of socially engaged printmaking as a guide for their own creative process, students learn how to visually express their own ideas related to contemporary social, political, and environmental concerns.

ArtS 2050. Advanced Ceramics. (ArtP; 3 cr [max 9 cr]; prereq 1050 or \#; fall, spring, offered periodically)
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 periodically)
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 periodically)
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 periodically)
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 periodically) 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 periodically) 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 periodically) 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 periodically)
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 periodically)
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 periodically)
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 periodically)
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 periodically)
Study of and practice in various contemporary methods in painting: application of drawing skills, color, composition, and personal expression to alternative painting techniques.
ArtS 3014. Media Studies: Fabric as Form. (ArtP; 3 cr [max 9 cr ]; prereq major or minor or \#; fall, spring, summer, offered periodically) Focus on the possibilities of fabric as the primary medium in art making. Topics include surface manipulation via hand and mechanical processes and using fabric to construct independent forms.
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 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.
ArtS 4881. Senior Review. (o cr; S-N only; prereq sr studio art major; fall, every year)
Review by the studio art and art history faculty of the student's work, concentrating on the major media and including any work designated at the Junior Review. Time of review and work presented decided in consultation with the adviser and the instructor of the major studio area. Normally taken fall semester.

ArtS 4901. Senior Exhibit. (o cr; S-N only; prereq sr studio art major or minor; spring, every year)
Students consult with their adviser and the faculty member facilitating the exhibit for details.

ArtS 4902. Senior Thesis Project I. (2 cr; A-F only; prereq senior ArtS major, completion of Second Year Portfolio Review; fall, every year) A two-semester sequential capstone course for majors, with a focus on the planning and preparation of a senior exhibit and the investigation of other professional skills. Group seminars include portfolio presentation, framing, interviewing, grant writing, and graduate school application. Individual creative research projects focus on development of a thesis and slide talk to accompany the final body of work exhibited in the HFA Gallery during the spring semester. Students participate in a portfolio review by the studio art and art history faculty, concentrating on work from the major medium and other work completed since the Second-Year Portfolio Review. Time of the review is arranged through the discipline coordinator.
ArtS 4903. Senior Thesis Project II. (1 cr; A-F only; prereq 4902; spring, every year)
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 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.

## Biology (Biol)

## Division of Science \& 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 $\mathrm{D}+$ 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)
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/SR (4 cr)
or 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)

## Elective Courses

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

## Organismal Electives

Take 1 or more course(s) from the following:
Biol 4071—Flora of Minnesota, Sci-L (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 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 (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 $\mathrm{D}+$ 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 1002. Human Nutrition. (Sci; 3 cr; no elective cr for biol majors or minors; spring, every year)
Nutrients essential to human life and well-being. Digestion, absorption, and metabolism of nutrients. Changes in metabolism during disease. Nutrients and their roles. Sports nutrition, weight loss/gain diets, nutritional myths. (two 65-min lect)

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 $65-\mathrm{min}$ lect, one 120 - or $180-\mathrm{min}$ lab or field study)
Biol 1052. Introduction to Conservation Biology. (Sci-L; 4 cr; no elective cr for biol majors or minors; spring, offered periodically) 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 $65-\mathrm{min}$ 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, offered periodically)
Basic concepts in insect biology including evolutionary history, lifecycles, 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. (one all-day field trip required in addition to labs)

Biol 1071. Plants of Minnesota. (Sci-L; 4 cr; no elective cr for biol majors or minors; summer, offered periodically)
Introduction to plant structure and function, especially those found in Minnesota: ecology, physiology, evolution, and conservation. Labs emphasize plant identification and anatomy.
Biol וווו. 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. (two 75-min lect)

Biol 2101. Evolution of Biodiversity. (Sci-L; 4 cr; prereq 1101 or 111 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 $65-\mathrm{min}$ lect, one 180-min lab)
Biol 2102. Human Anatomy. (3 cr; =[SSA 2102]; prereq soph; no elective cr for biol majors or minors; fall, every year)
Same as SSA 2102. Structure of human systems at their organ and cellular level. (two $65-\mathrm{min}$ lect, one $120-\mathrm{min}$ lab)
Biol 2103. Introduction to Human Physiology. (Sci; 4 cr; prereq 2102 or SSA 2102 or \#; no elective cr for biology majors or minors; spring, every year)
Function of human systems at organ, cell, and molecular levels. (three 65-min lect)

Biol 21ו1. Cell Biology. (Sci-L; 4 cr; prereq ו1ורו or 11102 or \#; fall, every year)
Cell structure and function. Includes topics pertaining to the chemistry, physiology, structure, and reproduction of plant and animal cells. (three $65-\mathrm{min}$ lect and one $120-\mathrm{min} \mathrm{lab})$
Biol 2151. Natural History of Belize. ( 1 cr [max 2 cr$]$; S-N only; prereq or coreq Biol 2101 or EnSt 2101 or \#; spring, offered periodically)
Brief introduction to the flora, fauna, and ecology of Belize, including visits to coral reef, wetland, mangrove, tropical forest, and savanna habitats.
Biol 3121. 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 $100-\mathrm{min}$ lect, $180-\mathrm{min}$ 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 $65-\mathrm{min}$ lect, one $180-\mathrm{min}$ 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)
Writing, editing, and revising an extensive review paper on a biological topic under the mentorship of a faculty member. Multiple drafts and revisions are expected.
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; 4 cr ; prereq Stat 1601 or Stat 2601, jr status or \#; spring, every year)
The biology of diseases (infectious and chronic) and the interventions (medical and behavioral) designed to treat or prevent disease. Epidemiologic methods and case studies are examined to understand the determinants of health and disease. (three $65-\mathrm{min}$ lect)
Biol 4071. Flora of Minnesota. (Sci-L; 4 cr; prereq Biol 2101; summer, offered periodically)
Identification, ecology, and conservation of vascular plants found in Minnesota. Labs and field trips emphasize plant identification and anatomy.
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 $65-\mathrm{min}$ lect, one $180-\mathrm{min}$ lab)

Biol 4121. Herpetology. (Sci-L; 4 cr; prereq Biol 2101 or EnSt 2101 or \#; spring, even years)
Survey of amphibians and reptiles, including their evolution, systematics, identification, behavior, ecological relationships, and contemporary problems associated with human activities. (two $65-\mathrm{min}$ lect, one $180-\mathrm{min}$ lab or field study)
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 $65-\mathrm{min}$ lect, one $180-\mathrm{min}$ 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 $65-\mathrm{min}$ lect, 180 -min lab)

Biol 4161. Evolution. (Sci; 4 cr; prereq Biol 2101, 3121 or \#; spring, even years)
Survey of the history, evidence, and mechanisms of organic evolution. (three $65-\mathrm{min}$ lect)

Biol 4172. Plant Systematics. (Sci-L; 4 cr; prereq 2101 or EnSt 2101 or \#; spring, odd 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 $65-\mathrm{min}$ 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 $65-\mathrm{min}$ lectures, one $180-\mathrm{min}$ 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 $65-\mathrm{min}$ lect, one $180-\mathrm{min}$ lab; all day field trip required)

Biol 4211. Biochemistry. (Sci; 4 cr; prereq 3121, Chem 2302 or Chem 2304 or \#; fall, every year)
Structures, functions, and biochemical transformations of proteins, carbohydrates, and lipids. (three $65-\mathrm{min}$ lect) Optional lab offered. See Biol 4611.

Biol 4301. Plant Biology. (Sci-L; 4 cr; prereq Biol 2101, 2111 or \#; fall, even years)
Descriptive and experimental study of plants. Anatomy, development, physiology, secondary compounds, evolution, human uses of plants. (two $65-\mathrm{min}$ lect, one $180-\mathrm{min}$ lab)

Biol 4311. Conservation Genetics. (Sci-L; 4 cr; prereq Biol 2101 or \#; Stat 1601 or 2601 recommended.; fall, offered periodically)
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 $120-\mathrm{min}$ 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 $65-\mathrm{min}$ lect, $180-\mathrm{min}$ lab)
Biol 4321. Animal Physiology. (Sci-L; 4 cr; prereq 2111; spring, offered periodically)
Functions of animal structures as they relate to coping with different environmental situations. (two $65-\mathrm{min}$ lect, one $120-\mathrm{min} \mathrm{lab}$ )

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. (three $65-\mathrm{min}$ lect)

Biol 4351. Conservation Biology . (Sci-L; 4 cr; prereq Biol 2101 or EnSt 2101, coreq or prereq Biol 3131 or \#; fall, odd 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 $65-\mathrm{min}$ lect, one $180-\mathrm{min}$ lab)

Biol 4600. Practicum in Biology. (1-2 cr [max 4 cr]; S-N only; prereq \#; no elective cr for biol majors or minors; fall, spring, every year)
Supervised experience of selected activities; lab preparation/management, greenhouse care/management, animal care, curating museum/herbarium collections. Repeatable with different projects or activities.
Biol 4611. Biochemistry Lab. (1 cr; prereq or coreq 4211; fall, every year) Experiments using the major separation and analytical techniques of biochemistry, including centrifugation, chromatography, electrophoresis, immunochemistry, and spectrophotometry. (one 180-minute lab)
Biol 4901. Senior Seminar. (1 cr; prereq 3701, sr or \#; required of all sr biology majors; full-year course begins fall sem; fall, every year) Seminar series on selected biological topics. Includes preparation and presentation of a seminar based on original research and/or scientific literature. Enroll in fall, continues all year.

Biol 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.

## Chemistry (Chem)

## Division of Science \& 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. 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/biochemistry 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 healthrelated fields, such as veterinary medicine, pharmacy and dentistry; in biological fields related to chemistry; and in a variety of other fields. The others enter the job market upon graduation, primarily in the chemical industry or in secondary education.

The UMM chemistry program is approved to offer American Chemical Society (ACS) Certified Degrees. "ACS promotes excellence in chemistry education for undergraduate students through approval of baccalaureate chemistry programs. ACS-approved programs offer a broad-based and rigorous chemistry education that gives students intellectual, experimental, and communication skills to become effective scientific professionals." (from ACS CPT guide)
Students who wish to have their degree certified by the ACS may need to complete additional courses or work beyond the program requirements listed below. A complete description of how to complete the ACS requirements at UMM can be found on the discipline web page: www.morris.umn.edu /academic/chemistry/courses.html.
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 $\mathrm{D}+$ 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

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)
Chem 3101—Analytical Chemistry, Sci-L (4 cr)
Chem 3501—Physical Chemistry I, Sci (4 cr)
Chem 3901—Chemistry Seminar I ( 0.5 cr )
Chem 4901-Chemistry Seminar II ( 0.5 cr )
Chem 2302-Organic Chemistry II, Sci (4 cr)
or Chem 2304—Organic Chemistry II with a Biological Emphasis, Sci ( 4 cr )
Take all of the following in the same term:
Chem 2321—Introduction to Research I (1 cr)
Chem 2322-Introduction to Research II (1 cr)
Math 1101—Calculus I, M/SR (5 cr)
Math 1102-Calculus II, M/SR (5 cr)
Phys 1101 -General Physics I, Sci-L (5 cr)
Phys 1102—General Physics II, Sci-L (5 cr)

## 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

Standard Chemistry Required Courses
Chem 3502—Physical Chemistry II, Sci (4 cr)
Chem 3511—Physical Chemistry Lab (1 cr)
Standard Chemistry Elective Courses
Take 2 or more course(s) from the following:
Chem 3301—The Chemistry of Sustainable Energy, Sci (3 cr)
Chem 3401—Polymer Chemistry and the Environment, Sci (3 cr)
Chem 3801—History of Chemistry, Sci (3 cr)
Chem 4111-Instrumental Analysis, Sci-L (4 cr)
Chem 4352-Synthesis, Sci (3 cr)
Chem 4551-Theoretical Chemistry, Sci (3 cr)
Chem 4552-Molecular Spectroscopy, Sci (3 cr)
Chem 4701—Inorganic Chemistry, Sci (3 cr)
Chem 4751—Advanced Inorganic Chemistry, Sci (3 cr)
Biol 4211—Biochemistry, Sci (4 cr)
and Biol 4611—Biochemistry Lab (1 cr)

## Chemistry, Subfield Biochemistry Sub-plan

## Biochemistry Required Courses

Biol 1111—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)
Chem 4351—Bioorganic Chemistry, Sci (3 cr)
Biol 4611—Biochemistry Lab (1 cr)

## Biochemistry Electives

For students planning to go to graduate school in biochemistry, it is recommended that they also take Biol 4111—Microbiology and Biol 4312-Genetics.
Take 1 or more course(s) from the following:
Chem 4111—Instrumental Analysis, Sci-L (4 cr)
Chem 3301—The Chemistry of Sustainable Energy, Sci (3 cr)
Chem 3401—Polymer Chemistry and the Environment, Sci (3 cr)
Chem 3502—Physical Chemistry II, Sci (4 cr)
Chem 4701—Inorganic Chemistry, Sci (3 cr)
Chem 3801—History of Chemistry, Sci (3 cr)
Chem 4352-Synthesis, 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 $\mathrm{D}+$ 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 the minor 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 $\mathbf{3 1 0 1}$ 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:

Biol 4211—Biochemistry, Sci (4 cr)
Chem 3301—The Chemistry of Sustainable Energy, Sci (3 cr)
Chem 3401-Polymer Chemistry and the Environment, Sci (3 cr)
Chem 3501—Physical Chemistry I, Sci (4 cr)
Chem 3502—Physical Chemistry II, Sci (4 cr)
Chem 3801—History of Chemistry, Sci (3 cr)
Chem 4111—Instrumental Analysis, Sci-L (4 cr)
Chem 4351—Bioorganic Chemistry, Sci (3 cr)
Chem 4352-Synthesis, Sci (3 cr)
Chem 4551-Theoretical Chemistry, Sci (3 cr)
Chem 4552-Molecular Spectroscopy, Sci (3 cr)

Chem 4701—Inorganic Chemistry, Sci (3 cr)
Chem 4751—Advanced Inorganic Chemistry, Sci (3 cr)
Chem 2302-Organic Chemistry II, Sci (4 cr)
or Chem 2304—Organic Chemistry II with a Biological Emphasis, Sci (4 cr)

## or if Chem $\mathbf{3 1 0 1}$ is not taken:

Chem 3501—Physical Chemistry I, Sci (4 cr)
Choose one course and lab combination from the following pairs:
Take 2 or more course(s) from the following:
Chem 2302-Organic Chemistry II, Sci (4 cr)
Chem 2312—Organic Chemistry Lab II (1 cr)
Chem 2304-Organic Chemistry II with a Biological Emphasis, Sci ( 4 cr )
Chem 2312—Organic Chemistry Lab II (1 cr)
Chem 3502—Physical Chemistry II, Sci (4 cr)
Chem 3511—Physical Chemistry Lab (1 cr)
Chem 4701—Inorganic Chemistry, Sci (3 cr)
Chem 4711—Inorganic Chemistry Lab (1 cr)
Biol 4211—Biochemistry, Sci (4cr)
Biol 4611—Biochemistry Lab (1 cr)
Chem 3401-Polymer Chemistry and the Environment, Sci (3 cr) Chem 3411—Polymer Chemistry Lab (1 cr)
Take 1 or more course(s) from the following:
Biol 4211—Biochemistry, Sci (4 cr)
Chem 2302-Organic Chemistry II, Sci (4 cr)
Chem 2304-Organic Chemistry II with a Biological Emphasis, Sci (4 cr)
Chem 3301-The Chemistry of Sustainable Energy, Sci (3 cr)
Chem 3401—Polymer Chemistry and the Environment, Sci (3 cr)
Chem 3502—Physical Chemistry II, Sci (4 cr)
Chem 4701—Inorganic Chemistry, Sci (3 cr)
Chem 3801—History of Chemistry, Sci (3 cr)
Chem 4351—Bioorganic Chemistry, Sci (3 cr)
Chem 4352-Synthesis, 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)

## 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 1001. Chemistry for the Curious Citizen: The Role of Chemistry in the Environment and Everyday Life. (Sci-L; 4 cr; may not count toward chem major or minor; summer, offered periodically)
The central nature and relevance of chemistry to the environment and everyday life. Air quality, the ozone layer, global warming, energy resources, acid rain, and nutrition. Discussion and debate of current events related to these topics. Select readings on significant historical chemical discoveries in these areas that still resonate today. Basic chemistry lab principles and techniques. This course is intended for non-science majors.
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 1994. Directed Research. (1-5 cr [max 10 cr$]$; prereq approved directed research form; fall, spring, every year)
An on- or off-campus undergraduate research 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; 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; =[Chem 2304]; 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; freeradical chemistry; retrosynthetic analysis; special topics. (4 hrs lect)

Chem 2304. Organic Chemistry II with a Biological Emphasis. (Sci; 4 cr; =[Chem 2302]; prereq 2301, Biol 2111 or \#; spring, every year) Continuation of topics from Chem 2301, with an emphasis on compounds and reactions of biological interest. Topics include spectroscopy, structure and reactivity of aromatic compounds, phosphoryl and acyl group transfer, nucleophilic carbonyl addition, reactions involving enolate and enamine intermediates, coenzyme chemistry, electrophilic addition, beta elimination, oxidation and reduction of organic compounds, and reactions involving free radical intermediates. (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 2304 or \#; spring, offered periodically)
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 2304 or \#; spring, every year)
Interdisciplinary approach to experiment design and analysis of data. Synthesis of organic, organometallic, and/or inorganic compounds, with emphasis on purification and characterization using advanced techniques and instrumental methods. Instruction in 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 or 2304, \#; 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 2994. Directed Research. (1-5 cr [max 10 cr ]; prereq approved directed research form; fall, spring, every year)
An on- or off-campus undergraduate research 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. Acidbase, oxidation-reduction, and complexometric titrations, introduction to electrochemical and spectrophotometric analyses and separations. (3 hrs lect, 3 hrs lab)
Chem 3301. The Chemistry of Sustainable Energy. (Sci; 3 cr; =[ESci 3301]; prereq 2302 or 2304 or \#; fall, even years)
The fundamental chemical concepts underlying energy sources. Topics include: energy basics, fossil fuels, "sustainable" energy sources, biomass, solar voltaics, hydrogen fuel cells, and nuclear energy.
Chem 3401. Polymer Chemistry and the Environment. (Sci; $3 \mathrm{cr} ;=[\mathrm{ESci}$ 3401]; prereq 2302 or 2304 or \#; spring, even years)
Same as ESci 3401. Introduction to many traditional topics in polymer chemistry including those with a connection to elements of the environment and environmental science such as the preparation of polymers from renewable feedstocks, polymers in renewable energy, green syntheses of polymers, and environmental impacts of polymers. (3 hrs lect)
Chem 3411. Polymer Chemistry Lab. (1 cr; prereq 2322, coreq 3401 or ESci 3401 or \#; spring, even years)
Synthesis, characterization, and physical properties of polymers with an emphasis on sustainable polymer chemistry. ( 3 hrs lab)
Chem 3501. Physical Chemistry I. (Sci; 4 cr; prereq 1102, Phys 1101, Math 1102 or \#; fall, every year)
The gas state. Classical thermodynamics. Phase, chemical and
heterogeneous equilibria. Chemical kinetics. Kinetic theory of gases. Transport. (4 hrs lect)

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 3801. History of Chemistry. (Sci; 3 cr; prereq 2301 or \#; fall, odd years)
Theories of atoms, elements, principles. Alchemy. Pneumatic chemistry. Phlogiston. Lavoisier and chemical revolution. Dalton and atomic weight scales. Physical and chemical atoms. Cannizzaro and Karlsruhe Congress. Einstein, Perrin and the reality of atoms. Niels Bohr and periodic table.(3 hrs lect)
Chem 3901. Chemistry Seminar I. (. 5 cr ; A-F only; prereq 2321; 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 3994. Directed Research. (1-5 cr [max 10 cr ]; prereq approved directed research form; fall, spring, every year)
An on- or off-campus undergraduate research experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum.
Chem 4111. Instrumental Analysis. (Sci-L; 4 cr; prereq 3101; spring, odd years)
Principles of chemical instrumentation and instrumental methods of analysis; extensive lab work using chromatographic, spectrophotometric, and electrochemical methods of analysis. ( 2 hrs lect, 6 hrs lab)
Chem 4351. Bioorganic Chemistry. (Sci; 3 cr; prereq 2302 or 2304, Biol 4211; spring, every year)
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 or 2304; 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 periodically)
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 4551. Theoretical Chemistry. (Sci; 3 cr ; prereq or coreq 3502 or \#; spring, offered periodically)
Quantum theory of molecules. Statistical thermodynamics; Gibbsian ensembles; applications. (3 hrs lect)

Chem 4552. Molecular Spectroscopy. (Sci; 3 cr; prereq 2302 or 2304, 3101 or \#; spring, even years)
Interaction of molecules and electromagnetic radiation. Spectroscopic determination of molecular structure. Operation of spectrometers and spectrophotometers. (3 hrs lect)
Chem 4701. Inorganic Chemistry. (Sci; 3 cr; prereq 3501 or \#; spring, odd years)
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 4711. Inorganic Chemistry Lab. (1 cr; prereq coreq 4701 or \#; spring, odd years)
Lab experiments in inorganic/organometallic chemistry illustrating synthetic and spectroscopic techniques. ( 3 hrs lab)
Chem 4751. Advanced Inorganic Chemistry. (Sci; 3 cr; prereq 3701 or \#;
fall, spring, offered periodically)
Structure and reactions of coordination compounds, inorganic cages and clusters, lanthanide and actinide series. (3 hrs lect)
Chem 4901. Chemistry Seminar II. (. 5 cr ; A-F only; prereq 3901; required of all chem majors; may not count toward chem minor: full-year course begins fall semester; fall, every year)
Continuation of Chemistry Seminar I. This is a full-year course. Students must attend year round and present one of the seminars.
Chem 4993. Directed Study. ( $1-5 \mathrm{cr}$ [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 4994. Directed Research. (1-5 cr [max 10 cr$]$; prereq approved directed research form; fall, spring, every year)
An on- or off-campus undergraduate research 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 Chinese discipline is designed to help students develop a number of skills in Chinese, including comprehension and speaking, reading, and writing, in order to communicate effectively in Chinese 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 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 l. (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.
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.

## Communication, Media, and Rhetoric (CMR)

## Division of the Humanities

This discipline is in the 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 $\mathrm{D}+$ 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 )
CMR 3121—Rhetorical Criticism and Hollywood Cinema, Hum (4cr)
CMR 3251—Rhetorical Criticism and Free Speech Discourse, E/CR ( 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 $\mathrm{D}+$ 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)

## 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 2321—Digital Media Production, Hum (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, E/CR (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 periodically)
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 1801. Legal Argument and Free Speech: Ready to Become a

 Supreme Court Justice?. (IC; 4 cr ; prereq new college student in their first semester of enrollment at UMM; fall, offered periodically) Examination of the development of legal argument in Supreme Court decisions dealing with free speech. Read Supreme Court cases, write opinions, speak to a mock Supreme Court, listen to arguments, and analyze the issues that define the ability to communicate in this country.CMR 2052. Legal Advocacy: Speaking in Appellate Forensic Situations. (E/CR; 4 cr; spring, offered periodically)
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 2311. Media History and Society. (SS; 4 cr ; fall, spring, offered periodically)
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 2321. Digital Media Production. (Hum; 4 cr ; fall, spring, offered periodically)
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 periodically) 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 periodically)
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 periodically)
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 periodically)
Investigation of the film genres of the Hollywood studio system era. Learn how films make meaning with their audiences.
CMR 3122. Rhetoric of Picture Books, Prose and Picture. (Hum; 4 cr ; prereq 1101 or \#; fall, offered periodically)
Explore and analyze picture books for intended and unintended messages. Examine the rhetorical construction of pictures and the rhetorical impact of the intersection between picture and prose. Gain a deeper sensitivity to the formerly unseen rhetorical dimensions of the symbols that surround them.

CMR 3251. Rhetorical Criticism and Free Speech Discourse. (E/CR; 4 cr; prereq 1101 or \#; fall, spring, offered periodically)
Analysis and evaluation of Supreme Court opinions establishing the contours of First Amendment protection for freedom of speech. Particular attention is devoted to the nature of "communication" revealed by the decisions studied.

CMR 3301. Media Theory, Criticism, and Problems. (SS; 4 cr; prereq 1101 or \#; spring, every year)
Theories, research studies, current trends, and various critical approaches to examine and explain the reflexive relationships between media and society.

CMR 3312. Media Literacy. (Hum; 4 cr; prereq 1101 or \#; fall, offered periodically)
Examining ways people decode media images and messages. Topics include principles of literacy, media content/industries, media and identity, and media effects.
CMR 3342. Visual Journalism. (Hum; 4 cr; this course may have a maximum of 12 students [we are limited by the number of computer workstations and software licenses in the HFA Digital Media Studio]; spring, offered periodically)
Both a theoretical and a hands-on course that immerses students in all aspects of the visual side of journalism, as well as in design principles and techniques for the web and print.
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 3411. Intercultural Communication Theory and Research. (HDiv; 4 cr; prereq 1101 or \#; fall, offered periodically)
Study of intercultural communication from an interpersonal and group perspective.
CMR 3421. Organizational Communication Theory and Research. (SS; 4 cr; prereq 1101 or \#; spring, offered periodically)
Study of organizational communication, including small group perspectives.
CMR 3432. Communication Research Methods . (Hum; 4 cr ; prereq 1101 or \#; fall, offered periodically)
Elements/methods of communication research. Use of quantitative/ qualitative research methodologies, basic research design, and data collection methods to inform decision making.
CMR 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.
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 periodically)
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 periodically)
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 periodically)
Applying a variety of approaches to understanding interpersonal communication.
CMR 4800. Directed Experience in Teaching Communication, Media, and Rhetoric. (1-4 cr [max 8 cr ]; S-N only; prereq \#; fall, spring, every year)
Practice as facilitators in the introductory-level communication, media, and 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; A-F only; prereq 1052, 1062, 1101 or sr status with \#; fall, 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 ; A-F only; prereq 4900, or sr status in the major, \#; 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 \& Mathematics

The computer science curriculum is designed to not only provide a solid background in fundamentals, but also to continuously respond to rapid changes in the field of computing by equipping our students with modern tools, approaches, and cutting-edge concepts and technologies. Coursework in computer science spans three core areas of computing, including theory, software development, and systems. Beginning computer science courses are open to non-majors and satisfy the mathematical and symbolic reasoning component of the general education requirements. All computer science majors must complete a senior seminar capstone experience, and the discipline prides itself on the high quality of students' papers and presentations in this course. The program also includes mathematics or statistics in the required coursework.
Computer science majors develop software, explore hardware systems, and apply theoretical concepts. Reflecting the collaborative nature of today's world, team work is heavily integrated into computer science coursework. Students are encouraged to use and supplement their formal education through research opportunities, internship experiences, programming and robotics competitions, and student and professional organizations. Many students take advantage of the opportunity to collaborate with computer science faculty on research projects, presenting the results at international, national, and regional conferences, as well as at UMM's Undergraduate Research Symposium.
Study in computer science is required for management and math majors at UMM, as well as for students pursuing a variety of pre-engineering programs. Many UMM computer science majors enter the job market upon graduation, primarily in the computing industry. Others pursue postgraduate work toward a masters or doctoral degree in computing, business, library science, or a variety of other fields.
Objectives-the computer science discipline is designed to

- serve students from other disciplines requiring knowledge of computer science;
- advance student learning in computer science at a depth and breadth appropriate to undergraduates;
- advance student competence in research in computer science;
- advance student writing and presentation skills appropriate for the field;
- advance student teamwork and collaboration skills; and
- prepare students for careers in industrial settings and/or postgraduate work in computing.


## 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. 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.
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 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—Senior Seminar (1 cr)
IS 1091-Ethical and Social Implications of Technology, E/CR (2 cr)
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 4409—Systems: Programming for Parallel Architecture, 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)
CSci 4456—Systems: Advanced Operating Systems, M/SR (4 cr)

## Theory Courses (45xx):

Take 2-4 credit(s) from the following:
CSci 4506-Theory: Fuzzy Logic and Fuzzy Sets, M/SR (2 cr)
CSci 4507-Theory: Data Compression, M/SR (2 cr)
CSci 4552-Theory: Advanced Algorithms, M/SR (4 cr)
CSci 4553-Theory: Evolutionary Computation and Artificial Intelligence, M/SR (4 cr)

CSci 4554 -Theory: Cryptography, M/SR (4 cr)
CSci 4555-Theory: Neural Networks and Machine Learning, M/ SR (4 cr)
CSci 4556-Theory: Computer Graphics, M/SR (4 cr)

## Programming and Languages Courses (46xx):

Take 2-4 credit(s) from the following:
CSci 4604—Programming and Languages: Graphical User Interfaces, M/SR (2 cr)
CSci 4605-Programming and Languages: Refactoring, M/SR (2 cr)
CSci 4651—Programming and Languages: Programming Languages, M/SR (4 cr)
CSci 4652—Programming and Languages: Compilers, M/SR (4 cr)
CSci 4653-Programming and Languages: Software Engineering, M/SR (4 cr)
CSci 4654 —Programming and Languages: Modern Functional Programming, M/SR ( 4 cr )
CSci 4655—Programming and Languages: Software Design and Development II, M/SR (4 cr)
CSci 4656 -Programming and Languages: Human-Computer Interaction and Interface Design, M/SR (4 cr)
CSci 4657-Programming and Languages: Programming Languages for Client-Server Systems, M/SR (4 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 3xxx, 4xxx
Stat $2 \mathrm{xxx}, 3 \mathrm{xxx}, 4 \mathrm{xxx}$

## 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 )
CSci 1302-Foundations of Computer Science, 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 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 3xxx, 4xxx
Stat 1xxx, 2xxx, 3xxx, 4xxx

## Computer Science Course Descriptions

CSci 1001. Introduction to the Computing World. (M/SR; 2 cr ; no elective cr for CSci majors or minors; fall, offered periodically) 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).
CSci 1101. Dynamic Web Programming. (M/SR; 2 cr; prereq 1001 or equiv experience with \#; no elective cr for CSci majors or minors; spring, offered periodically)
Basics 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 ; spring, every year)
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 1801. The Design of Everyday Technologies. (IC; 2 cr ; prereq new college student in their first semester of enrollment at UMM; requires attending two activities outside of class, a poster session, and a presentation; fall, offered periodically)
Discussion and examination of examples of everyday things, issues surrounding the design of technologies for people, and the impacts of new technologies and tools on people in society. Discussion of how values and ethics are manifested in design. Study of design techniques and approaches with an emphasis on promoting design literacy. Includes discussion, readings, presentations, and a project. Requires attending two activities outside of class, a poster session, and a presentation.
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, 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 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)
Model-based study of computing systems, operating systems, and networks. Discussion of modularity and organization, protection and security, performance, memory management and data storage, deadlock, and interprocess and inter-computer communication. ( 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 periodically)
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 4406. Systems: Wireless Data Networks. (M/SR; 2 cr; prereq 3401 or \#; fall, spring, offered periodically)
Licensed vs. unlicensed carrier frequencies. Physical layer characteristics and protocols. Network topologies. Discussion of current and upcoming standards. Data privacy and security.
CSci 4408. Systems: Computer Forensics. (M/SR; 2 cr; prereq 3401 or \#; spring, offered periodically)
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 4409. Systems: Programming for Parallel Architecture. (M/SR; 2 cr; prereq 3401; spring, offered periodically)
Study of programming models, languages, and approaches for parallel computer architectures. Topics include introduction to parallel computing and parallel architectures, approaches to program parallelization, mechanisms for communication and synchronization between tasks, and study of programming language support for parallel computation.
CSci 4451. Systems: Distributed Systems. (M/SR; 4 cr; prereq 3401 or \#; fall, spring, offered periodically)
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 4452. Systems: Computer Networks. (M/SR; 4 cr; prereq 3401 or \#; fall, spring, offered periodically)
Principles of computer networks. Network topologies, protocols, routing, internetworking, security and privacy.
CSci 4453. Systems: Database Systems. (M/SR; 4 cr; prereq 2101 or \#; fall, spring, offered periodically)
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 periodically)
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 periodically)
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 periodically)
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 periodically)
Introduction to bioinformatics with an emphasis on computer systems. Possible topics include: utilizing software for genetic sequencing, largescale 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 periodically)
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 periodically)
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 periodically)
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 4511. Theory: Artificial Life. (M/SR; 2 cr; prereq 2101 or \#; fall, spring, offered periodically)
Introduction to the field of Artificial Life and the phenomena of living systems, with an emphasis on computational approaches to understanding the logic of living systems in artificial environments. Techniques and tools used to better understand the complex information processing that defines living systems, such as agent-based systems, evolutionary computation, cellular automata, and digital simulations.
CSci 4552. Theory: Advanced Algorithms. (M/SR; 4 cr; prereq 3501 or \#; fall, spring, offered periodically)
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 2101 or \#; fall, spring, offered periodically)
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 1302, 2101 or \#; fall, spring, offered periodically)
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 1302, 2101 or \#; fall, spring, offered periodically)
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, inductive 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 1302, 2101 or \#; fall, spring, offered periodically)
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 periodically) An exploration into designing Graphical User Interfaces. Aspects of humancomputer 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 periodically) 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 periodically) 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 periodically)
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 periodically)
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 periodically)
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 periodically)
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 periodically)
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 periodically)
Client/Server model and related Internet protocols. Server-side data storage. Common programming languages and technologies for client-side and server-side data processing. Related security issues.
CSci 4901. Senior Seminar. (1 cr; S-N only; prereq IS 1091 or \#, jr or sr; 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.

## 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 1323. Introduction to Tap Dance. (ArtP; 1 cr [max 2 cr ]; S-N only; Tap shoes required; fall, 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 1331. Ballet I. (ArtP; 1 cr [max 2 cr]; prereq 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]; prereq 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]; prereq 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]; prereq 1323 or \#; Tap shoes required; spring, every year)
Practice in footwork and advanced beginning vocabulary of this percussive dance form, including opportunities for improvisation. Learn about the origins of the dance form, different styles and how they evolved, and the dance form's relationship to musical structures. Learn and compose Tap dance choreography.
Dnce 2011. Dance in Society. (HDiv; 4 cr; fall, odd years)
Through a broad, cross-cultural survey of the different ways in which dance functions in the modern world, students gain an appreciation of the way this art form reflects social and historical experiences. Includes lectures, readings, and opportunities to see dance through videos, observations, and live performances.

Dnce 2301. Practicum in Dance. (ArtP; 1 cr; prereq \#; spring, every year) Directed projects in performance and production aspects of dance for the stage. Projects can be focused on either choreography or technical theatre for dance.

Dnce 2311. Dance Composition. (ArtP; 2 cr [max 8 cr ]; fall, spring, offered periodically)
Introduction to the basic elements of choreography, including the use of space, time, energy, abstraction, motif and development, and the selection of music. Using improvisation and assigned movement problems to learn the process of crafting solo and group choreography.
Dnce 2331. Ballet II. (ArtP; 1 cr [max 2 cr]; prereq 1331 or \#; ballet slippers required; fall, every year)
A low intermediate-level study of classical ballet. Emphasis on advancing technical skill through conditioning and performance of ballet steps and combinations.

Dnce 2332. Jazz Dance II. (ArtP; 1 cr [max 2 cr]; prereq 1332 or \#; spring, every year)
Builds upon basic dance vocabulary with emphasis on the movement vocabulary of jazz dance. Emphasis on African dance roots and stylistic variations in contemporary jazz dance forms. Includes a performance experience.
Dnce 2333. Modern Dance II. (ArtP; 1 cr [max 2 cr]; prereq 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.
Dnce 2993. Directed Study. (1-5 cr [max 10 cr ]; prereq approved directed study form; fall, spring, summer, every year)
A learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum such as dance history, choreography and directing, dance education for children.

Dnce 3011. Dance History. (FA; 4 cr; prereq 2011 or \#; spring, offered periodically)
Identify significant developments in the history of Dance. Trace the roots of Ballet and Modern Dance and their impact on dance as performance art in Western society. Examine the history of select styles of non-Western dance and research major figures in dance history.
Dnce 3993. Directed Study. (1-5 cr [max 10 cr ]; prereq approved directed study form; fall, spring, summer, every year)
A learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum such as dance history, choreography and directing, dance education for children.

Dnce 4993. Directed Study. (1-5 cr [max 10 cr ]; prereq approved directed study form; fall, spring, summer, every year)
A learning experience individually arranged between a student and a faculty member for academic credit in areas not covered in the regular curriculum such as dance history, choreography and directing, dance education for children.

## Economics (Econ)

## Division of the Social Sciences

Objectives-The economics curriculum is designed to ensure that students

- understand the nature and functioning of the market system
- are able to define criteria for assessing efficiency in the provision of goods and services
- investigate and assess the operation of economic institutions
- are able to evaluate alternative policies intended to enhance economic outcomes
- develop competence in quantitative methods and computing methods
- are able to conceptualize and analyze problems using the tools of economic theory, and communicate the results
- are competent in oral and written communication
- are adequately prepared for graduate or professional school


## 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 $B$.
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

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)

## 4xxx Level 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)
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)

## 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 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 3009—Political Economy, SS (4 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 3133-Economics of China, IP (2 cr)
Econ 3134 -Cooperative Business Model, SS (2 cr)
Econ 3141-Economic Development and Growth I, IP (2 cr)
Econ 3142-Economic Development and Growth II, IP (2 cr)
Econ 3153 -Contemporary Global Economic Issues, 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 3xxx

## Economics Minor

## Minor Requirements

Grades of D or D+ in Econ 1111-1112, Math 1101, and Stat 1601 may not be used to meet 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

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)
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)

## 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 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 3009—Political Economy, SS (4 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 3133-Economics of China, IP (2 cr)
Econ 3134-Cooperative Business Model, SS (2 cr)
Econ 3141-Economic Development and Growth I, IP (2 cr)
Econ 3142-Economic Development and Growth II, IP (2 cr)
Econ 3153 -Contemporary Global Economic Issues, 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 ( $1-5 \mathrm{cr}$ )
Econ $3 \mathrm{xxx}, 4 \mathrm{xxx}$

## 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 וIוו. Principles of Microeconomics. (SS; 4 cr ; prereq high school algebra or \#; fall, spring, every year)
Study of scarce resource allocation in a market economy. Supply and demand, consumer theory, theory of the firm, market structure, pricing of factors of production, income distribution and the role of government.
Econ III2. 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 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.

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 3005. Experimental and Behavioral Economics I. (SS; 2 cr; prereq 1111, 1112, Math 1101 or \#; fall, spring, offered periodically)
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 periodically)
Advanced concepts and applications in experimental and behavioral economics.

Econ 3007. Environmental and Natural Resource Economics I. (Envt; 2 cr; prereq iווו or \#; fall, spring, offered periodically)
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 periodically)
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.
Econ 3009. Political Economy. (SS; 4 cr; =[Econ 3004, Econ 3003]; prereq וווור, ווור \#; spring, offered periodically)
The historical evolution, methodological relevance, and basic structure of the modern capitalist economy, including the dynamics of capital accumulation, economic crisis, transformation and regulating mechanism of contemporary capitalism, and hegemonic tendency of economy over polity and other aspects of life in contemporary society.
Econ 3014. Game Theory: The Theory of Strategic Behavior I. (SS; 2 cr; =[IS 3206H]; prereq וווו or \#; spring, even 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, even 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 וווו, 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 1ווו, 1112 or \#; spring, offered periodically)
Analysis of the economics of public expenditures.
Econ 3122. Public Economics II. (SS; 2 cr; prereq וווו, $1 ו 12$ or \#; spring, offered periodically)
Analysis of the economics of taxation.
Econ 3131. Comparative Economic Systems. (IP; 2 cr ; prereq 1וו1, 1112 or \#; fall, spring, offered periodically)
Comparison of the theory and functioning of the major economic systems of the world; economic reform in capitalist and socialist economies.
Econ 3133. Economics of China. (IP; 2 cr; prereq 1וו1, ו112; fall, spring, offered periodically)
Examine the sources of economic growth in China, one of the world's largest and fastest-growing economies. Analyze the restructuring and reforms made to the economy, including the opening of the economy to world trade.

Econ 3134. Cooperative Business Model. (SS; 2 cr; =[Mgmt 3134]; prereq וווו or \#; spring, even years)
Same as Mgmt 3134. In the northern plains of the United States, cooperative businesses, including consumer, producer, and worker cooperatives, have made significant contributions to economic growth and development. Identify the unique economic, legal, and organizational characteristics of these firms and their role in the economy. Special attention is given to the potential role of cooperative business organizations in community development.

Econ 3141. Economic Development and Growth I. (IP; 2 cr; prereq וווו, 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 11ו1, 1112, Stat 1601, or \#; spring, offered periodically)
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 וווו, Math וורו 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 1ו12, 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 3211. History of Economic Thought I. (Hist; 2 cr; prereq וווו, ו1ו2; 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 3212. History of Economic Thought II. (Hist; 2 cr; prereq 3211 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; $4 \mathrm{cr} ;=[$ Mgmt 3351]; prereq וווו or 1112 or \#; spring, offered periodically)
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.
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 4וII. Mathematical Economics I. (M/SR; 2 cr; prereq 3201, 3202 or \#; fall, spring, offered periodically)
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 periodically)
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 [ElEd]; Education, Secondary [SeEd]; and Sport Studies and Athletics [SSA].)
UMM offers all students the opportunity to study education and its role in society. Most 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 optional endorsement areas in preprimary (age 3-grade 3); and middle level (grades 5-8) communication arts and literature, mathematics, science, and social studies. 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 ( $\mathrm{K}-12$ ), 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 Sport Studies and Athletics (SSA) discipline for course listings.
Teacher education at UMM is part of the lifelong development of an effective teacher. It 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 provides opportunities for a variety of rural, urban, and suburban placements in Minnesota, other states, and other countries. 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 (ElEd) section and Admission to the Program in the Education, Secondary (SeEd) section of this catalog.

## 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. (3 cr; 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.
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.
Ed ו1ו1. Introduction to Deaf Education. (Hum; 2 cr ; fall, every year) 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.
Ed 1801. Critical Issues in K-12 Education. (IC; 2 cr ; prereq new college student in their first semester of enrollment at UMM; fall, spring, offered periodically)
The education of K-12 students is reported on and discussed in the media on a daily basis and federal programs such as No Child Left Behind and Race to the Top influence the functioning of schools and the education of the $\mathrm{K}-12$ student. State regulations and initiatives are also an important factor in how students learn and how teachers are prepared to teach. How can the average citizen make sense of all this information? Delve into some of the critical issues facing the education of $\mathrm{K}-12$ students. Topics may include issues such as the achievement gap, assessments, bullying, inclusion and equity, and opportunity.

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. (FL; 3 cr; prereq 1012 or \#; fall, spring, offered periodically)
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.
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.

Ed 2111. Tutor-Aide Practicum. (1 cr; S-N only; prereq coreq 2121; 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 ]; S-N only; IP [if taken for 2 or more cr]; fall, spring, summer, every year)
Students complete 80 to 120 hours of preprofessional field experience in a school in another country.
Ed 2113. International Practicum in Secondary Education. (IP; 1-3 cr [max 3 cr]; S-N only; IP [if taken for 2 or more cr]; fall, spring, summer, every year)
Students complete 80 to 120 hours of preprofessional field experience in a school in another country.
Ed 2121. Introduction to Education. (SS; 3 cr; A-F only; prereq coreq 2111; fall, spring, summer, every year)
History, philosophy, and purposes of American education; classroom practices and effective teaching; instructional technology; and certification requirements in education.

Ed 2131. Foundations of Reading. (Hum; 2 cr; A-F only; this course is a prerequisite for admission to the Elementary Education program; open to students from all disciplines; spring, every year)
Theoretical frameworks that undergird the process of reading and its development, including language and linguistic foundations. Stages of reading and fundamentals of reading processes, including phonemic awareness, phonics, fluency, vocabulary, and reading comprehension. Survey of research on key aspects of literacy development and assessment.
Ed 2201. Perspectives on Young Adult Literature: Schooling, Society, and Culture. (Hum; 4 cr ; summer, offered periodically)
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, offered periodically)
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 4121. Strategies for Inclusive Schooling. (2 cr; A-F only; prereq EIEd 3101, $3102,3103,3111$ or admission to the secondary education program; fall, every year)
Strategies and techniques for developing inclusive learning environments. Discussion of the differences in strategies in accommodations and modifications. Emphasizes adaptations for students with mild, moderate, and severe disabilities. Introduction to various methods of identifying students with disabilities and follow-up interventions.
Ed 4901. The Teacher and Professional Development. (1 cr; A-F only; prereq ElEd or SeEd 4201 or 4204 or \#; spring, every year) Capstone experience. Professional development issues and philosophy of education are included as topics of study.
Ed 4903. Kindergarten Education. (4 cr; A-F only; summer, every year) Study of kindergarten education. Topics include: historical foundations, philosophy, current issues and trends, developmental characteristics and organizational needs of kindergarten children, and developmentally appropriate practices and instruction in the classroom.
Ed 4911. Kindergarten Practicum. (1 cr; S-N only; prereq coreq 4903; summer, every year)
Field experience with kindergarten children.
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 (EIEd)

Division of Education

A separate admissions process must be completed and admission granted before students enroll in this program.
The elementary education major leads to Minnesota licensure as a teacher of grades K-6. Students obtaining a K-6 license may also pursue an optional endorsement in one of the following five areas: 1) preprimary, 2) middle level communication arts and literature, 3) middle level mathematics, 4) middle level science, and 5) middle level social studies.
Objectives-Coursework in elementary 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 elementary school; understand child and adolescent development theory, individual and group motivation and diversity among learners; create instructional opportunities adapted to learners of diverse cultural backgrounds and abilities; use instructional strategies and technologies that reflect personal knowledge of effective verbal, nonverbal, and media communication techniques; encourage development of critical thinking, problem solving, and performance skills; understand and use formal and informal methods of student assessment; and collaborate with parents/guardians, families, school colleagues, and the community in an ethical manner.
Students pursuing Minnesota teaching licensure at the elementary K-6 level and optional endorsement areas must have successfully completed licensure requirements in the elementary teacher education program and passed state and federally mandated examinations for new teachers. A minimum GPA of 2.50 overall with 2.75 minimum GPA in elementary education major and licensure area(s). All courses that fulfill requirements for teaching licensure in elementary education (discipline, professional education, or other courses) must be completed with a grade of C- or better. Required courses must be taken A-F unless they are offered S-N only.

## Admission

Students must complete 60 credits before admission to the program.
A GPA above 2.00 is preferred for the following:

- 2.75 for students already admitted to the degree-granting college.
- 2.75 for students transferring from another University of Minnesota college.
- 2.75 for students transferring from outside the University.

For admission to the major's two-year course sequence which begins each fall, students must follow the application procedure. Information sessions are held periodically to provide an overview of admissions and program requirements.
Students transferring from other schools must be admitted to UMM before admission to the elementary major can be offered. Transfer students should seek academic planning advice from the elementary education faculty in advance of application to the program.

## Requirements

1. Completion of the Minnesota Teacher Licensure Examinations: Basic Skills.
2. Minimum GPA of 2.50 overall with 2.75 minimum GPA in ElEd major and licensure area(s). No grade below C- will be accepted in these courses.
3. Approximately 60 credits completed by the end of the sophomore year.
4. Approval of the faculty based on an interview, recommendations, assessment of prior experience (especially with children and other cultures), and progress toward degree.
5. Admission to UMM.

For information about University of Minnesota admission requirements, visit the Office of Admissions website.

## Courses Required for Admission

Ed 2121-Introduction to Education, SS (3 cr)
Ed 2111—Tutor-Aide Practicum ( 1 cr )
Ed 2131-Foundations of Reading, Hum (2 cr)
Take the following course or course pair. Psy 1051 is a prerequisite.
Psy 1061-Introduction to the Development of the Child and
Adolescent, SS (4 cr)
or Psy 3401 —Developmental Psychology I: Child Psychology, SS (4 cr)
and Psy 3402-Developmental Psychology II: Adolescence, SS (2 cr)

## Elementary Education Major

## Program Requirements

Students are required to take 2 semester(s) of any second language.
All courses required for a major in elementary education must be completed with a grade of C- or better. Required courses must be taken A-F unless they are offered S-N only. A minimum GPA of 2.75 is required in the major to graduate. The GPA includes all coursework. Grades of " $F$ " are included in GPA calculation until they are replaced.
Successful completion of course assignments, elementary education course grades of C- or better, satisfactory completion of field experiences, and minimum GPA of 2.50 overall with 2.75 minimum GPA in the elementary education major and licensure area(s) are required at the end of each semester for continued eligibility in the program.
Students seeking a non-education major or minor should see requirements for the area of interest.

## Courses for the Program

Major Requirements-Prerequisite Courses
Students must complete the following courses before admission to the program:
Ed 2121-Introduction to Education
Ed 2111—Tutor-Aide Practicum
Ed 2131-Foundations of Reading
Psy 1061 -Introduction to the Development of the Child and Adolescent
or Psy 3401 and 3402—Developmental Psychology

## Major Requirements-Program Year One

ElEd 3101-Teaching and Learning Strategies (3 cr)
EIEd 3102-Reading Methods: Literacy and Language Instruction in the Elementary School (4 cr)
EIEd 3103-Mathematics in the Elementary School (4 cr)
ElEd 3111-Practicum I: Field Experience in the Elementary Classroom (1 cr)
ElEd 3201-Preprimary Theory: Three-, Four-, and Five-Year-Olds in School (1 cr)
ElEd 3202-Middle Level Theory (1 cr)

## Practicum II: Field Experience in a Preprimary or Middle Level Setting

EIEd 3211-Practicum II: Field Experience in a Preprimary Setting ( 1 cr )
or EIEd 3212—Practicum II: Field Experience in a Middle Level Setting (1 cr)

## Major Requirements-Program Year Two

Ed 4121-Strategies for Inclusive Schooling (2 cr)
EIEd 4102-Social Studies in the Elementary School (2 cr)
ElEd 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)
ElEd 4112-Practicum IV: Cross-Cultural Experience in the Elementary School ( 1 cr )
Ed 4901-The Teacher and Professional Development ( 1 cr )
EIEd 4201-Directed Student Teaching in Primary and Intermediate Grades, HDiv (12 cr)
or EIEd 4204-Directed Student Teaching in International School at the Primary and Intermediate Level, IP (12 cr)

## Student Teaching Requirements

1. Completion of the following courses:

EIEd 3101, 3102, 3103, 3111, 3201, 3202, 3211 or 3212, 4102, 4103, 4104, 4107, 4111, 4112, Ed 4121
2. GPA and grade requirements Minimum GPA of 2.50 overall with 2.75 minimum GPA in EIEd major and licensure area(s).
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 2xxx or above (Engl 3021 recommended)
Engl 3021-Grammar and Language, Hum (4 cr)
or Engl 2xxx or above

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)
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, 1 xxx is equivalent to 1 xxx or above.
Take 2 or more course(s) from the following:
ArtS 1050—Beginning Ceramics, ArtP (3 cr)
or ArtH 1101—Principles of Art, FA (4 cr)
or ArtS 1xxx
or ArtH 1xxx
Dnce 1xxx
Mus 1041—Introduction to Music, FA (4 cr)
or Mus 1042—Fundamentals of Music, FA (4 cr)
or Mus 1xxx
Th 2111—Creative Drama with Children, ArtP (4 cr)
or Th 1101—The Theatre Experience: An Introduction, FA (4 cr)
or Th 1xxx
5. Social studies (two courses representing two different disciplines)
In the listing below, 1 xxx is equivalent to 1 xxx or above.
Take 2 or more course(s) from the following:
Anth 1111-Introductory Cultural Anthropology, SS (4 cr) or Anth 1xxx
Econ 1111—Principles of Microeconomics, SS ( 4 cr )
or Econ 1112—Principles of Macroeconomics, SS (4 cr) or Econ 1xxx
Geog 2001—Problems in Geography, Envt (4 cr)
or Geog 1xxx
Hist 1301—Introduction to U.S. History, Hist (4 cr) or Hist 1xxx
Pol 1201-American Government and Politics, E/CR (4 cr)
or Pol 1xxx
Soc 1101—Introductory Sociology, SS (4 cr)
or Soc 3122—Sociology of Childhoods, HDiv (4 cr)
or Soc 1xxx
6. Science (two courses representing two different disciplines, at least one with lab)
In the listing below, 1 xxx is equivalent to 1 xxx or above.
Take 2 or more course(s) from the following:
Biol 1xxx
or Ed 2301 —Environmental Science and Place-Based Education, Envt (4 cr)
or EnSt 2101—Environmental Biology, Sci-L (4 cr)
Chem 1xxx
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
7. Psychology

Psy 1081—Drugs and Human Behavior, SS (2 cr)
8. Successful completion of a cross-cultural field experience
9. GPA and grade requirements

Minimum GPA of 2.50 overall with 2.75 minimum GPA in ElEd major and licensure area(s).
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 MTLE 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. Please see an adviser if no honors sub-plan is listed for the program.)

## Preprimary Education Sub-plan (age 3 to grade 3) <br> Required Courses

ElEd 3203-Preprimary Methods: Curriculum and Instruction for Three-, Four-, and Five-Year-Olds (3 cr)
ElEd 4206-Directed Student Teaching in Preprimary Classroom, HDiv (4 cr)
ElEd 3211—Practicum II: Field Experience in a Preprimary Setting
Psy 3401 (meets both Admission and Preprimary requirements) (meets both ElEd Licensure and SS GenEd requirements)
Soc 3122 (meets both ElEd Licensure and HDiv GenEd requirements)

## Additional Courses

Take 3 or more course(s) from the following:
Ed 4903-Kindergarten Education (4 cr)
Psy 3111—Sensation and Perception, SS (4 cr)
Psy 3112—Cognition, SS (4 cr)
Psy 3302—Personality, SS (4 cr)
Psy 3501—Social Psychology, SS (4 cr)
Th 2111 (meets both ElEd Licensure and ArtP GenEd requirements)

## Middle Level Education-Communication Arts and <br> Literature Sub-plan (grades 5-8)

## Required Courses

In addition to the required courses listed below, a minor in English is strongly recommended.
EngE 4121—Methods of Teaching Communication Arts and Literature in the Middle and Secondary School (4 cr)
ElEd 4207-Directed Student Teaching in Middle Level Classroom, HDiv (4 cr)
Engl 2501—Literary Studies, Hum (4 cr)
ElEd 3212 —Practicum II: Field Experience in a Middle Level Setting
CMR 1052 or 1042 (meets both ElEd Licensure and E/CR GenEd requirements)
Additional Courses (Engl 3021 recommended)
In the listing below, 2 xxx is equivalent to 2 xxx or above.
Take 3 or more course(s) from the following:
Ed 2201—Perspectives on Young Adult Literature: Schooling, Society, and Culture, Hum (4 cr)
Engl 2xxx
Engl 3021—Grammar and Language, Hum (4 cr)
Eng1 3021-Grammar and Language (meets both ElEd Licensure and Hum GenEd requirements)

## Middle Level Education-Mathematics Sub-plan <br> (grades 5-8)

## Required Courses

In addition to the required courses listed below, a minor in mathematics is strongly recommended.
MthE 4121—Methods of Teaching Mathematics in the Middle and Secondary School (4 cr)
ElEd 4207-Directed Student Teaching in Middle Level Classroom, HDiv (4 cr)

Math 1101—Calculus I, M/SR (5 cr)
Math 1102-Calculus II, M/SR (5 cr)
ElEd 3212—Practicum II: Field Experience in a Middle Level Setting
Stat 1601 or 2601 or 2611 (meets both ElEd Licensure and M/SR GenEd requirements)

## Additional Math Courses (Math 2111 recommended)

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

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

## Required Courses

In addition to the required courses listed below, a minor in anthropology, economics, history, political science, or sociology is strongly recommended.
SScE 4121-Methods of Teaching Social Science in the Middle and Secondary School ( 4 cr )
ElEd 4207-Directed Student Teaching in Middle Level Classroom, HDiv (4 cr)
ElEd 3212-Practicum II: Field Experience in a Middle Level Setting
Econ 1112 (meets both ElEd Licensure and SS GenEd requirements)
Hist 1301 (meets both ElEd Licensure and Hist GenEd requirements)
Political Science
Pol 1xxx or above
or Pol 1201 (meets both ElEd Licensure and E/CR GenEd requirements)
Soc 1101 or Anth 1111 (meets both ElEd Licensure and SS GenEd requirements)
Additional Course (Geog 2001 recommended)
In the listing below, 1 xxx is equivalent to 1 xxx or above.
Take 1 or more course(s) from the following:
Anth 1xxx
Econ 1xxx
Hist 1xxx
Pol 1xxx
Soc 1xxx
Geog 2001 (meets both ElEd Licensure and Envt GenEd requirements)
Middle Level Education-Science Sub-plan (grades 5-8)

## Required Courses

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).
SciE 4121—Methods of Teaching Science in the Middle and Secondary School (4 cr)
EIEd 4207-Directed Student Teaching in Middle Level Classroom, HDiv (4 cr)
Biol 1111—Fundamentals of Genetics, Evolution, and Development, Sci (3 cr)
Biol 2101-Evolution of Biodiversity, Sci-L (4 cr)
Chem 1101—General Chemistry I, Sci-L (4 cr)
ElEd 3212—Practicum II: Field Experience in a Middle Level Setting
Geol 1101 (meets both ElEd Licensure and Sci-L GenEd requirements)
Phys 1052 (meets both ElEd Licensure and Sci-L GenEd requirements)
Phys 1091 —Principles of Physics I, Sci-L (5 cr)
or Phys 1101—General Physics I, Sci-L (5 cr)

Additional courses recommended but not required
Biol 2111, Chem 1102, Phys 1092, Phys 1102, Ed 2301

## Elementary Education Course Descriptions

EIEd 3101. Teaching and Learning Strategies. (3 cr; A-F only; prereq admission to the elementary teacher education program; fall, every year) Elementary school teaching and learning. Planning for instruction, learning theory, multicultural education, classroom management, use of technology in the classroom.

EIEd 3102. Reading Methods: Literacy and Language Instruction in the Elementary School. (4 cr; A-F only; prereq admission to elementary teacher education program; 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. (4 cr; A-F only; prereq admission to the elementary teacher education program; 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.
EIEd 31ו1. Practicum I: Field Experience in the Elementary Classroom. ( 1 cr; S-N only; prereq admission to the elementary teacher education program; fall, every year)
Field experience in the elementary classroom.
ElEd 3201. Preprimary Theory: Three-, Four-, and Five-Year-Olds in School. (1 cr; A-F only; prereq 3101, 3102, 3103, 3111; spring, every year) Overview of preprimary education including historical and social foundations, theories, current issues and trends, contemporary programs, and developmentally appropriate practices for three-,four-, and five-year olds.

ElEd 3202. Middle Level Theory. (1 cr; A-F only; prereq 3101, 3102, 3103, 3111; spring, every year)
Developmental characteristics, organizational and instructional needs of pre-adolescent and adolescent level classrooms. Characteristics of effective middle level teachers. Required for elementary education majors.
EIEd 3203. Preprimary Methods: Curriculum and Instruction for Three-, Four-, and Five-Year-Olds. (3 cr; A-F only; prereq 3101, 3102, 3103, 3111; spring, every year)
Content and methods for planning developmentally appropriate activities and environments designed to enhance preprimary children's cognitive, social, emotional, physical, and creative development; methods of child guidance, anti-bias curriculum, and working with families. Required for student pursuing preprimary endorsement.

ElEd 3211. Practicum II: Field Experience in a Preprimary Setting. (1 cr; S-N only; prereq 3101, 3102, 3103, 3111; spring, every year) Field experience in preprimary or kindergarten setting.
EIEd 3212. Practicum II: Field Experience in a Middle Level Setting. (1 cr; S-N only; prereq 3101, 3102, 3103, 3111; spring, every year) Field experience in the middle level classroom.

EIEd 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 4102. Social Studies in the Elementary School. (2 cr; A-F only; prereq 3101, 3102, 3103, 3111; fall, every year)
Outcomes, content, integration strategies, and assessment of social studies instruction in the elementary curriculum.
EIEd 4103. Science in the Elementary School. ( $2 \mathrm{cr} ;$ A-F only; prereq 3101, 3102, 3103, 3111; fall, every year)
Standards, curriculum, and assessment of elementary school science. Includes theoretical basis of methodology and its application, assessment, selection and use of instructional media and computer software, and meeting the needs of cultural diverse and special needs students.

EIEd 4104. Language Arts and Literature in the Elementary School. (3 cr; A-F only; prereq 3101, 3102, 3103, 3111; fall, every year)
Theory, content, assessment, and strategies that support identification, selection, and use of materials and practices in the language arts and children's literature that foster children's language development and growth in reading, writing, speaking, listening, viewing, and visually representing.

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

EIEd 4111. Practicum III: Beginning Student Teaching. (2 cr; S-N only; prereq 3101, 3102, 3103, 3111; fall, every year)
Participation in in-service, teaching, and teaching-related activities in preparation for student teaching.
EIEd 4112. Practicum IV: Cross-Cultural Experience in the Elementary
School. (1 cr [max 2 cr]; S-N only; prereq 3101, 3102, 3103, 3111; fall, every year)
Field experience in the elementary classroom.
ElEd 4201. Directed Student Teaching in Primary and Intermediate Grades. (HDiv; 12 cr ; S-N only; prereq 4102, 4103, 4104, 4111, 4112; spring, every year)
Students teach for a period of 10 to 12 weeks demonstrating application of approaches to teaching and learning in primary and intermediate grades under the guidance of a cooperating teacher and University supervisor.
EIEd 4202. Directed Student Teaching in Primary and Intermediate Grades. ( $1-16$ cr [max 16 cr]; S-N only; prereq \#; 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; 12 cr; S-N only; prereq 4102, 4103, 4104, 4111, 4112; spring, every year)
Students teach for a period of 10 to 12 weeks demonstrating application of approaches to teaching and learning in primary and intermediate grades under the guidance of a cooperating teacher and University supervisor.
EIEd 4205. Directed Student Teaching in the Elementary School. (1-16 cr [max 16 cr ]; A-F only; prereq \#; fall, spring, summer, every year) For students from colleges that require A-F grading for student teaching through the Global Student Teaching Program.
EIEd 4206. Directed Student Teaching in Preprimary Classroom. (HDiv; 4 cr ; S-N only; prereq 3201, 3203, 3211; spring, every year)
Students teach for a period of 4 weeks demonstrating application of approaches to teaching and learning in preprimary grades under the guidance of a cooperating teacher and University supervisor.
ElEd 4207. Directed Student Teaching in Middle Level Classroom. (HDiv; 4 cr; S-N only; prereq 3202, 3212, appropriate methods course; spring, every year)
Students teach for a period of 4 weeks demonstrating application of approaches to teaching and learning in middle level grades under the guidance of a cooperating teacher and University supervisor.
EIEd 4993. Directed Study. ( $1-5 \mathrm{cr}$ [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, Secondary (SeEd)

## Division of Education

Required credits in this program: 41 to 43.
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; and
- 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 $(\mathrm{K}-12)$, general science $(5-8)$, instrumental music $(\mathrm{K}-12)$, 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 2.75 is required in licensure area(s) and in education prerequisite courses. A minimum GPA of 2.50 is required overall. The GPA includes all course work. Grades of "F" are included in GPA calculation until they are replaced. All courses required for teaching licensure in secondary education (discipline, professional education, or other courses) must be completed with a grade of C- or better. Required courses must be taken A-F unless they are offered $\mathrm{S}-\mathrm{N}$ only.


## Admission

Students must complete 90 credits before admission to the program.
A GPA above 2.00 is preferred for the following:

- 2.75 for students already admitted to the degree-granting college.
- 2.75 for students transferring from another University of Minnesota college.
- 2.75 for students transferring from outside the University.

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 in early spring.
Transfer students must be admitted to UMM before admission to the secondary program can be offered. Transfer students should seek academic planning advice from the secondary education faculty before application to the program.

## Requirements

1. Completion of the Minnesota Teacher Licensure Examinations: Basic Skills.
2. A minimum GPA of 2.75 is required in licensure area(s) and in education prerequisite courses and 2.50 overall. 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 website.

## Courses Required for Admission

Ed 2121—Introduction to Education, SS (3 cr)
Ed 2111—Tutor-Aide Practicum (1 cr)

## Child Development

Take the following course or course pair. Psy 1051 is a prerequisite. Psy 1061 -Introduction to the Development of the Child and Adolescent, SS (4 cr)
or Psy 3401—Developmental Psychology I: Child Psychology, SS (4 cr) and Psy 3402—Developmental Psychology II: Adolescence, SS (2 cr)

## Psy 1081 and CMR 1052 or 1042

These are required for licensure and are recommended to be completed before beginning the program.

## Licensure Area Requirements

## Student Teaching Requirements

1. Successful completion of:

SeEd 4102-Teaching and Learning Strategies (2 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)
Ed 4121—Strategies for Inclusive Schooling (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 ) and SeEd 4115—Advanced Content Reading, Hum (2 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)
and SeEd 4115—Advanced Content Reading, Hum (2 cr)
or MusE 4123-Methods of Teaching Music K-12 (4 cr)
or SciE 4121—Methods of Teaching Science in the Middle and Secondary School (4 cr) and SeEd 4115-Advanced Content Reading, Hum (2 cr)
or SScE 4121—Methods of Teaching Social Science in the Middle and Secondary School (4 cr)
and SeEd 4115-Advanced Content Reading, Hum (2 cr)
3. Satisfactory completion of tutor-aide and practicum experiences.
4. CMR 1052-Introduction to Public Speaking or CMR 1042-Public Speaking and Analysis.
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
2.75 minimum GPA required in licensure area(s) and education prerequisite courses and 2.50 overall.
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 2121—Introduction to Education and Ed 2111-Tutor-Aide Practicum
SeEd 4102, 4103, 4104, 4105, 4115, and Ed 4121

## Student Teaching

SeEd 4201—Directed Student Teaching in the Middle and Secondary School, HDiv (12 cr)
or SeEd 4204—Directed Student Teaching in International School at the Middle and Secondary Level, IP (12 cr)
Ed 4901-The Teacher and Professional Development ( 1 cr )
2. Successful completion of licensure area methods course(s).
3. Psy 1061-Intro. to the Development of the Child \& Adolescent and Psy 1081-Drugs \& Human Behavior. 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
2.75 minimum GPA required in licensure area(s) and education prerequisite courses and 2.50 overall.
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 MN Teacher Licensure Exam in Basic Skills, the licensure area(s), and pedagogy.

## 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

Biol 1111 is a prerequisite course for Biol 2111.
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)
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)
Chem 2302-Organic Chemistry II, Sci (4 cr)
or Chem 2304—Organic Chemistry II with a Biological Emphasis, Sci (4 cr)
Communication Arts and Literature 5-12 Sub-plan

## Required Courses for the Sub-Plan

Engl 2501—Literary Studies, 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 2111—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 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 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 4901-Geology Senior Seminar (1 cr)
Geol 4902-Geology Senior Seminar Presentations (1 cr)
Phys 1052-The Solar System, Sci-L (5 cr)
Phys 1053-Introduction to Stars, Galaxies, and Cosmology, Sci ( 4 cr )
Math 1101-Calculus I, M/SR (5 cr)
or Math 1021—Survey of Calculus, M/SR (4 cr)

## French K-12 Sub-plan

## Required Courses for the Sub-Plan

One cross-listed French course taught in English (such as Fren
1027, 1031, 1302, 1311, or 1312) may be counted towards the French
licensure, provided that students complete written work for the class in French.
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: Theme 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 1027-Real to Reel: The Middle Ages and Renaissance in Film, Hum (4 cr)
or Fren 3022-Early Modern Studies: Pre-Enlightenment Culture in France, Hist (4 cr)
or Fren 3023-Early Modern Studies: Orature and Literature in PreEnlightenment France, Hum (4 cr)
or Fren 3026-Early Modern Studies: History of the French Language, 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 1031-Modern Studies: The Modern Body in France, SS ( 4 cr ) or Fren 1302-French Cinema, IP (4 cr)
or Fren 3037-Modern Studies: Revolution, Romanticism, Modernity, Hum (4 cr)
or Fren 3038—Modern Studies: Avant-Garde, Existentialism, Experimentation, Hum (4 cr)
or Fren 3039-Modern Studies: The Old Regime and New Ideas: The French Enlightenment, Hist ( 4 cr )
One course from Francophone Studies Cluster:
Fren 1311-West African Francophone Cinema, IP (4 cr)
or Fren 1312-Morocco: History, Story, Myth, IP (4 cr)
or Fren 3041—Francophone Studies: Francophone Worlds, IP (4 cr)
or Fren 3042-Francophone Studies: Contes francophones, IP (4 cr)
or Fren 3043-Francophone Studies: Littèrature migrante, IP ( 4 cr )
or Fren 3044—Francophone Studies: L'Amerique francophone, Hum (4 cr)
Study abroad is strongly encouraged.

## General Science 5-8 Sub-plan

## Required Courses for the Sub-Plan

Biol 1111 is a prerequisite course for Biol 2101 and Biol 2111.
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)
Geol 1101—Physical Geology, Sci-L (4 cr)
Phys 1052—The Solar System, Sci-L (5 cr)

## Phys 1091 or 1101

Prerequisite for Phys 1101 is Math 1101—Calculus I.
Phys 1091—Principles of Physics I, Sci-L (5 cr)
or Phys 1101 -General Physics I, Sci-L (5 cr)

## Phys 1092 or 1102

Prerequisite for Phys 1102 is Math 1102-Calculus II.
Phys 1092—Principles of Physics II, Sci-L ( 5 cr )
or Phys 1102—General Physics II, Sci-L (5 cr)

## Instrumental Music K-12 Sub-plan <br> 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 3161—Introduction to World Music, IP ( 4 cr )
Mus 2301—Instrumental Techniques-Woodwind (1 cr)
Mus 2302-Instrumental Techniques-Brass and Percussion (1 cr)
Mus 2303-Instrumental Techniques-Strings (1 cr)
Mus 2304-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 )
Mus 3200-3223-Advanced Individual Performance Studies in wind, string, percussion, or keyboard (consult with music faculty to determine performance studies requirements)

## Concert Attendance

Seven successful completions of Mus 1000—Concert Attendance

## Piano Proficiency

Enrollment in Mus 1200 —Piano until piano proficiency is passed

## Instrument Repair Clinic

Successful completion of the instrument repair clinic

## Life Science 9-12 Sub-plan

Required Courses for the Sub-Plan
Biol 1111—Fundamentals of Genetics, Evolution, and Development, Sci (3cr)
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)
Biol 4901—Senior Seminar (1 cr)
Chem 1101—General Chemistry I, Sci-L (4 cr)
Math 1021-Survey of Calculus, M/SR (4 cr)
or 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)

## 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 )
Stat 2611-Mathematical Statistics, M/SR (4 cr)

## Physics 9-12 Sub-plan

Required Courses for the Sub-Plan
Math 1101-Calculus I, M/SR (5 cr)
Math 1102—Calculus II, M/SR (5 cr)

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 2201—Circuits and Electronic Devices, Sci-L (4 cr)
Phys 2401 —Optics, Sci-L (4 cr)
Phys 3501 —Statistical Physics, Sci (4 cr)
Phys 4101—Electromagnetism, Sci (4 cr)
Phys 4201 - Quantum Mechanics, Sci (4 cr)
Phys 4901—Senior Thesis ( 1 cr )
or Phys 2993 or 3993 or 4993 -Directed Studies in Research
or Other research experience (e.g., UROP, internship) with
discipline approval
Also recommended (required for physics major): Math 2101—Calc III, Math 2401—Differential Equations

## Social Studies 5-12 Sub-plan

## Required Courses for the Sub-Plan

(Fulfills requirements for a social science major)
Anth 1111—Introductory Cultural Anthropology, SS (4 cr)
Econ 1111-Principles of Microeconomics, SS (4 cr)
Econ 1112—Principles of Macroeconomics, SS (4 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—Introductory 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

Anth 2101-Physical Anthropology, Sci-L (4 cr)
Anth 2103-Archaeology, SS (4 cr)
Anth 4411-Seminar in Anthropological Methodology, E/CR ( 4 cr )
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.
Take no more than 4 credit(s) from the following:
Anth 1xxx
Soc 1xxx

## 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 and Ethnohistory, 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 3701—Forensic Anthropology, Sci-L (4 cr) Anth $2 \mathrm{xxx}, 3 \mathrm{xxx}, 4 \mathrm{xxx}$

## Sociology Electives

Take no more than 4 credit(s) from the following:
Soc 2101—Systems of Oppression, HDiv ( 4 cr )
Soc 3103-Research Methodology in Sociology, SS (4 cr)
Soc 3111—Sociology of Modernization, IP (4 cr)
Soc 3112-Sociology of the Environment and Social Development, Envt ( 4 cr )
Soc 3121—Sociology of Gender and Sexuality, HDiv (4 cr)
Soc 3122—Sociology of Childhoods, HDiv (4 cr)
Soc 3123-Sociology of Aging, HDiv (4 cr)
Soc 3124-Sociology of Law, SS (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 3403-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, 3xxx, 4xxx

## -or-

## Economics Focus

Econ 3201—Microeconomic Theory, SS (4 cr)
Econ 3202-Macroeconomic Theory, SS (4 cr)
Math 1101-Calculus I, M/SR (5 cr)
No more than 4 cr from each of the following can be applied to the sub-plan: Econ x993, Econ 4501
Take 6 or more credit(s) from the following:
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 3009—Political Economy, SS (4 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 3133-Economics of China, IP (2 cr)
Econ 3134-Cooperative Business Model, SS (2 cr)
Econ 3141-Economic Development and Growth I, IP (2 cr)
Econ 3142-Economic Development and Growth II, IP (2 cr)
Econ 3153 -Contemporary Global Economic Issues, 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

## -or-

## History Focus

Hist 1111—Themes in World History, Hist (4 cr)
An additional 16 credits in history of which 12 credits are at 2 xxx 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 1402—Women in U.S. History, HDiv (4 cr)
Hist 1501—Introduction to East Asian History: China, Japan, and Korea before 1800, Hist (4 cr)
Hist 1601—Latin American History: A Basic Introduction, IP ( 4 cr )

## Hist 1 xxx

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 2103-Medieval Europe, Hist (4 cr)
Hist 2151—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 2251-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 2352-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 2361 -An Environmental and Geographic History of the United States, Envt ( 4 cr )
Hist 3381-History of American Indian Nationalism and Red Power, 1920-Present, Hist (4 cr)
Hist 3451—Facing West, HDiv (4 cr)
Hist 2452-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 2551—Modern Japan, Hist (4 cr)
Hist 2552-History of Modern China, Hist (4 cr)
Hist 2554 -Korean History, Hist (4 cr)
Hist 3558—Shanghai: China's Model of Modernity, IP (4 cr)
Hist 3559 -History of Religion in China, 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 3609-Natural Calamities: Disaster and Response in Latin American History, IP ( 4 cr )
Hist 3611-The Amazon in History, Hist (4 cr)
Hist 2704 -Gender, Women, and Sexuality in Medieval Europe, SS (4 cr)
Hist 3707-Gender in East Asia, HDiv (4 cr)
Hist 2708-Gender, Women, and Sexuality in Modern Europe, IP ( 4 cr )
Hist 3993 —Directed Study ( $1-5 \mathrm{cr}$ )
Hist 4993 -Directed Study ( $1-5 \mathrm{cr}$ )
Hist $2 \mathrm{xxx}, 3 \mathrm{xxx}, 4 \mathrm{xxx}$

## -or-

## Political Science Focus

An additional 16 credits (exclusive of those used to complete required courses); 8 of which must be in courses above 2 xxx .
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
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 3233 -Civil Liberties and American Politics, E/CR (4 cr)
Pol 3234 -Race, Class, and Power: Social Movements and Interest Groups in U.S. Politics, HDiv (4 cr)
Pol 3261—State and Local Politics, SS (4 cr)
Pol 3263—Political Psychology, SS (4 cr)
Pol 3272-Making Environmental Public Policy, Envt (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 3461—Diplomatic Negotiations, IP (4 cr)
Pol 3475-International Human Rights, IP (4 cr)
Pol 3501-Government and Politics of Asia, SS (4 cr)
Pol 3503-Women in Politics Worldwide, IP (4 cr)
Pol 3504 -Latin American Politics, 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 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)

## 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 (4 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)
Psy 4301 - Clinical Assessment and Therapeutic Interventions, 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)
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:
Psy 3501—Social Psychology, SS (4 cr)
Psy 3502—Psychology and Law, SS (4 cr)
Psy 3503-Consumer Psychology, SS (4 cr)
Psy 3504-Educational Psychology, SS (4 cr)
Psy 3513-Negotiation, SS (4 cr)
Psy 3542-Multicultural Psychology, HDiv (4 cr)
Psy 3701 -Organizational Behavior, SS ( 4 cr )
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)
Pol 3263 -Political Psychology, SS (4 cr)
Psy 2993—Directed Study (1-5 cr)
Psy 3611 —History and Philosophy of Psychology, Hist (4 cr)
Psy 3800 —Research Practicum (1-12 cr)
Psy 3993 -Directed Study ( $1-5$ cr)
Psy 4770—Empirical Investigations in Psychology, SS (1-6 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)
-or-

## Sociology Focus

Soc 3103-Research Methodology in Sociology, SS (4 cr)
Soc 3403-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 4991 is strongly 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 and Ethnohistory, HDiv ( 4 cr )
Anth 4411 -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 3701—Forensic Anthropology, Sci-L (4 cr)
Anth 4901-Seminar in Anthropological Theory, SS (4 cr)
Anth $2 \mathrm{xxx}, 3 \mathrm{xxx}, 4 \mathrm{xxx}$
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 3112-Sociology of the Environment and Social Development, Envt ( 4 cr )
Soc 3121—Sociology of Gender and Sexuality, HDiv (4 cr)
Soc 3122—Sociology of Childhoods, HDiv (4 cr)
Soc 3123-Sociology of Aging, HDiv (4 cr)
Soc 3124—Sociology of Law, SS (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 4991—Sociology Independent Project Seminar (4 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 3011-Conversation, Composition, and Culture, IP (2 cr)
Span 3012-Spanish Grammar in Practice, IP (2 cr)
Span 3111—Readings in Spanish I, Hum (2 cr)
Span 3112-Readings in Spanish II, Hum (2 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

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)
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-Media Studies: Digital Imaging, ArtP (3 cr)
ArtS 3002-Media Studies: Artist's Books, ArtP (3 cr)
or ArtS 3006-Media Studies: Feminist Art: A Studio Perspective, ArtP (3 cr)
Minimum 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 2050 repeat to 9 cr
ArtS 1050—Beginning Ceramics, ArtP (3 cr)
ArtS 2050—Advanced Ceramics, ArtP (3 cr)

## or Drawing

ArtS 3110 repeat to 9 cr
ArtS 3100—Advanced Drawing I, ArtP (3 cr)
ArtS 3110—Advanced Drawing II, ArtP (3 cr)
or Photography/Digital Imaging
Repeat either to reach 12 cr
ArtS 2500—Photography, ArtP (3 cr)
ArtS 3005-Media Studies: Digital Imaging, 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 Drawing
ArtS 3100—Advanced Drawing I, ArtP (3 cr)
ArtS 3110—Advanced Drawing II, ArtP (3 cr)
or Photography/Digital Imaging
ArtS 2500—Photography, ArtP (3 cr)
ArtS 3005—Media Studies: Digital Imaging, 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)
or ArtS 2301—Beginning Painting I, ArtP (3 cr)
or ArtS 2401—Beginning Sculpture I, ArtP (3 cr)
or ArtS 1050—Beginning Ceramics, ArtP (3 cr)
or ArtS 3100—Advanced Drawing I, ArtP (3 cr)
or ArtS 2500—Photography, $\operatorname{ArtP}$ (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, $\operatorname{ArtP}(1 \mathrm{cr})$
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 3161-Introduction to World Music, IP (4 cr)
Mus 2301—Instrumental Techniques-Woodwind (1 cr)
Mus 2302-Instrumental Techniques-Brass and Percussion (1 cr)
Mus 2303-Instrumental Techniques-Strings (1 cr)
Mus 2304-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 (consult with music faculty to determine performance studies requirements)
Mus 3200-3223-Advanced Individual Performance Studies in voice or guitar (consult with music faculty to determine performance studies requirements)

## Concert Attendance

Seven successful completions of Mus 1000—Concert Attendance

## Piano Proficiency

Enrollment in Mus 1200 —Piano until piano proficiency is passed

## Secondary Performance

Secondary performance competence on another family (wind, string, percussion, or keyboard)

## 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. (2 cr; A-F only; prereq admission to the secondary teacher education program; coreq 4103, 4104, 4105, methods; fall, every year)
Provides greater depth in previously taught concepts and skills, including 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 ; S-N only; prereq admission to the secondary teacher education program; coreq 4102, 4104, 4105, methods; fall, every year)
Field experience in the middle and secondary school.
SeEd 4104. Teaching Diverse Learners. (HDiv; 2 cr; A-F only; prereq admission to the secondary teacher education program; coreq 4102, 4103, 4105, methods; fall, every year)
Study of teaching/learning in diverse settings. Topics include 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; A-F only; prereq admission to the secondary teacher education program; coreq 4102, 4103, 4104, methods; 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 4115. Advanced Content Reading. (Hum; $2 \mathrm{cr} ;$ A-F only; prereq 4105; fall, spring, 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 subject-specific theories, strategies, and projects.

SeEd 4201. Directed Student Teaching in the Middle and Secondary School. (HDiv; 12 cr; S-N only; prereq 4102, 4103, 4104, 4105, methods, CMR 1042 or CMR 1052; spring, every year)
Students teach for a period of 10 to 12 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 ]; S-N only; prereq \#; fall, spring, 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; 12 cr; S-N only; prereq 4102, 4103, 4104, 4105, methods, CMR 1042 or CMR 1052; spring, every year) Students teach for a period of 10 to 12 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]; A-F only; prereq \#; fall, spring, summer, every year) For students from colleges that require A-F grading for student teaching through the Global Student Teaching Program.
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.

## Middle and Secondary Education Methods Courses

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; A-F only; prereq admission to the secondary teacher education program, coreq SeEd 4102, SeEd 4103, SeEd 4104, SeEd 4105; fall, every year)
Objectives, curricula, special methods, materials, and evaluation appropriate for teaching art in $\mathrm{K}-12$.
EngE 4121. Methods of Teaching Communication Arts and Literature in the Middle and Secondary School. ( 4 cr ; A-F only; prereq admission to the secondary teacher education program, coreq SeEd 4102, SeEd 4103, SeEd 4104, SeEd 4105; 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; A-F only; prereq admission to the SeEd or ElEd teacher education program; coreq SeEd 4102, SeEd 4103, SeEd 4104, SeEd 4105 or prereq ElEd 3202, EIEd 3212; fall, every year)
Objectives, curricula, special methods, materials, and evaluation appropriate for teaching foreign language in $\mathrm{K}-12$.
MthE 4121. Methods of Teaching Mathematics in the Middle and
Secondary School. ( 4 cr ; A-F only; prereq admission to the secondary teacher education program, coreq SeEd 4102, SeEd 4103, SeEd 4104, SeEd 4105; fall, every year)
Objectives, curricula, special methods, materials, and evaluation appropriate for teaching mathematics in the middle and secondary school.
MusE 4123. Methods of Teaching Music K-12. (4 cr; A-F only; prereq admission to the secondary teacher education program, coreq SeEd 4102, SeEd 4103, SeEd 4104, SeEd 4105; fall, every year) Objectives, curricula, special methods, materials, and evaluation appropriate for teaching music in $\mathrm{K}-12$.

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

## SScE 4121. Methods of Teaching Social Science in the Middle and

Secondary School. ( 4 cr ; A-F only; prereq admission to the secondary teacher education program, coreq SeEd 4102, SeEd 4103, SeEd 4104,
SeEd 4105; fall, every year)
Objectives, curricula, special methods, materials, and evaluation appropriate for teaching social science in the middle and secondary school.

## 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 $\mathrm{D}+$ 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 2501—Literary Studies, 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 4021-Research Seminar: British Literature of the Fin de Siecle, 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 4029—Research Seminar: Perspectives on Literacy, Hum (4 cr)
Engl 4031 -Research Seminar: Renaissance Romance, Hum (4 cr)

## Lower Level Elective Courses

4 of the 40 credits in the major must have an HDiv designator at 2 xxx or above. No more than 4 credits of $2 x x x$ 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 2022-Sports Literature and Writing, Hum (4 cr)
Engl 2031—Gender in Literature and Culture, 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)
Engl 2121 -Topics in Writing: Introduction to Creative Writing, $\operatorname{ArtP}(4 \mathrm{cr})$
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)
Engl 2411—Representations of American Indians in Popular and Academic Culture, HDiv ( 4 cr )
Engl 2xxx
Hum 1xxx, 2xxx, 3xxx, 4xxx

## Upper Level Elective Courses

Up to 4 credits of 3993, 4993 may count in the major.
Take 12 or more credit(s) from the following:
Engl 3012—Advanced Fiction Writing, ArtP (4 cr) Engl 3015-Writing Poetry for the 21st Century, ArtP (4 cr) Engl 3032-Creative Nonfiction Writing, ArtP (4 cr) Engl 3142-The Rise of the Novel, Hum (4 cr) Engl 3151—Writing Revolution, Hum (4 cr)
Engl 3153-Gothic Literature, 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 3161—Medieval Literature, Hum (4 cr)
Engl 3163-Life in a Medieval City: Literature and Culture in York, 700-1500, Hum (4 cr)
Engl 3165-English Renaissance Poetry and Prose, Hum (4cr)
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 3332—African American Women Writers, HDiv (4 cr)
Engl 3451—Shakespeare's England, Hum (4 cr)
Engl 3522-Harlem Renaissance, HDiv (4 cr)
Engl 3993-Directed Study (1-5 cr)
Engl 4993 -Directed Study ( $1-5 \mathrm{cr}$ )
Engl 3xxx, 4xxx

## Advanced Skills Courses

Take 4 or more credit(s) from the following:
Engl 3005-Understanding Writing: Theories and Practices, Hum ( 4 cr )
Engl 3021—Grammar and Language, Hum (4 cr)
Engl 3411—Critical Approaches to Literature, Hum (4 cr)

## 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

## Minor Requirements

Up to 4 credits of coursework with a grade of D or $\mathrm{D}+$ 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 2501—Literary Studies, Hum (4 cr)

## Take exactly 8 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 )

## Elective Courses

4 of the 20 credits in the minor must have an HDiv designator at 2 xxx or above. No more than 4 credits of $2 x x x$ 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 (4cr)
Engl 2014 -Introduction to Popular Literature: Science Fiction, Hum ( 4 cr )
Engl 2015-Introduction to Film Studies, Hum (4 cr)
Engl 2022—Sports Literature and Writing, Hum (4 cr)
Engl 2031 -Gender in Literature and Culture, 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)
Engl 2121—Topics in Writing: Introduction to Creative Writing, ArtP (4 cr)
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)
Engl 2411-Representations of American Indians in Popular and Academic Culture, HDiv (4 cr)
Engl 2xxx
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 3032-Creative Nonfiction Writing, ArtP (4 cr)
Engl 3142-The Rise of the Novel, Hum (4 cr)
Engl 3151—Writing Revolution, Hum (4 cr)
Engl 3153-Gothic Literature, 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 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 3332-African American Women Writers, HDiv (4 cr)
Engl 3411—Critical Approaches to Literature, Hum (4 cr)
Engl 3451—Shakespeare's England, Hum (4 cr)
Engl 3522-Harlem Renaissance, HDiv (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)
Eng1 4021-Research Seminar: British Literature of the Fin de Siecle, 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 4029—Research Seminar: Perspectives on Literacy, Hum (4 cr) Engl 4031—Research Seminar: Renaissance Romance, Hum (4 cr) Engl $3 x x x, 4 x x x$

## 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 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 2011. Introduction to Poetry and Poetic Language. (Hum; $4 \mathrm{cr} ;$ prereq 1011 or equiv; fall, spring, offered periodically)
An introduction to the techniques of close reading and the analysis of poetry. Emphasis on appreciating and understanding poetic form.
Engl 2012. Introduction to Fiction. (Hum; $4 \mathrm{cr} ;$ prereq 1011 or equiv; fall, offered periodically)
An introduction to critical reading and analysis of fiction (novels and/or short stories).
Engl 2013. Introduction to Drama. (Hum; 4 cr; prereq 1011 or equiv; fall, offered periodically)
An introduction to critical reading and analysis of dramatic literature.
Engl 2014. Introduction to Popular Literature: Science Fiction. (Hum; 4 cr ; prereq 1011 or equiv; fall, offered periodically) Introduction to popular literature in a variety of styles and forms with emphasis on analysis and context.

Engl 2015. Introduction to Film Studies. (Hum; $4 \mathrm{cr} ;$ prereq 1011 or equiv; weekly lab required for viewing films; spring, offered periodically) Develops students' abilities to view films critically and to deepen their understanding of the film experience. Begins with critical analysis skills and terminology, then takes up the study of genres and styles, including documentaries and foreign films.
Engl 2022. Sports Literature and Writing. (Hum; 4 cr ; prereq 1011 or equiv; fall, offered periodically)
Introduction to sports literature and sports writing, including exploration of rhetorical modes and techniques.
Engl 2031. Gender in Literature and Culture. (HDiv; 4 cr ; prereq 1011 or equiv; fall, spring, offered periodically)
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 2041. Introduction to African American Literature. (HDiv; 4 cr ; prereq 1011 or equiv; spring, offered periodically)
Introduction to issues and themes in African American literature and culture, with emphasis on historical and cultural context.
Engl 2059. Introduction to Shakespeare. (Hum; 4 cr; prereq 1011 or equiv; spring, odd 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 2061. 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 20thcentury 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. (Envt; 4 cr; prereq 1011 or equiv; fall, spring, offered periodically)
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 periodically) 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; 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; 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; fall, spring, offered periodically)
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; fall, spring, offered periodically)
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 periodically)
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 2421. Understanding Moby-Dick. (Hum; 4 cr ; prereq 1011 or equiv; fall, offered periodically)
A chapter-by-chapter analysis of Moby-Dick. Emphasis on important critical trends.
Engl 2431. Holocaust Literature and Film. (IP; 4 cr ; prereq 1011 or equiv;

## fall, even years)

Survey of Holocaust literature and film, focusing on works that clarify the political ideology that led so many to participate in the murder of two-thirds of Europe's Jews and that articulated what Jews suffered during the Nazi era.

Engl 2501. Literary Studies. (Hum; $4 \mathrm{cr} ;$ prereq 1011 or equiv; no cr for students who have received cr for Engl 1131 ; fall, spring, every year) An introduction to the tools and methods of literary analysis, including the vocabulary of criticism, the techniques of close reading, and the conventions of literary argumentation. A prerequisite to advanced courses in English.
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, \#, 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 \#; fall, spring, offered periodically)
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 periodically)
A creative writing class. Practice with the different elements of poetrysound, 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 periodically)
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 2501 (or 1131), two from 2201, 2202, 2211, 2212; spring, offered periodically)
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 2501 (or 1131), two from 2201, 2202, 2211, 2212; spring, offered periodically)
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 3153. Gothic Literature. (Hum; 4 cr; prereq 2501 (or 1131), two from 2201, 2202, 2211, 2212; fall, offered periodically)
The cultural origins of Gothic literature in tension with the neoclassical values of 18 th-century Britain and its persistent influence over the next two centuries (including its relationship to modern horror fiction and film). Emphasis on the ways Gothic tales encode cultural anxieties about gender, class, and power.
Engl 3154. 19th-Century British Fiction. (Hum; 4 cr; prereq 2501 (or 1131), two from 2201, 2202, 2211, 2212; fall, spring, offered periodically) 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 2501 (or 1131), two from 2201, 2202, 2211, 2212; fall, spring, offered periodically) 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 2501 (or 1131), two from 2201, 2202, 2211, 2212; spring, offered periodically)
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 2501 (or 1131), two from 2201, 2202, 2211, 2212; fall, offered periodically) 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 2501 (or 1131), two from 2201, 2202, 2211, 2212; spring, even 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 2501 (or 1131), two from 2201, 2202, 2211, 2212; fall, spring, offered periodically) 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 2501 (or 1131), two from 2201, 2202, 2211, 2212 or \#; summer, offered periodically)
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.
Engl 3165. English Renaissance Poetry and Prose. (Hum; 4 cr; prereq 2501 (or 1131), two from 2201, 2202, 2211, 2212; fall, offered periodically) 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 2501 (or ו131), two from 2201, 2202, 2211, 2212; fall, spring, offered periodically) 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 3232. Gender and Sexuality in Literatures of the American Tropics. (HDiv; 4 cr ; prereq 2501 (or 1131), two from 2201, 2202, 2211, 2212; spring, even years)
Studies expressions of gender and sexuality in literatures of American tropics, regions of the Pacific, the Caribbean, and the Philippines that were affected by U.S. empire. Uses feminist, queer, and postcolonial theories to examine range of texts to learn about how the United States has imagined its Others and how those Others have talked back.
Engl 3253. Modern and Postmodern Love in the Novel. (Hum; 4 cr ; prereq 2501 (or 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 2501 (or 1131), two from 2201, 2202, 2211, 2212; fall, offered periodically) 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 2501 (or l131), two from 2201, 2202, 2211, 2212; fall, offered periodically)
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 2501 (or 1131 ), two from 2201, 2202, 2211, 2212; fall, offered periodically) 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.
Engl 3301. U.S. Multicultural Literature. (HDiv; 4 cr; prereq 2501 (or 1131), two from 2201, 2202, 2211, 2212, or \#; spring, offered periodically) 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 2501 (or 1131), two from 2201, 2202, 2211, 2212, or \#; fall, spring, offered periodically) Study of American Indian literature written in English. Particular attention given to language, identity, land, and sovereignty.
Engl 3331. African American Literature. (HDiv; 4 cr; prereq ll3ı, two from 2201, 2202, 2211, 2212; fall, spring, offered periodically)
Study of African American literature. Particular attention given to issues of gender, class, power, "passing," and the racialized body.
Engl 3332. African American Women Writers. (HDiv; 4 cr; prereq 1011 or equiv or \#; fall, offered periodically)
If African Americans struggled to achieve equality and recognition in the racist United States, the situation was even more difficult for African American women, who had to contend with the sexism in both the white and black communities. This course examines the writings of prominent African American women.
Engl 3411. Critical Approaches to Literature. (Hum; 4 cr; prereq 2501 (or 1131), two from 2201, 2202, 2211, 2212; fall, offered periodically) An introduction to the major schools of literary theory and cultural analysis; particular attention to the ways in which the dialogue and debate between these approaches define the discipline of literary criticism.
Engl 3451. Shakespeare's England. (Hum; 4 cr; $;$ [Th 3451]; summer, offered periodically)
Same as Th 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.
Engl 3522. Harlem Renaissance. (HDiv; 4 cr; prereq 2501 (or ו13), 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.
Engl 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.
Research Seminar: A research-based study of a literary subject that forms a capstone experience for majors.

Engl 4004. Research Seminar: Old English Literature and Language. (Hum; 4 cr ; prereq two from 31xx-35xx, \#; fall, spring, offered periodically)
Prose and poetry of early medieval England (650-1100) in translation and in Old English (which is studied), with attention to material (manuscripts) and cultural contexts and to reception history.

Engl 4012. Research Seminar: Imagining the Earth. (Hum; 4 cr; prereq two from 31xx-35xx, \#; fall, spring, offered periodically) 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.
Engl 4017. Research Seminar: Tricksters-Conjurers in American Indian and African American Literature. (HDiv; 4 cr ; prereq two from 31xx-35xx, \#; fall, spring, offered periodically)
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.
Engl 4021. Research Seminar: British Literature of the Fin de Siecle. (Hum; 4 cr; prereq two from 31xx-35xx, \#; fall, spring, offered periodically)
Study of literature at the end of the 19th century in Britain, including such topics as the widening split between "literature" and popular culture, the redefinition of realism, and the crisis of sexuality. Reading includes fiction by Conrad, Haggard, Hardy, Stoker, Wells, and Wilde, as well as recent criticism and historiography.
Engl 4023. Research Seminar: Nationalism and Irish Literature. (Hum; 4 cr ; prereq two from 31xx-35xx, \#; fall, spring, offered periodically)
Examination of 20th-century Irish literature through the lens of cultural nationalism. How questions of language, race, culture, and colonial history make the idea of Ireland problematic. Exploration of a diverse host of writers interested in Irish myths, ideals, and identities with research from Irish and postcolonial studies.
Engl 4024. Research Seminar: Poet's Choice: The Book as the 25th Poem. (Hum; 4 cr; prereq two from 31xx-35xx, \#; spring, offered periodically)
"If you have a book of twenty-four poems, the book itself should be the twenty-fifth," claims poet James Wright. Study of single volumes of poetry, examination of the book as a whole, and consideration of the sequence of poems and recurring images and themes. Exploration of key movements of the 20th century, placing each volume in its literary context.
Engl 4028. Research Seminar: Inventing a Nation: Early American National Literature. (Hum; 4 cr; prereq two from 31xx-35xx, \#; spring, offered periodically)
At the end of the Revolution, Americans set out to create a literature that would define the new nation. Writers adapted old forms and invented new ones in an effort to make American writing distinct and somehow reflective of the nation's values. This course explores those efforts, including drama, novels, magazine writing, and their contexts.
Engl 4029. Research Seminar: Perspectives on Literacy. (Hum; 4 cr; prereq two from 31xx-35xx, \#; spring, even years)
Study of literacies and literate practices, both print and digital; the history and politics of defining literacy; and the role of technologies in literate activities.
Engl 4031. Research Seminar: Renaissance Romance. (Hum; 4 cr; prereq two from 31xx-35xx, \#; fall, offered periodically) An intensive study of the ever-controversial and paradoxical romance genre of 16th- and 17th-century England. Texts include Sir Philip Sidney's "Arcadia," Lady Mary Wroth's "Urania," Robert Greene's "Menaphon," and William Shakespeare's "The Winter's Tale," among others.
Engl 4032. Research Seminar: Transnational Theory and Literatures. (Hum; 4 cr; prereq two from 31xx-35xx, \#; spring, offered periodically) An intensive study of transnational literature and theory from the turn of the 20th century to the present, emphasizing the movement of marginalized subjects to the center of cultural expression, the intertwining of cultures in contact zones, and the forms of identity emerging from these modern, hybrid cultures.
Engl 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.

## Environmental Science (ESci)

Division of Science \& Mathematics

This major is for students interested in an interdisciplinary science education that prepares them to deal with environmental challenges. The basic natural resources of land, air, and water are studied in the context of protecting and sustaining the environment. Students become knowledgeable about environmental issues and applied environmental science. The environmental science curriculum draws courses predominantly from the disciplines of the 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 3007Environmental 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.
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 $\mathrm{D}+$ 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 1101 -Calculus I, M/SR ( 5 cr )
or Math 1021—Survey of Calculus, M/SR (4 cr)
Phys 1101 -General Physics I, Sci-L (5 cr)
or Phys 1091—Principles of Physics I, Sci-L (5 cr)
Stat 1601 -Introduction to Statistics, M/SR ( 4 cr )
or Stat 2601—Statistical Methods, M/SR (4 cr)

## Applied Sciences

Biol 3131—Ecology, Sci-L (4 cr)
Geol 1101—Physical Geology, Sci-L (4 cr)
Geol 2161 -GIS and Remote Sensing, Sci ( 4 cr )
Geol 3501—Hydrology, Sci (4 cr)
EnSt 1101—Environmental Problems and Policy, Envt (4 cr)
ESci 4901-Environmental Science Senior Seminar I (1 cr)
ESci 4902-Environmental Science Senior Seminar II (1 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)

## 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 Science Courses

Courses from at least 2 disciplines must be included. No more than 8 credits from 2 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—Organic 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)
ESci 3401-Polymer Chemistry and the Environment, Sci (3 cr)
or Chem 3401—Polymer Chemistry and the Environment, Sci (3 cr)

## Environmental Science Course Descriptions

Biol ווו1. 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. (two 75-min lect)
Biol 2101. Evolution of Biodiversity. (Sci-L; 4 cr; prereq 1101 or וווו 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 $65-\mathrm{min}$ 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 $65-\mathrm{min}$ lect, one $180-\mathrm{min}$ lab and field study; weekend field trip required)

Biol 4121. Herpetology. (Sci-L; 4 cr; prereq Biol 2101 or EnSt 2101 or \#; spring, even years)
Survey of amphibians and reptiles, including their evolution, systematics, identification, behavior, ecological relationships, and contemporary problems associated with human activities. (two $65-\mathrm{min}$ lect, one $180-\mathrm{min}$ lab or field study)

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 $65-\mathrm{min}$ lect, one $180-\mathrm{min}$ 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 $65-\mathrm{min}$ lect, $180-\mathrm{min}$ lab)
Biol 4172. Plant Systematics. (Sci-L; 4 cr; prereq 2101 or EnSt 2101 or \#; spring, odd 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 $65-\mathrm{min}$ lect, 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 $65-\mathrm{min}$ lect, one $180-\mathrm{min}$ lab; all day 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. (three $65-\mathrm{min}$ lect)

Biol 4351. Conservation Biology . (Sci-L; 4 cr; prereq Biol 2101 or EnSt 2101, coreq or prereq Biol 3131 or \#; fall, odd 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 $65-\mathrm{min}$ lect, one $180-\mathrm{min}$ 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 I1O1; 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; 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; =[Chem 2304]; 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; freeradical chemistry; retrosynthetic 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. Acidbase, oxidation-reduction, and complexometric titrations, introduction to electrochemical and spectrophotometric analyses and separations. (3 hrs lect, 3 hrs lab)

Chem 3401. Polymer Chemistry and the Environment. (Sci; $3 \mathrm{cr} ;=[\mathrm{ESci}$ 3401]; prereq 2302 or 2304 or \#; spring, even years)
Same as ESci 3401. Introduction to many traditional topics in polymer chemistry including those with a connection to elements of the environment and environmental science such as the preparation of polymers from renewable feedstocks, polymers in renewable energy, green syntheses of polymers, and environmental impacts of polymers. (3 hrs lect)
Chem 3501. Physical Chemistry I. (Sci; 4 cr; prereq 1102, Phys 1101, Math 1102 or \#; fall, every year)
The gas state. Classical thermodynamics. Phase, chemical and heterogeneous equilibria. Chemical kinetics. Kinetic theory of gases. Transport. (4 hrs lect)

## EnSt ו10ו. Environmental Problems and Policy. (Envt; 4 cr; fall, spring,

 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 $65-\mathrm{min}$ lectures, one 180-min lab)

ESci ו13ו. Renewable Energy With Biomass Gasification. (Sci-L; 3 cr; prereq Math 0901 or placement beyond Math 0901 using ACT/placement exam or \#; summer, every year)
Principles of biomass gasification with a focus on chemical, biological, and economic considerations of biomass energy production. Features hands-on training in chemistry and biomass with classroom and lab activities.

ESci 2103. The Roots of Modern Science in 16th-Century Mining. (Sci; 3 cr ; =[IS 1322]; prereq Phys 1091, Phys 1101, Chem 1101 or Geol 1001; summer, odd years)
Study of the works of Georgius Agricola and Lazarus Ercker as examples for the emergence of applied chemistry through economic need during the 16th century; site visits to mines and ore processing technological sites of the period. Emphasis on the chemical, physical, and geological aspects of mining and ore-processing technology in a region with an ongoing 800-year history of mining. This course is part of the international program "Journey to the Roots of Modern Science" in Freiberg, Germany.

## ESci 2201. Field Experience in Environmental Challenges of the Italian

Alps. (Envt; 4 cr; summer, odd years)
Study of the impact of geologic processes such as tectonism, mass movement, and flooding; understanding climate change through the observation of vegetation changes and glacier fluctuations; soil and water resources and the archaeological record of the nature of human settlements in the Alps.

ESci 31ו1. Evolution of the Minnesota Prairie. (Sci-L; 4 cr; prereq Geol 1101 or EnSt 2101 or \#; fall, odd years)
Interpretation of the geologic, geochemical, climatologic, and paleontological records of western Minnesota to reconstruct the origin and history of the landscape, flora, and fauna during the last 15,000 years. Topics include: climate, deglaciation, large lakes, vegetation changes, late Pleistocene mammals, peopling of the upper Midwest, and extraterrestrial impact events in the upper Midwest. ( 3 hrs lect, 3 hrs lab, and field trip)
ESci 3196. 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 3301. The Chemistry of Sustainable Energy. (Sci; 3 cr; =[Chem 3301]; prereq Chem 2302 or \#; fall, even years)
The fundamental chemical concepts underlying energy sources. Topics include: energy basics, fossil fuels, "sustainable" energy sources, biomass, solar voltaics, hydrogen fuel cells, and nuclear energy.

ESci 3401. Polymer Chemistry and the Environment. (Sci; 3 cr; =[Chem 3401]; prereq Chem 2302 or 2304 or \#; spring, even years)
Same as Chem 3401. Introduction to many traditional topics in polymer chemistry including those with a connection to elements of the environment and environmental science such as the preparation of polymers from renewable feedstocks, polymers in renewable energy, green syntheses of polymers, and environmental impacts of polymers. (3 hrs lect)
ESci 4901 . Environmental Science Senior Seminar I. (1 cr; A-F only; prereq \#; 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; A-F only; prereq 4901, \#; 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 2001. Natural and Unnatural Geologic Hazards. (Envt; 4 cr; spring, offered periodically)
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 2131. Geomorphology. (Sci; 4 cr; prereq 1101; spring, even years) Study of the 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 2161. GIS and Remote Sensing. (Sci; 4 cr ; prereq 1101 or Biol 1101 or Biol וווו or \#; spring, offered periodically)
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; spring, 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 2301. Atmospheric Physics. (Envt; 4 cr; prereq 1092 or 1102, Math 1102; fall, odd 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)
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; 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 chi-squared tests; use of statistical computer packages.
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 4601. Biostatistics. (M/SR; 4 cr; prereq 1601 or $\mathbf{2 6 0 1}$ or $\mathbf{2 6 1 1}$ or \#; spring, offered periodically)
Design and analysis of biological studies: biological assays, case-control studies, randomized clinical trials, factorial designs, repeated measures designs, observational studies, and infectious disease data. Analysis of survival data: basic concepts in survival analysis, group comparisons, and Cox regression model. Use of statistical computer packages.

## Environmental Studies (EnSt)

## 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 environment program coordinator.
The environmental studies major is designed to serve those interested in a broader knowledge of the natural environment and the role of humans in it. Students acquire 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

Requirements for the major include successful completion of two elements:

Element 1: The Environmental Studies Core
Element 2: The Environmental Studies Elective Block
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 approved by the environmental studies program coordinator. Elective plans must be designed to ensure that there is sufficient depth of coverage in the chosen EnSt electives. For many students, a second major (or minor) in a closely related discipline is desirable. Electives often can be selected in such a way that they also count toward the second major. Elective courses, other than those listed below, may be appropriate to add depth and provide more theoretical context for the environmentally focused coursework. For instance, Pol 3475-International Human Rights might be an appropriate elective for students wishing to understand global environmental rights. Some generally focused courses (Engl 3032-Creative Nonfiction, for example) are appropriate if course project topics are environmentally themed. Approval of alternative electives requires written consent of the course instructor and the program 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

## Element 1: The Environmental Studies Core

Students must successfully complete each of the following eight courses in order to satisfy this element of the major.
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 ( 4 cr )
Geol 1101—Physical Geology, Sci-L (4 cr)
Stat 1601 -Introduction to Statistics, M/SR (4 cr)
or Stat 2601—Statistical Methods, M/SR (4 cr)
Element 2: Environmental Studies Elective Block
Students must successfully complete at least 24 credits from the electives listed below, subject to the following restrictions:

1. Courses used to satisfy this element are exclusive of any used to complete the Core element.
2. At least 16 credits must come from the Upper Division Electives Block.
3. At least 4 credits of the Upper Division Electives must come from Category A.
4. At least 4 credits of the Upper Division Electives must come from Category B.

## Lower Division Electives

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)
EnSt 2111—Environmental Ethics, Envt (4 cr)
Geol 2001—Natural and Unnatural Geologic Hazards, Envt (4 cr)
Hist 1812—FIRE!: An introductory Seminar to American Environmental History, IC (4 cr)
Phys 2301—Atmospheric Physics, Envt (4 cr)
Pol 1201 -American Government and Politics, E/CR (4 cr)

## Upper Division Elective Courses

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

## Category A: Science and Mathematics Electives

Take 4 or more credit(s) from the following: Biol 3131—Ecology, Sci-L (4 cr)
Biol 4071—Flora of Minnesota, 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 3101—Analytical Chemistry, Sci-L (4 cr)
Geol 3501—Hydrology, Sci (4 cr)

## Category B: 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)
Geog 3501-Geographic Information Systems, Envt (4 cr)
Hist 2361-An Environmental and Geographic History of the United States, Envt ( 4 cr )
Pol 3272-Making Environmental Public Policy, Envt (4 cr)
Pol 3355-Environmental Political Theory, Envt ( 4 cr )
Soc 3112—Sociology of the Environment and Social Development, Envt (4 cr)
Soc 3131-World Population, Envt (4 cr)
Soc 3204-Culture, Food, and Agriculture, Envt (4 cr)

## Category C: Humanities Electives

Take 0 or more credit(s) from the following:
Engl 4012—Research Seminar: Imagining the Earth, Hum (4 cr)
Span 3623 -Seminar: Ecology and Nature in Latin American Literature, Envt (4 cr)

## Environmental Studies Course Descriptions

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.

Anth 2501. Medical Anthropology-An Overview. (SS; 4 cr; prereq וווו or Soc 1101 or \#; spring, offered periodically)
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 32O4]; prereq illor Soc 1101 or \#; spring, every year)
Same as Soc 3204. Examines the globalization of food systems utilizing a political ecology perspective 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 illor 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 ו1ו1. 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. (two 75-min lect)

Biol 2101. Evolution of Biodiversity. (Sci-L; 4 cr; prereq 1101 or 111 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 $65-\mathrm{min}$ 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 $65-\mathrm{min}$ lect, one $180-\mathrm{min}$ lab and field study; weekend field trip required)

Biol 4071. Flora of Minnesota. (Sci-L; 4 cr; prereq Biol 2101; summer, offered periodically)
Identification, ecology, and conservation of vascular plants found in Minnesota. Labs and field trips emphasize plant identification and anatomy.

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 $65-\mathrm{min}$ lect, one $180-\mathrm{min}$ 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 $65-\mathrm{min}$ lect, $180-\mathrm{min}$ lab)

Biol 4172. Plant Systematics. (Sci-L; 4 cr; prereq 2101 or EnSt 2101 or \#; spring, odd 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 $65-\mathrm{min}$ lect 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 $65-\mathrm{min}$ lect, one $180-\mathrm{min}$ lab; all day 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. (three $65-\mathrm{min}$ lect)
Biol 4351. Conservation Biology . (Sci-L; 4 cr; prereq Biol 2101 or EnSt 2101, coreq or prereq Biol 3131 or \#; fall, odd 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 $65-\mathrm{min}$ lect, one $180-\mathrm{min}$ 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. Acidbase, oxidation-reduction, and complexometric titrations, introduction to electrochemical and spectrophotometric analyses and separations. ( 3 hrs lect, 3 hrs lab )

Econ 1ו11. Principles of Microeconomics. (SS; 4 cr; prereq high school algebra or \#; fall, spring, every year)
Study of scarce resource allocation in a market economy. Supply and demand, consumer theory, theory of the firm, market structure, pricing of factors of production, income distribution and the role of government.

Econ 3007. Environmental and Natural Resource Economics I. (Envt; 2 cr; prereq וווו or \#; fall, spring, offered periodically)
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 periodically)
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.
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.
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 periodically)
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 two from 31xx-35xx, \#; fall, spring, offered periodically)
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, spring, 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 $65-\mathrm{min}$ lectures, one 180-min lab)

## EnSt 2111. Environmental Ethics. (Envt; 4 cr; evening or weekend field

 trips required; fall, 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 3001. Water Resources Policy. (Envt; 4 cr; prereq 1101 or Pol 1201 or \#; fall, every year)
An examination of fundamental contemporary water resource challenges. Units on water quality (e.g., drinking water) and quantity (e.g., irrigated agriculture) encourage critical evaluation of local, national, and international water resources policy in the contexts of environmental quality, human health, and technology. (two 100 min discussions)
EnSt 3996. Internship/Field Experience in Environmental Studies. (2-4 cr [max 4 cr]; S-N only; prereq jr status or \#, approved internship proposal; 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. (4 cr; A-F only; prereq 3996, sr status or \#; spring, every year)
The course has two components: 1) Students present seminars on their individual internships/field experiences. 2) Students collaborate on a multidisciplinary research project germane to Environmental Studies (e.g., local water resources) and present results in a public forum.

Geol ı10ı. 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 periodically)
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 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 1812. FIRE!: An introductory Seminar to American Environmental History. (IC; 4 cr ; prereq new college student in their first semester of enrollment at UMM; fall, offered periodically)
One of the primary ways in which people have manipulated their environments has been through the burning of fossil fuels. Indigenous people, for instance, used fire to clear land, to improve soil quality, and to drive game. Coal powered the Industrial Revolution and oil provided the energy necessary for the Automobile Age. The impact of using energy in this way is today obvious. This course is organized around the topic of fire and uses this theme to examine core issues in American Environmental History. Topics might include: American Indian peoples and fire, burning and early agriculture, coal and industrialization, the Age of the Automobile, incineration and the problem of waste, and forest arson as a mode of political protest.
Hist 2361. An Environmental and Geographic History of the United States. (Envt; 4 cr ; fall, spring, offered periodically)
A broad examination of how humans interacted with their natural world throughout American history. Combined emphasis on cultural ecology (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: 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.

Phys 2301. Atmospheric Physics. (Envt; 4 cr; prereq 1092 or 1102, Math 1102; fall, odd 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, national constitution, civil and political rights, party system; nature, structure, powers, and procedures of legislative, executive, and judicial departments of the national government.
Pol 3272. Making Environmental Public Policy. (Envt; 4 cr; prereq 1101 or 1201 or 1401; spring, even years)
Exploration of the domestic and international politics of environmental and energy policy making. Focus on theoretical frameworks for policy making and political behaviors surrounding development of environmental and energy policies. Includes the applications of political dynamics and principles to specific areas of environmental and energy policy. Emphasis also given to politics of policy implementation.
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 3112. Sociology of the Environment and Social Development. (Envt; 4 cr ; prereq 1101 or \#; fall, odd years)
Introduces students to the sociological study of the environment and social development. Examines the impact of international environmental and development efforts on individuals at the local level. Focuses on grassroots environmental activism and social development work. Explores and discusses power relations and systems of inequality within the context of environmental and social development efforts.

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 $1 ו 1 ו$ or \#; spring, every year)
Same as Anth 3204. Examines the globalization of food systems utilizing a political ecology perspective 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 3012, 3112 or \#; fall, offered periodically) 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; 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 chi-squared tests; use of statistical computer packages.
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

Discontinued Major Transition Plan—Students will no longer be admitted into the European Studies major effective summer 2011. Students pursuing the European Studies major cannot also pursue a German Studies major; however, they could pursue an Area of Concentration.

## Foreign Languages

(See World Languages.)

## 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 Frenchspeaking peoples and for understanding their rich cultures, ideas, institutions, and writings, past and present. It invites students to think critically about French and Francophone cultures, and prepare them for graduate school or to enter a bilingual, professional world.

## 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 $2 x x x$ 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).
For additional language offerings at UMM, see "World Languages."

## 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 oncampus 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.
One cross-listed French course taught in English (such as Fren 1027, 1031, 1302, 1311, or 1312) may be counted towards the French major, provided that students complete written work for the class in French.
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 that encompasses the Middle Ages through French classicism. Students gain familiarity with the history, cultures, and literatures of France from its beginnings in early feudal society through the seventeenth century.
Take 4 or more credit(s) from the following:
Fren 1027—Real to Reel: The Middle Ages and Renaissance in Film, 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 PreEnlightenment France, Hum (4 cr)
Fren 3026-Early Modern Studies: History of the French Language, 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 the dawn of the French Enlightenment.
Take 4 or more credit(s) from the following:
Fren 1031-Modern Studies: The Modern Body in France, SS (4 cr)
Fren 1302-French Cinema, IP (4 cr)
Fren 3037-Modern Studies: Revolution, Romanticism, Modernity, Hum (4 cr)
Fren 3038 -Modern Studies: Avant-Garde, Existentialism, Experimentation, Hum (4 cr)
Fren 3039-Modern Studies: The Old Regime and New Ideas: The French Enlightenment, Hist (4 cr)

## 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 1311-West African Francophone Cinema, IP (4 cr)
Fren 1312-Morocco: History, Story, Myth, 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: Littèrature migrante, IP (4 cr)
Fren 3044-Francophone Studies: L'Amerique francophone, Hum (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 three-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. French Major Portfolio

## 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 FREN 3xxx or above, exclusive of those used to fulfill required cluster courses. Fren 2011 and Fren 2012 may also be used to satisfy this elective requirement. Students may take up to 4 credits from Fren 1027, Fren 1031, Fren 1302, Fren 1311, Fren 1312 towards these elective credits.
Electives can be chosen from the cluster courses or the following:
Take 8 or more credit(s) from the following:
Fren 1027-Real to Reel: The Middle Ages and Renaissance in Film, Hum (4 cr)
Fren 1031-Modern Studies: The Modern Body in France, SS (4 cr)
Fren 1302-French Cinema, IP (4 cr)
Fren 1311-West African Francophone Cinema, IP (4 cr)
Fren 1312-Morocco: History, Story, Myth, IP (4 cr)
Fren 2011—Introduction to French Phonetics, Hum (4 cr)
Fren 2012—French for Professions, IP (4 cr)
Fren $3 x x x$, $4 x x x$

## 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 $\mathrm{S}-\mathrm{N}$ unless offered $\mathrm{S}-\mathrm{N}$ 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 3011—Reading and Analysis of Texts, Hum (4 cr)

## Elective Courses

Take 16 or more credit(s) from the following.
Fren 2001—Intermediate French I, IP (4 cr)
Fren 2002-Intermediate French II, IP (4 cr)
Fren 2011-Introduction to French Phonetics, Hum (4 cr)
Fren 2012-French for Professions, IP (4 cr)
Fren 3022-Early Modern Studies: Pre-Enlightenment Culture in France, Hist (4 cr)
Fren 3023-Early Modern Studies: Orature and Literature in PreEnlightenment France, Hum (4 cr)
Fren 3026-Early Modern Studies: History of the French Language, Hum (4 cr)
Fren 3028-Early Modern Studies: Female Authorship and Medieval Canon Fodder, Hum (4 cr)
Fren 3037-Modern Studies: Revolution, Romanticism, Modernity, Hum ( 4 cr )
Fren 3038-Modern Studies: Avant-Garde, Existentialism, Experimentation, Hum (4 cr)
Fren 3039-Modern Studies: The Old Regime and New Ideas: The French Enlightenment, Hist (4 cr)
Fren 3041 -Francophone Studies: Francophone Worlds, IP (4 cr)
Fren 3042-Francophone Studies: Contes francophones, IP (4 cr)
Fren 3043-Francophone Studies: Littèrature migrante, IP (4 cr)
Fren 3044—Francophone Studies: L'Amerique francophone, Hum (4 cr)
Fren 3060-July in Paris III: French Language and Culture in Paris, IP ( 4 cr )
Fren 4011—Advanced Language Studies: Theme et Version, Hum (4 cr)
Fren 4012-Advanced Language Studies: Advanced French Grammar, Hum (4 cr)
Fren 4021-French and Francophone Theater, Hum (4 cr)
Fren 4991 -Independent Study in French Abroad, IP (4 cr)
Fren 2xxx, 3xxx, 4xxx

## 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 proficiency/ 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. (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 ; A-F only; summer, odd years)
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.

Fren 1023. July in Paris II: French Language and Culture in Paris. (FL; 4 cr; A-F only; prereq 1001 or placement; summer, odd years) 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

Fren 1027. Real to Reel: The Middle Ages and Renaissance in Film. (Hum; 4 cr ; does not count towards the Fren minor; fall, spring, offered periodically)
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. Taught in English. Meets Early Modern Studies (EMS) requirement for the French major.

Fren 1031. Modern Studies: The Modern Body in France. (SS; 4 cr; prereq or coreq 3011 or \#; fall, spring, offered periodically)
Beginning with Vesalius, this course examines how the notions of body and mind have been shaped and reshaped in tandem with the rise of the sciences in France, with emphasis on evolving conceptions of ability and disabilities Taught in English. Meets Modern Studies (MOS) requirement in the French major.

Fren 1302. French Cinema. (IP; 4 cr; does not count towards the Fren minor; fall, spring, offered periodically)
The history of filmmaking in France from the Lumiere brothers to the present; introduction to major trends in film theory. All films have English subtitles. Taught in English. Meets Modern Studies (MOS) requirement for the French major.

Fren 1311. West African Francophone Cinema. (IP; 4 cr; does not count toward the Fren minor; fall, spring, offered periodically) 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. Meets Francophone Studies (FRS) requirement for the French major.
Fren 1312. Morocco: History, Story, Myth. (IP; 4 cr; A-F only; does not count toward the Fren minor; summer, offered periodically)
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. Meets Francophone Studies (FRS) requirement for the French major.
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 periodically) 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 periodically)
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 Frenchspeaking 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 periodically) 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 periodically)
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 periodically) 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 3028. Early Modern Studies: Female Authorship and Medieval
Canon Fodder. (Hum; 4 cr; prereq or coreq 3011 or \#; fall, spring, offered periodically)
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, Pernette du Guillet, Louise Labe, Marguerite de Navarre, and Madame de Lafayette, among others. Meets Early Modern Studies (EMS) requirement in French major.
Fren 3037. Modern Studies: Revolution, Romanticism, Modernity . (Hum; 4 cr; prereq or coreq 3011 or \#; fall, spring, offered periodically) 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: Avant-Garde, Existentialism,
Experimentation. (Hum; 4 cr ; prereq or coreq 3011 or \#; fall, spring, offered periodically)
From la belle epoque 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 Pennac, 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 3039. Modern Studies: The Old Regime and New Ideas: The

French Enlightenment. (Hist; 4 cr; prereq or coreq 3011 or \#; fall, spring, offered periodically)
Explores the absolutism of Louis XIV and the rise of modern secular thinking in the French literature and philosophy of the Enlightenment, with particular attention given to shifting notions of freedom, agency, and one's place within society and relationship to others. Meets Modern Studies (MOS) requirement for the French major.

Fren 3041. Francophone Studies: Francophone Worlds. (IP; 4 cr; prereq or coreq 3011 or \#; fall, spring, offered periodically)
Readings in a variety of cultural and literary texts from among Frenchlanguage 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 periodically)
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: Littèrature migrante. (IP; 4 cr; prereq or coreq 3011 or \#; fall, spring, offered periodically)
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'Amerique francophone. (Hum; 4 cr ; prereq or coreq 3011 or \#; fall, spring, offered periodically) 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 3060. July in Paris III: French Language and Culture in Paris. (IP; 4 cr [max 8 cr ]; A-F only; prereq 1002 or equiv; summer, odd years) 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.
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: Theme et Version. (Hum; 4 cr; prereq or coreq 3011 or \#; spring, odd 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, even 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 periodically) 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 periodically)
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 email.
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. Engl 2031-Gender in Literature and Culture, HDiv (4 cr)
GWSS 1101-Introduction to Gender, Women, and Sexuality Studies, HDiv (4 cr)
GWSS 4901-Gender, Women, and Sexuality Studies Capstone ( 1 cr ) Soc 3121—Sociology of Gender and Sexuality, HDiv (4 cr)

## 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 credit(s) 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)

Engl 3332-African American Women Writers, HDiv (4 cr)
Fren 3028-Early Modern Studies: Female Authorship and Medieval Canon Fodder, Hum (4 cr)
GWSS 4101—Feminist Theory, HDiv (4 cr)
Hist 1402 -Women in U.S. History, HDiv (4 cr)
Hist 2704 -Gender, Women, and Sexuality in Medieval Europe, SS ( 4 cr )
Hist 2708-Gender, Women, and Sexuality in Modern Europe, IP (4 cr)
Hist 3707 -Gender in East Asia, HDiv (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 (4 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 8 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)
Engl 3301—U.S. Multicultural Literature, HDiv (4 cr)
Engl 3522—Harlem Renaissance, HDiv (4 cr)
Eng1 4021-Research Seminar: British Literature of the Fin de Siecle, Hum (4 cr)
Engl 4031-Research Seminar: Renaissance Romance, Hum (4 cr)
Fren 1031—Modern Studies: The Modern Body in France, SS (4 cr)
Fren 1302-French Cinema, IP (4 cr)
Fren 1311-West African Francophone 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: Littèrature migrante, 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 3112-Sociology of the Environment and Social Development, Envt (4 cr)
Soc 3122—Sociology of Childhoods, HDiv (4 cr)
Soc 3123-Sociology of Aging, HDiv (4 cr)
Soc 3141—Sociology of Deviance, E/CR (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

GWSS 1101-Introduction to Gender, Women, and Sexuality Studies, HDiv (4 cr)

## 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 credit(s) 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)
Engl 2031-Gender in Literature and Culture, HDiv (4 cr)
Engl 3332-African American Women Writers, HDiv (4 cr)
Fren 3028-Early Modern Studies: Female Authorship and Medieval Canon Fodder, Hum (4 cr)
GWSS 4101-Feminist Theory, HDiv (4 cr)
Hist 1402 - Women in U.S. History, HDiv ( 4 cr)
Hist 2704-Gender, Women, and Sexuality in Medieval Europe, SS (4 cr)
Hist 2708-Gender, Women, and Sexuality in Modern Europe, IP (4 cr)
Hist 3707-Gender in East Asia, HDiv (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 (4 cr)
Soc 3121-Sociology of Gender and Sexuality, HDiv (4 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)
Engl 3301-U.S. Multicultural Literature, HDiv (4 cr)
Eng1 3522-Harlem Renaissance, HDiv (4 cr)
Engl 4021-Research Seminar: British Literature of the Fin de Siecle, Hum (4 cr)
Engl 4031-Research Seminar: Renaissance Romance, Hum (4 cr)
Fren 1031-Modern Studies: The Modern Body in France, SS (4 cr)
Fren 1302-French Cinema, IP (4 cr)
Fren 1311-West African Francophone 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: Littèrature migrante, 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 3112-Sociology of the Environment and Social Development, Envt (4 cr)
Soc 3122-Sociology of Childhoods, HDiv (4 cr)
Soc 3123-Sociology of Aging, HDiv (4 cr)
Soc 3141—Sociology of Deviance, E/CR (4 cr)

## Gender, Women, and Sexuality Studies Course Descriptions

Anth 2501. Medical Anthropology-An Overview. (SS; 4 cr; prereq וווו or Soc 1101 or \#; spring, offered periodically)
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 $1 ו 1$ or Soc 1101 or \#; fall, offered periodically)
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; $4 \mathrm{cr} ;=[$ Soc 3602]; prereq 1111 or Soc 1101 or \#; spring, every year)
Same as Soc 3602. Study of the social, economic, and political positions of women in Latin American countries. Topics include class and ethnic differences, women in the labor force, and women's participation in political movements through the lens of feminist theory.

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.

Econ 3351. Globalization: Examining India's Social and Economic
Development. (IP; 4 cr; =[Mgmt 3351]; prereq 1111 or 1112 or \#; spring, offered periodically)
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.

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.

Engl 2031. Gender in Literature and Culture. (HDiv; 4 cr; prereq 1011 or equiv; fall, spring, offered periodically)
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 3142. The Rise of the Novel. (Hum; 4 cr; prereq 2501 (or 1131), two from 2201, 2202, 2211, 2212; spring, offered periodically)
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 3154. 19th-Century British Fiction. (Hum; 4 cr; prereq 2501 (or 1131), two from 2201, 2202, 2211, 2212; fall, spring, offered periodically) The rise of the novel to respectability and prominence in Britain from the Romantics to the Victorians.

Engl 3301. U.S. Multicultural Literature. (HDiv; 4 cr ; prereq 2501 (or וlis), two from 2201, 2202, 2211, 2212, or \#; spring, offered periodically) Examination of literatures by African American, American Indian, Asian American, Chicana/o, U.S. Latino/a, and other under-represented peoples.

Engl 3332. African American Women Writers. (HDiv; 4 cr ; prereq 1011 or equiv or \#; fall, offered periodically)
If African Americans struggled to achieve equality and recognition in the racist United States, the situation was even more difficult for African American women, who had to contend with the sexism in both the white and black communities. This course examines the writings of prominent African American women.

Engl 3522. Harlem Renaissance. (HDiv; 4 cr; prereq 2501 (or 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.

## Engl 4021. Research Seminar: British Literature of the Fin de

Siecle. (Hum; 4 cr ; prereq two from 31xx-35xx, \#; fall, spring, offered periodically)
Study of literature at the end of the 19th century in Britain, including such topics as the widening split between "literature" and popular culture, the redefinition of realism, and the crisis of sexuality. Reading includes fiction by Conrad, Haggard, Hardy, Stoker, Wells, and Wilde, as well as recent criticism and historiography.
Engl 4031. Research Seminar: Renaissance Romance. (Hum; 4 cr; prereq two from 31xx-35xx, \#; fall, offered periodically)
An intensive study of the ever-controversial and paradoxical romance "genre of 16th- and 17th-century England. Texts include Sir Philip Sidney’s
"Arcadia," Lady Mary Wroth's "Urania," Robert Greene's "Menaphon," and William Shakespeare's "The Winter's Tale," among others.

Fren 1031. Modern Studies: The Modern Body in France. (SS; 4 cr; prereq or coreq 3011 or \#; fall, spring, offered periodically)
Beginning with Vesalius, this course examines how the notions of body and mind have been shaped and reshaped in tandem with the rise of the sciences in France, with emphasis on evolving conceptions of ability and disabilities Taught in English. Meets Modern Studies (MOS) requirement in the French major.
Fren 1302. French Cinema. (IP; 4 cr; does not count towards the Fren minor; fall, spring, offered periodically)
The history of filmmaking in France from the Lumiere brothers to the present; introduction to major trends in film theory. All films have English subtitles. Taught in English. Meets Modern Studies (MOS) requirement for the French major.

Fren 1311. West African Francophone Cinema. (IP; 4 cr; does not count toward the Fren minor; fall, spring, offered periodically)
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. Meets Francophone Studies (FRS) requirement for the French major.
Fren 3041. Francophone Studies: Francophone Worlds. (IP; 4 cr; prereq or coreq 3011 or \#; fall, spring, offered periodically)
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 periodically)
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: Littèrature migrante. (IP; 4 cr; prereq or coreq 3011 or \#; fall, spring, offered periodically)
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.

## GWSS 1101. Introduction to Gender, Women, and Sexuality Studies.

 (HDiv; 4 cr; fall, every year)This course introduces students to the theoretical concepts and impact of gender and sexuality in everyday life. Various feminist, queer, and other gender-oriented theories are considered and employed as students explore how definitions of femininity, masculinity, and sexuality have been created, maintained, negotiated, and resisted. Particular attention is paid to the
complicated relationships between individuals and social systems, and to the ways in which class, race, ethnicity, age, and other identity categories intersect with definitions and representations of gender and sexuality.
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 111 or \#; fall, spring, offered periodically)
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. Gender, Women, and Sexuality Studies Capstone . (1 cr; A-F only; prereq completion of 32 cr in women's studies; fall, spring, every year)
This course requires a theoretical analysis paper, in which students analyze and reflect on their academic coursework and own intellectual autobiography. Students are expected to consider and apply feminist, queer, and/or other gender-oriented theoretical approaches in this final paper. This course also requires a portfolio and a presentation and panel discussion. Students can work with any faculty teaching GWSS courses.
Hist 1402. Women in U.S. History. (HDiv; 4 cr; fall, spring, offered periodically)
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 2704. Gender, Women, and Sexuality in Medieval Europe. (SS; 4 cr; spring, odd years)
Analysis of the history of European women and gender systems as constructed during the Middle Ages (c. 500-1500).
Hist 2708. Gender, Women, and Sexuality in Modern Europe. (IP; 4 cr; fall, spring, offered periodically)
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 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 3707. Gender in East Asia. (HDiv; 4 cr; fall, spring, offered periodically)
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.
Mgmt 3351. Globalization: Examining India's Social and Economic Development. (IP; 4 cr; =[Econ 3351]; prereq Econ 1111 or Econ 1112 or \#; spring, offered periodically)
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.
Phil 2112. Professional Ethics. (E/CR; 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.
Phil 2141. Analytic Feminism. (Hum; 4 cr ; spring, offered periodically) Applies an analytical approach to issues discussed in feminist writings. A mixture of lecture and discussion. Requirements include essay exams, papers, attendance, service-learning projects with related reflective journals, and class participation.

Pol 3503. Women in Politics Worldwide. (IP; 4 cr; prereq 1201 or \#; spring, odd years)
Examines the ways gender influences politics throughout the world. Topics covered include: the "gender gap" and voter turnout, women's involvement in linkage organizations, such as parties and interest groups, and finally policy outcomes regarding women in different kinds of political systems.

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 child birth; contraception and disease prevention; sexual coercion and abuse; sexual dysfunctions and their treatment.

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 3221. Behavioral Biology of Women. (Sci; 4 cr; prereq (3201 or 3211) or Biol 2111 or \#; spring, odd years)
Exploration of proximate and ultimate influences on female behavior in human and nonhuman species. Topics include sexual differentiation, gender differences in cognition, biological basis of sexual orientation, female sexual selection, dominance, and other topics of interest to students. Readings consist of primary journal articles.
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 world views, communication styles, acculturation, prejudice, white privilege, identity development, physical and mental health, and multicultural competencies.
Soc 2101. Systems of Oppression. (HDiv; 4 cr; prereq 1101 or Anth 111 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 and ageism.
Soc 3112. Sociology of the Environment and Social Development. (Envt; 4 cr ; prereq 1101 or \#; fall, odd years)
Introduces students to the sociological study of the environment and social development. Examines the impact of international environmental and development efforts on individuals at the local level. Focuses on grassroots environmental activism and social development work. Explores and discusses power relations and systems of inequality within the context of environmental and social development efforts.
Soc 3121. Sociology of Gender and Sexuality. (HDiv; 4 cr; prereq 1101 or Anth וווו or \#; fall, every year)
Introduces students to the sociological study of gender and sexuality. Focuses on gender difference and gender inequality. Analyzes 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. Following a theoretical overview, examines how gender and sexuality affect everyday experiences.
Soc 3122. Sociology of Childhoods. (HDiv; 4 cr ; prereq 1101 or \#; spring, even years)
Introduces students to the sociological study of childhoods. Examines the interaction between societies and their youngest members-how societies shape children's lives through social institutions such as families, education, and the state. Takes a close look at children's access to privileges and resources as determined by children's experiences of race, gender, class, nationality, and sexual orientation.
Soc 3123. Sociology of Aging. (HDiv; 4 cr ; prereq 1101; spring, every year) An introduction to sociology of aging. Examination of the major theories of social aging as well as the historical and cross-cultural variations in aging and differences by race, ethnicity, gender, and social class.

Soc 3141. Sociology of Deviance. (E/CR; 4 cr ; prereq 1101 or \#; spring, every year)
Introduces students to the sociological study of deviance. Explores the social reality of deviance within contemporary society and examines the social construction of deviant categories. Focuses on images of deviance as social constructs, rather than as intrinsic elements of human behavior. Investigates the complex relationships between individual behavior and social structure, with a focus on power, inequality, and oppression. Also, examines the socio-cultural definitions of morality and behavior.

Soc 3252. Women in Muslim Society. (IP; 4 cr; prereq וIOו or Anth וווו; spring, offered periodically)
The cultures and social statuses of women in several Muslim countries are examined and placed in their political, economic, and religious contexts.

Soc 3452. American Indian Women. (HDiv; 4 cr; =[Anth 3452]; prereq 1101 or Anth $11 ו 1$ or \#; fall, offered periodically)
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 3602. Women in Latin America. (IP; $4 \mathrm{cr} ;=$ [Anth 3602]; prereq 1101 or Anth וווו or \#; spring, every year)
Same as Anth 3602. Study of the social, economic, and political positions of women in Latin American countries. Topics include class and ethnic differences, women in the labor force, and women's participation in political movements through the lens of feminist theory.
Span 3653. Seminar: Maria de Zayas: Literary Violence in Golden Age Spain. (Hum; 4 cr; prereq 3012, 3112 or \#; fall, offered periodically) 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 3012, 3112 or \#; fall, offered periodically) 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.

## Geography (Geog)

## Division of the Social Sciences

Objectives-Geography courses focus on basic concepts of the field and deal with both societal relationships and the physical environment. Geog 2001 satisfies the geography requirement for students seeking secondary school teaching licensure in the social sciences.

## Geography Course Descriptions

Geog 2001. Problems in Geography. (Envt; 4 cr; spring, every year) Basic concepts and questions in the field of geography. The terminology and approaches of geographical inquiry and analysis, with emphasis on the spatial patterns and arrangements of human interaction with the landscape and the production of geographical knowledge.
Geog 3501. Geographic Information Systems. (Envt; $4 \mathrm{cr} ;$ prereq any 1xxx course in social or natural sciences; spring, every year) The theory and practice of Geographic Information Systems. Topics include data models, spatial statistics, and cartographic modeling. Special emphasis on social and environmental applications. (two 65-minute lect, one 120-minute lab session per week)

## Geology (Geol)

## Division of Science \& Mathematics

Geology offers courses that satisfy a variety of requirements as well as a curriculum leading to a bachelor of arts degree in geology.
Objectives-The geology curriculum serves those interested in a broader knowledge of their natural environment and the geological sciences as part of their liberal arts education; provides a firm foundation in geology, related sciences, and mathematics for students interested in the investigation and solution of geologic problems; prepares students for graduate study in the geosciences and related areas; provides the necessary background in earth science for those who plan to teach in this field at the secondary level; and serves those in other professional or interdisciplinary programs who need geology as a related subject.

## Geology Major

## Program Requirements

Up to 8 credits of coursework with a grade of D or $\mathrm{D}+$ 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.
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

Chem 1101—General Chemistry I, Sci-L (4 cr)
Chem 1102—General Chemistry II, Sci-L (4 cr)
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 4901-Geology Senior Seminar (1 cr)
Geol 4902-Geology Senior Seminar Presentations (1 cr)
Math 1021—Survey of Calculus, M/SR (4 cr)
or Math 1101—Calculus I, M/SR (5.0 cr)
Completion of approved Geology Field Camp (6 cr)

## Elective Courses

Take 10 or more credit(s) from the following:
Geol 2131—Geomorphology, Sci (4 cr)
Geol 2141—Glacial and Quaternary Geology, Sci (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)
Geol 3993 —Directed Study ( $1-5 \mathrm{cr}$ )
or Geol 4993 —Directed Study ( $1-5 \mathrm{cr}$ )
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 $\mathrm{D}+$ 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 3101—Structural Geology, Sci-L (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, 2993, 3993, 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 periodically)
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 periodically)
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 ו10ו. 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, offered periodically)
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 llol 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, even years) Study of the 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 from 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 $1 ו 1 ו$ or \#; spring, offered periodically)
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

 periodically)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.
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 periodically)
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; spring, offered periodically)
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 periodically)
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 2111 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, even years)
Morphology 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 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, even 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. Airphoto Interpretation. (Sci; 4 cr; prereq 1101 or \#; spring, offered periodically)
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 3502. Groundwater . (Envt; 4 cr; prereq 1101 or \#; spring, odd years) The origin, occurrence, and availability of groundwater, aquifer geology and groundwater resources, chemical character of groundwater and groundwater pollution, groundwater wells and well design, and groundwater as a geologic agent. ( 3 hrs lect, 3 hrs lab and field trips)
Geol 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.

Geol 4130. Advanced Geomorphology. (Sci; 4 cr [max 8 cr]; prereq 2131; fall, spring, offered periodically)
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.
Geol 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

## German (Ger)

Discontinued Major Transition Plan-Students will no longer be admitted into the German major and/or minor effective summer 2011. German majors/minors will transition into German Studies, which includes most of the courses available with the German major. Students pursuing the German major may not pursue a German Studies major. For German course offerings at UMM, see German Studies.

## German Studies

## Division of the Humanities

This is an interdisciplinary program housed in the Division of the Humanities. The program is administered by the German Studies coordinator and the Chair of the Division of Humanities.

The German Studies curriculum includes 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 graduate study and future careers.
Objectives - In the core courses for the German Studies major, students develop a number of skills in German, including comprehension and speaking, reading and writing, to communicate effectively in German about everyday situations, literature, and culture. On all levels, 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 courses, students learn aesthetic appreciation through the interpretation of texts and to organize their thoughts for effective argumentation. Elective courses in German Studies give students an interdisciplinary perspective, complementing the core courses in German with courses in history, art history, architecture, economics, music, film, and other fields relevant to German culture. Study abroad is strongly recommended to increase fluency and proficiency in the German language. The German Studies program prepares its graduates for careers in business, history, political science, medicine, music, art history, psychology, philosophy, theology, and law, among others. Several courses in the natural sciences, if supplemented with readings in German, may also be applied toward the German Studies major.

## Study Abroad

In light of today's increasingly interdependent world, the UMM German faculty strongly encourages study abroad in combination with a German Studies 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 Studies

For additional language offerings at UMM, see "World Languages."

## German Studies Major

## Courses for Admission

## Beginning German

Beginning German I and II or equivalent previous language experience required to take intermediate German.

## Program Requirements

Selection of electives must be intentional and done in close consultation with a German Studies adviser. Students must submit an elective plan (preferably by the end of sophomore year), to be reviewed and approved by the German Studies coordinator and the Chair of the Division of the Humanities.

Elective plans must be designed to ensure that there is sufficient depth of coverage in the chosen German Studies electives. For many students, a double-major (or minor) in 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 German Studies elective plan also count toward the second major. An advising sheet for recommended course combinations and areas of focus will be available to students and faculty involved.
In addition to the requirements for the major, students are encouraged to complete at least one year of instruction in another foreign language
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

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 3101-Survey of German Literature and Culture I, Hum (4 cr) Ger 3102-Survey of German Literature and Culture II, Hum (4 cr)

## Selection of Elective Courses

Other elective courses, not listed below, may be appropriate to add depth and provide more theoretical context for the German Studies coursework (requires written approval of the course instructor and the program coordinator).
At least 12 of the 16 elective credits must be from upper division (3xxx or $4 x x x$ ) courses and 4 or more upper division elective credits must be either in German courses or in courses where some work is done in German (3xxx-4xxx German or Partial German Electives).

## Elective Courses

Courses listed under the " $3 \mathrm{xxx}-4 \mathrm{xxx}$ German and Partial German Electives" heading that are outside of the German discipline (e.g., ArtH 3132) require written approval of the course instructor and the program coordinator prior to registration.

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

## 1xxx-2xxx Electives

Take no more than 4 credit(s) from the following:
ArtH 1121—Renaissance to Modern Art, FA (4 cr)
Engl 2431—Holocaust Literature and Film, IP (4 cr)
Hist 2103-Medieval Europe, Hist (4 cr)
3xxx-4xxx German and Partial German Electives
Take 4 or more credit(s) 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 3132-Castles and Cathedrals, FA (4 cr)
Ger 3041—New German Cinema, IP (4 cr)
Ger 3201—Periods: German Classicism, Hum (4 cr)
Ger 3202—Periods: German Romanticism, Hum (4 cr)
Ger 3203-Periods: German Modernism, IP ( 4 cr )
Ger 3601—Studies in German Literature, Hum (4 cr)
Ger 3611—Austrian Studies, Hum (4 cr)
Hist 3101—Renaissance and Reformation, Hist (4 cr)
Hist 3156-Modern German Intellectual History, Hist (4 cr)
Hist 3204 —Nazi Germany, Hist ( 4 cr)
Hist 3209-Modern Germany, Hist (4 cr)
German-related Content Electives
Exclusive of those used above
Take no more than 8 credit(s) from the following.
Econ 3009—Political Economy, SS (4 cr)
Econ 3211—History of Economic Thought I, Hist (2 cr)
Econ 3212-History of Economic Thought II, Hist (2 cr)
Engl 4004—Research Seminar: Old English Literature and Language, Hum (4 cr)
Hist 3101—Renaissance and Reformation, Hist (4 cr)
Hist 3156-Modern German Intellectual History, Hist (4 cr)
Hist 3204—Nazi Germany, Hist (4 cr)
Hist 3209-Modern Germany, Hist (4 cr)
Phil 4002-Existentialism, Hist (4 cr)

## Supplemental Electives

Take no more than 4 credit(s) from the following.
ArtH 3201-19th-Century European Art through PostImpressionism, FA (4 cr)
ArtH 3211—Early Modernist Art: Symbolism to Surrealism, FA (4 cr)
ArtH 3281—Women and Art, FA (4 cr)
Engl 3021-Grammar and Language, Hum (4 cr)
Engl 3411 - Critical Approaches to Literature, 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)

## German Studies 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.

## 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 3101—Survey of German Literature and Culture I, Hum (4 cr)
Ger 3102—Survey of German Literature and Culture II, Hum (4 cr)

## Selection of Elective Courses

Other elective courses, not listed below, may be appropriate to add depth and provide more theoretical context for the German Studies coursework (requires written approval of the course instructor and the program coordinator).
At least 4 of the 8 elective credits must be from upper division German courses or in courses where some work is done in German (3xxx-4xxx German or Partial German Electives).

## 3xxx-4xxx German and Partial German Electives

Take 4 or more credit(s) 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 3132-Castles and Cathedrals, FA (4 cr)
Ger 3041-New German Cinema, IP (4 cr)
Ger 3201—Periods: German Classicism, Hum (4 cr)
Ger 3202—Periods: German Romanticism, Hum (4 cr)
Ger 3203—Periods: German Modernism, IP (4 cr)
Ger 3601—Studies in German Literature, Hum ( 4 cr )
Ger 3611—Austrian Studies, Hum (4 cr)
Hist 3101—Renaissance and Reformation, Hist (4 cr)
Hist 3156-Modern German Intellectual History, Hist (4 cr)
Hist 3204—Nazi Germany, Hist (4 cr)
Hist 3209-Modern Germany, Hist (4 cr)

## German-related Content Electives

Exclusive of those used above
Take no more than 4 credit(s) from the following:
ArtH 1121—Renaissance to Modern Art, FA (4 cr)
Econ 3009—Political Economy, SS (4 cr)
Econ 3211—History of Economic Thought I, Hist (2 cr)
Econ 3212—History of Economic Thought II, Hist (2 cr)
Engl 2431—Holocaust Literature and Film, IP (4 cr)
Engl 4004—Research Seminar: Old English Literature and Language, Hum ( 4 cr )
Hist 2103-Medieval Europe, Hist (4 cr)
Hist 3101—Renaissance and Reformation, Hist (4 cr)
Hist 3156-Modern German Intellectual History, Hist (4 cr)
Hist 3204—Nazi Germany, Hist (4 cr)
Hist 3209-Modern Germany, Hist (4 cr)
Phil 4002—Existentialism, Hist (4 cr)

## Required Proficiency/Placement Examination-

Students who plan to complete courses in the same language they studied in high school must take the proficiency/ 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.

## German 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, odd 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, odd 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 3201. 19th-Century European Art through Post-Impressionism. (FA; 4 cr; prereq any $1 \times x x$ 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, odd 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.
Econ 3009. Political Economy. (SS; 4 cr; =[Econ 3004, Econ 3003]; prereq $11 ו 1,1 ו 12$ or \#; spring, offered periodically)
The historical evolution, methodological relevance, and basic structure of the modern capitalist economy, including the dynamics of capital accumulation, economic crisis, transformation and regulating mechanism of contemporary capitalism, and hegemonic tendency of economy over polity and other aspects of life in contemporary society.
Econ 3211. History of Economic Thought I. (Hist; 2 cr; prereq uוו1, ו112; 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 3212. History of Economic Thought II. (Hist; 2 cr; prereq 3211 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.
Engl 2431. Holocaust Literature and Film. (IP; 4 cr ; prereq 1011 or equiv; fall, even years)
Survey of Holocaust literature and film, focusing on works that clarify the political ideology that led so many to participate in the murder of two-thirds of Europe's Jews and that articulated what Jews suffered during the Nazi era.

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 3411. Critical Approaches to Literature. (Hum; 4 cr; prereq 2501 (or 1131), two from 2201, 2202, 2211, 2212; fall, offered periodically) An introduction to the major schools of literary theory and cultural analysis; particular attention to the ways in which the dialogue and debate between these approaches define the discipline of literary criticism.
Engl 4004. Research Seminar: Old English Literature and Language. (Hum; 4 cr; prereq two from 31xx-35xx, \#; fall, spring, offered periodically)
Prose and poetry of early medieval England (650-1100) in translation and in Old English (which is studied), with attention to material (manuscripts) and cultural contexts and to reception history.

Ger 1001. Beginning German I. (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 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.
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 2002; 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 3041. New German Cinema. (IP; 4 cr; =[Hum 3041]; prereq 30ו1; fall, offered periodically)
Same as Hum 3041. Traces the development of New German Cinema, which began in the 1960 s , 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 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 18 th 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 18 th century to the 20th century. Selected representative works are read and analyzed.

Ger 3201. Periods: German Classicism. (Hum; 4 cr; prereq 3101, 3102 or \#; spring, odd 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 librettos 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, even 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 periodically)
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 3601. Studies in German Literature. (Hum; 4 cr; prereq 3011; fall, odd years)
Selected readings in German reflecting modern literary trends. The course examines the cultural politics in the evolvement 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.
Ger 3611. Austrian Studies. (Hum; 4 cr; prereq 3011 or \#; fall, even years) Selected readings in Austrian Literature from 1875 to 1925, including Marie von Ebner-Eschenbach, Rainer Maria Rilke, Arthur Schnitzler, and Hugo von Hofmannsthal. Historical background for the period through Brigitte Hamann's biography of Empress Elisabeth and/or Rudolph von Habsburg, the modern musical "Elisabeth," as well as the operetta "Die Fledermaus" and Istvan Szabo's film "Oberst Redl."
Ger 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.
Ger 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.
Hist 2103. Medieval Europe. (Hist; 4 cr; fall, spring, offered periodically) Survey of historical developments in Europe from about 500 to 1500 .
Hist 3101. Renaissance and Reformation. (Hist; 4 cr ; spring, odd years) Examination of western European history and historiography between 1350 and 1600 with emphasis on cultural "renaissances" and religious "reformations."

## 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 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 3209. Modern Germany. (Hist; 4 cr; spring, odd 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.

Mus 3101. Core Studies III: Medieval, Renaissance, and Baroque Music. (Hist; 4 cr; prereq 1102, major or minor or \#; fall, odd years)
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, odd years) Historical development of Western music and representative literature of the various periods and styles.

Phil 4002. Existentialism. (Hist; 4 cr; prereq any 1xxx or 2xxx or \#; fall, spring, offered periodically)
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 nonexistence makes on the significance of our lives.

## 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; learn to integrate their academic study with their intellectual and ethical development; 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. 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

Hist 1111-Themes in World History, Hist (4 cr)
Hist 2001-The Study of History: Schools, Rules, and Tools, Hist (4 cr)
Hist 4501—Senior Research Seminar in History, Hist (4 cr)

## Elective Courses

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 , Hist ( 4 cr )
Hist 1601—Latin American History: A Basic Introduction, IP (4 cr)
Hist 2103-Medieval Europe, Hist (4 cr)
Hist 2151-Modern Europe, Hist (4 cr)
Hist 2251-American Indians and the United States: A History, HDiv (4 cr)
Hist 2352-The U.S. 1960s, Hist (4 cr)
Hist 2361—An Environmental and Geographic History of the United States, Envt ( 4 cr )
Hist 2452-Minnesota History, Hist (4 cr)
Hist 2551-Modern Japan, Hist (4 cr)
Hist 2552-History of Modern China, Hist (4 cr)
Hist 2554-Korean History, Hist (4 cr)
Hist 2704 -Gender, Women, and Sexuality in Medieval Europe, SS ( 4 cr )
Hist 2708-Gender, Women, and Sexuality in Modern Europe, IP (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 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 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 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 3381-History of American Indian Nationalism and Red Power, 1920-Present, Hist (4 cr)
Hist 3451—Facing West, HDiv (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 3558-Shanghai: China's Model of Modernity, IP (4 cr)

Hist 3559 - History of Religion in China, 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 3609-Natural Calamities: Disaster and Response in Latin
American History, IP (4 cr)
Hist 3611-The Amazon in History, Hist (4 cr)
Hist 3707-Gender in East Asia, HDiv (4 cr)
Hist 3993, 4993—Directed Study (1-5 cr)
Hist 1xxx, 2xxx, 3xxx, 4xxx

## History Minor

## Minor Requirements

No grades below C- are allowed. Courses may not be taken $\mathrm{S}-\mathrm{N}$ unless offered $\mathrm{S}-\mathrm{N}$ 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

Hist 1111—Themes in World History, Hist (4 cr)

## Elective Courses

An additional 16 credits in history of which 12 credits are at $2 x x x$ 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, HDiv (4 cr)
Hist 1501-Introduction to East Asian History: China, Japan, and Korea before 1800, Hist (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 2103-Medieval Europe, Hist (4 cr)
Hist 2151—Modern Europe, Hist (4 cr)
Hist 2251—American Indians and the United States: A History, HDiv ( 4 cr )
Hist 2352-The U.S. 1960s, Hist (4 cr)
Hist 2361—An Environmental and Geographic History of the United States, Envt (4 cr)
Hist 2452—Minnesota History, Hist (4 cr)
Hist 2551—Modern Japan, Hist (4 cr)
Hist 2552-History of Modern China, Hist (4 cr)
Hist 2554 —Korean History, Hist (4 cr)
Hist 2704—Gender, Women, and Sexuality in Medieval Europe, SS ( 4 cr )
Hist 2708-Gender, Women, and Sexuality in Modern Europe, IP (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 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 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 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 3381-History of American Indian Nationalism and Red Power, 1920-Present, Hist (4 cr)
Hist 3451—Facing West, HDiv (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 3558-Shanghai: China's Model of Modernity, IP (4 cr)
Hist 3559 - History of Religion in China, 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 3609-Natural Calamities: Disaster and Response in Latin American History, IP (4 cr)
Hist 3611—The Amazon in History, Hist (4 cr)
Hist 3707-Gender in East Asia, HDiv (4 cr)
Hist 3993, 4993-Directed Study (1-5 cr)
Hist $2 \mathrm{xxx}, 3 \mathrm{xxx}, 4 \mathrm{xxx}$

## Teacher Preparation Requirements

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

## History Course Descriptions

Hist 1015. Topics and Problems in World History. (Hist; 4 cr [max 8 cr ]; A-F only; prereq participation in College in the Schools program; fall, spring, every year)
Examination of special topics in world history designed for the "College in the Schools" program offered at Morris Area Schools. Course is built around specific topics, such as genocide in the 20th century or global approaches to environmental history, and emphasizes how historians work, pose questions, use sources, and engage in debate.
Hist 11ו1. Themes in World History. (Hist; 4 cr; =[Hist 1102, Hist 1101]; fall, spring, every year)
Methods, themes, and problems in the study of world history.
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 periodically)
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. (Hist; 4 cr ; fall, offered periodically)
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, odd years)
Methods, themes, and problems in the study of Latin American history.

Hist 1811. A History of You(th). (IC; 4 cr ; prereq new college student in their first semester of enrollment at UMM; fall, offered periodically) Why does the behavior of young people attract so much attention and anxiety? Why does the stage between childhood and a fully recognized adulthood carry such significance in our collective consciousness? Engage in a historical analysis of what youth has signified, using source materials from Plato to pop culture. Along the way, engage chronologically with the emergence of the categories of childhood and youth and thematically with the relationship between youth and a multitude of social categories and phenomena (for example, politics, media, consumption, and sexuality). Requires extensive reading, active classroom participation, and the completion of a research project and presentation with both individual and group components.

Hist 1812. FIRE!: An introductory Seminar to American Environmental History. (IC; 4 cr; prereq new college student in their first semester of enrollment at UMM; fall, offered periodically)
One of the primary ways in which people have manipulated their environments has been through the burning of fossil fuels. Indigenous people, for instance, used fire to clear land, to improve soil quality, and to drive game. Coal powered the Industrial Revolution and oil provided the energy necessary for the Automobile Age. The impact of using energy in this way is today obvious. This course is organized around the topic of fire and uses this theme to examine core issues in American Environmental History. Topics might include: American Indian peoples and fire, burning and early agriculture, coal and industrialization, the Age of the Automobile, incineration and the problem of waste, and forest arson as a mode of political protest.
Hist 1813. World Indigenous History. (IC; 4 cr; prereq new college student in their first semester of enrollment at UMM; fall, offered periodically)
On September 13, 2007, after sixty years of advocacy, the United Nations General Assembly passed the Declaration on Rights of Indigenous People. This resolution acknowledges the vital role that Indigenous Nations hold in our global community. It is a strict policy for the protection of human rights of over 60 million peoples. This revolutionary act offers United Nations protections and prohibits discrimination against Indigenous populations. Finally, this declaration promotes a controversial first step toward the formal world recognition of Indigenous sovereignty. This new political referendum provides the context for this course, as each week students strive to define and understand World Indigenous History. Throughout the semester students are introduced to the rich and diverse societies, cultures, politics, and histories of global Indigenous communities.
Hist 2001. The Study of History: Schools, Rules, and Tools. (Hist; 4 cr; spring, every year)
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 2103. Medieval Europe. (Hist; 4 cr ; fall, spring, offered periodically) Survey of historical developments in Europe from about 500 to 1500.
Hist 2151. Modern Europe. (Hist; 4 cr; fall, spring, offered periodically) History of modern Europe emphasizing political, economic, social, and intellectual developments since 1789.

## Hist 2251. American Indians and the United States: A History. (HDiv; 4

 cr; spring, every year)The experience of the original Americans and their interaction with later immigrants.
Hist 2352. The U.S. 1960s. (Hist; 4 cr; fall, even years)
History of the United States in the 1960s. 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 2361. An Environmental and Geographic History of the United

 States. (Envt; 4 cr ; fall, spring, offered periodically) A broad examination of how humans interacted with their natural world throughout American history. Combined emphasis on cultural ecology (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: 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 politicalmovement and the development of environmental policy, eco-feminism, American religion and the environment, the politics of global climate change.
Hist 2451. The American West. (Hist; $4 \mathrm{cr} ;=[$ Hist 3451]; fall, even years) Overview of the history of the American West up to the 21st century. While many scholars have argued that the "West" was merely a necessary process of national expansion, others argue that it is a very significant region-the most culturally and ecologically diverse region in the country. Discussion of these major historical interpretations of the American West and examination of how people have understood this vast region as a cultural icon of national identity. Work through various definitions of the West and identify how political issues of the environment, international borderlands, and gender and race relations have significantly influenced the United States for many generations. Through lectures, readings, and discussion, examine Western history chronologically while also covering other major themes including federalism, the mythic West, tourism, ranching and agriculture, urban and suburban areas, film, and religion.

## Hist 2452. Minnesota History. (Hist; 4 cr; fall, spring, offered

 periodically)Examination of the social, cultural, and political history of Minnesota with emphases on American Indian and European-American conflict, immigration and ethnicity, the development of political culture, and the changing nature of regional identity.
Hist 2551. Modern Japan. (Hist; 4 cr; fall, spring, offered periodically) The history of Japan from the foundation of the Tokugawa Shogunate until the present. Special attention to issues of gender, nationalism, and modernity.

## Hist 2552. History of Modern China. (Hist; 4 cr ; spring, offered

## periodically)

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 2554. Korean History. (Hist; 4 cr; fall, spring, offered periodically) The history of the Korean peninsula from neolithic times to the present. Special attention to evolving Korean understandings of gender and technology.
Hist 2704. Gender, Women, and Sexuality in Medieval Europe. (SS; 4 cr; spring, odd years)
Analysis of the history of European women and gender systems as constructed during the Middle Ages (c. 500-1500).
Hist 2708. Gender, Women, and Sexuality in Modern Europe. (IP; 4 cr; fall, spring, offered periodically)
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 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 15 th centuries with particular emphasis upon political, religious, and intellectual developments.
Hist 3009. Microhistory. (Hist; 4 cr; fall, spring, offered periodically) An in-depth historical examination of one or more locales and their relationship to broaden historical phenomena.
Hist 3012. History of Ancient Greece and Rome. (Hist; 4 cr; spring, offered periodically)
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, odd years) Examination of western European history and historiography between 1350 and 1600 with emphasis on cultural "renaissances" and religious "reformations."

Hist 3102. Early Modern Europe . (Hist; 4 cr; fall, spring, offered periodically)
Survey of historical developments in Europe from about 1350 through the 18th century.
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, odd 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 3162. The Scottish Enlightenment: Texts and Contexts. (IP; 4 cr; =[Phil 3162]; summer, offered periodically)
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 smallgroup discussions with recognized experts in the study of the Scottish Enlightenment. Includes visits to historically significant cities and sites.
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, even 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, odd 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 3210. Popular Religion, Heresy, and Inquisition in the Middle Ages. (Hist; 4 cr ; fall, spring, offered periodically)
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 latemedieval 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 periodically)
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 retrenchment 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 3353. World War II. (Hist; 4 cr; fall, spring, offered periodically) 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, odd years)
Topics, themes, and problems in U.S. history, 1877 to 1920.
Hist 3356. Civil Rights Movement, 1954-1974. (Hist; 4 cr; fall, spring, offered periodically)
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.

Hist 3358. Civil War and Reconstruction. (Hist; 4 cr; fall, spring, offered periodically)
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 3381. History of American Indian Nationalism and Red Power, 1920-Present. (Hist; 4 cr; A-F only; spring, even years)
Documents the history of American Indian Nationalism and the origins of the Red Power Movement in the late 1960s. Explores the rise of the Society of American Indians, the Indian Defense Association, National Congress of American Indians, and the rise of the Red Power Movement. Students learn about the changing nature of how the U.S. Government and Native Nations developed into a globalized transnational and intertribal political debate in the 20th century. Provides students with a critical overview of the peoples, places, and events that have impacted Tribal and U.S. relations.

## Hist 3402. Representations from the Field: American Indian

Ethnography and Ethnohistory. (HDiv; 4 cr; =[Anth 3402, Amln 3402]; prereq Anth 1111 or Soc 1101; fall, offered periodically)
Same as Anth 3402 and AmIn 3402. An analysis of ethnographic and ethnohistoric materials focusing on specific American Indian cultures.
Hist 3451. Facing West. (HDiv; 4 cr; fall, spring, offered periodically) 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 3453. The American Presidency, 1789-1900. (Hist; 4 cr; fall, spring, offered periodically)
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. Emphases on settlement, ethnicity, nativism, transnational issues, and 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 periodically)
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 periodically)
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 3557. East Asia Since 1800. (IP; 4 cr; fall, spring, offered periodically)
Examination of the social, political, economic, technological, and cultural changes in East Asia [China, Japan, and Korea] since 1800.
Hist 3558. Shanghai: China's Model of Modernity. (IP; 4 cr; fall, offered periodically)
Exploration of the role of Shanghai, China's greatest metropolis, in the emergence and dissemination of a distinctively Chinese modernity since the nineteenth century. Particular attention is paid to the interplay of global and local forces in the transformation of society and culture. Other topics may include the impact of international commerce, the rise of new social classes, leisure and entertainment, consumer culture and everyday life, crime and order, cosmopolitanism and national identity.

Hist 3559. History of Religion in China. (Hist; 4 cr; spring, even years) Introduction to religion in pre-modern and modern China. Emphasis on the place of religion in society and culture. Topics may include Confucianism, Buddhism, Daoism, and Christianity; ancestor worship and death ritual; popular cults and religious rebellion; modern reform movements and religion under socialism.

## Hist 3561. The Pacific War in East Asia. (Hist; 4 cr; fall, offered periodically)

Political, military, social, and cultural history of the Pacific war in East Asia. Exploration of different perspectives and wartime experiences in China, Japan, and the Japanese empire (including Korea). Emphasis on the impact of the war as a watershed period in the history of East Asia. Topics may include the Rape of Nanjing, the bombing of Hiroshima, the Manchurian Incident, and the creation of Manchukuo, collaboration, and resistance, wartime mobilization and propaganda, Zen nationalism, and comparisons with Nazi Germany and Vichy France. Films, memoirs, and fiction will augment academic texts.
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 periodically)
A survey of modern Cuban history with an emphasis on the Cuban Revolution. An introduction to a wide variety of perspectives.
Hist 3609. Natural Calamities: Disaster and Response in Latin American History. (IP; 4 cr ; fall, odd years)
Earthquakes, hurricanes, volcanic explosions, and other natural disasters have had a significant impact on the economies, politics, and culture of Latin America. A broad historical overview of the impact of such hazards is explored, together with an in-depth focus on the Haitian earthquake of 2010.

## Hist 3611. The Amazon in History. (Hist; 4 cr; spring, even years)

Analyzes the Amazon from a number of historical perspectives: exploration, conquest, exploitation, development, sustainability, and environmentalism.
Hist 3707. Gender in East Asia. (HDiv; 4 cr; fall, spring, offered periodically)
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 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 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 4501. Senior Research Seminar in History. (Hist; $4 \mathrm{cr} ;$ A-F only; prereq 2001; fall, spring, every year)
Advanced historical thematic analysis and guided research resulting in an original, substantial paper or project.

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.

## 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 2001 H is usually completed in fall of the sophomore year.
IS 2001H—Honors: Traditions in Human Thought, Hum, H (2 cr)
IS 4994 H -Senior Honors Project, H (1-4 cr)

## Elective Courses

Any fully-approved IS $3 x x x H$ course may be used to fulfill the 4 course elective requirement.

Take 4 or more course(s) from the following:
IS 3111 H -Honors: The End of the World as We've Known It: The Apocalypse Then and Now, SS, H ( 2 cr )
IS 3203 H -Honors: A Cross-Section of the Enlightenment, Hist, H ( 2 cr )
IS 3204 H -Honors: Ecological Health and the Sustainability of Common-Property Resources, Envt, H (2 cr)

IS 3206 H —Honors: Introduction to Game Theory, M/SR, H (2 cr)
IS 3207 H -Honors: Utopia(s), Hum, H (2 cr)
IS 3208 H -Honors: Totalitarianism: Imagination, Theory, and Experience, SS, H (2 cr)
IS 3209 H -Honors: Apocalypse Now? The Science and Policy of Preparing for a Catastrophe, Envt, H (2 cr)
IS 3212 H -Honors: Global Encounters and the Making of the Contemporary World, 1450 to the Present, HDiv, H (2-4 cr)
IS 3214 H -Honors: Evolution and Culture of Human Aggression, Hum, H (2 cr)
IS $3215 H$-Honors: Sagas before the Fall: Culture, Climate, and Collapse in Medieval Iceland, Envt, H (2 cr)
IS 3216H-Honors: Perspectives on Disability in Contemporary American Life, HDiv, H (2 cr)
IS 3217 H -Honors: The Trial of Galileo, Hist, H ( 2 cr )
IS 3231H—Honors: Drama, Philosophy, and Politics in Classical Greece, Hum, H (2 cr)
IS 3234H—Honors: Intersections of Art and Science, FA, H (2 cr)
IS 3235 H -Honors: Politics and Film, Hum, H (2 cr)

## 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 \#; spring, offered periodically)
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 periodically)
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 CommonProperty Resources . (Envt; 2 cr ; prereq participation in Honors Program or \#; fall, spring, offered periodically)
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; $2 \mathrm{cr} ;$ =[Econ 3014]; prereq participation in the Honors Program, high school higher algebra or \#; fall, spring, offered periodically)
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 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 periodically)
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 $50-\mathrm{min}$ lect/disc plus multiple evening film screenings)
IS 3211H. Honors: Republic or Empire? The American 1890s. (Hist; 2 cr; prereq participation in Honors Program or \#; fall, spring, offered periodically)
The 1890 s are often seen as a cultural watershed for the United States. Depression, political movements, and a "splendid little war" against Spain and the Philippines represent only the surface of a decade which altered aspects of race, class, gender, and literary sensibility.

IS 3212H. Honors: Global Encounters and the Making of the Contemporary World, 1450 to the Present. (HDiv; 2-4 cr [max 4 cr ]; prereq high school higher algebra, participation in Honors Program or \#; spring, offered periodically)
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 $\mathbf{3 2 1 4 H}$. Honors: Evolution and Culture of Human Aggression. (Hum; 2 cr; prereq participation in Honors Program or \#; fall, offered periodically) 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 3215H. Honors: Sagas before the Fall: Culture, Climate, and Collapse in Medieval Iceland. (Envt; 2 cr; prereq participation in Honors Program or \#; fall, offered periodically)
Exploration of the literary and physical record of society in Viking-age Iceland from its settlement during the Medieval Warm Period, through centuries of environmental degradation and changing religion, to the onset of the Little Ice Age and the end of the Icelandic free state.

## IS 3216H. Honors: Perspectives on Disability in Contemporary

American Life. (HDiv; 2 cr; prereq participation in Honors Program or \#; fall, offered periodically)
Introduction to the interdisciplinary field of disability studies, which favors a social rather than medical approach to understanding difference. History and struggle for civil rights, identity issues, contemporary controversies, and exploring the frontiers of one's own interest in disability by means of a service learning project.
IS 3217H. Honors: The Trial of Galileo. (Hist; 2 cr ; prereq participation in Honors Program or \#; spring, offered periodically)
The dispute between Galileo and the Inquisition produced one of history's most notorious trials, an enduring symbol of the struggle between science and religion. Study of the complicated history behind the myth by reenacting the trial and learning about the theology, science, and cultural politics of this tumultuous period.
IS 3234H. Honors: Intersections of Art and Science. (FA; 2 cr; prereq participation in Honors Program or \#; spring, offered periodically) 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 3235H. Honors: Politics and Film. (Hum; 2 cr; prereq participation in Honors Program or \#; spring, offered periodically)
Explores age-old questions of political science and philosophy-what is justice, what does citizenship mean, what is power, how do we relate to the "other"-through the lens of film. Examines American and foreign films and a variety of filmmakers to analyze effects of different cinematic and narrative techniques on our interpretations.

IS 3236H. Honors: Representations of Writers and Artists. (Hum; 2 cr; prereq participation in Honors Program or \#; fall, offered periodically) An interdisciplinary approach is used in exploring the varied ways writers and artists are represented in books, television, film, and other media, comparing these representations with the lives and experiences of contemporary working writers and artists.
IS 3237H. Honors: The Power of Place: An Interdisciplinary Approach to Where We Live. (Envt; 2 cr; prereq participation in Honors Program or \#; spring, offered periodically)
Goes beyond the image and myth of Lake Wobegon in examining the past and present of West Central Minnesota. An intensely interdisciplinary focus on environmental, social, political, and economic change and how modern global forces play out in this specific setting. Community leaders and experts play an active role in lecture and discussion.
IS 4994H. 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

This interdisciplinary group of courses is in the Division of the Humanities.
Objectives-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 periodically)
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 periodically) 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 periodically)
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 periodically)
How classical mythology has been used in literature, poetry, drama, and fiction.

Hum 1051. Greek Drama. (Hum; 4 cr; spring, offered periodically) Study of Greek drama.

Hum 1054. Backgrounds to Literature: Classical Mythology. (IP; 4 cr; fall, spring, offered periodically)
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 periodically) Readings in major continental novelists of the 19th and 20th centuries.
Hum 1552. Literature and History of Jewish and Muslim Spain. (IP; 4 cr; summer, offered periodically)
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.

Hum 1561. Hispanic Film. (IP; 4 cr; fall, offered periodically)
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 1805. Myth: From the Page to the Stage. (IC; 2 cr ; prereq new college student in their first semester of enrollment at UMM; fall, spring, offered periodically)
Grab a thunderbolt and explore the rich tapestry of world mythologies by reading, researching, discussing, creating, and acting. Students familiarize themselves with important myths from various cultures around the world. Students use theatre techniques to creatively engage in classroom roleplaying activities as well as projects such as a myth mask, future myth, and a myth collage. At the end of the semester, students perform a short original play focusing on one of the myths studied in class.

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 periodically) 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 periodically)
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.
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 periodically)
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 3051. Russian Literature . (Hum; 4 cr; spring, offered periodically) Study of Russian literature in translation. Special attention to the works of Dostoyevsky, Tolstoy, and Chekhov.
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 (IS)

## 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 website) 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 an internship.

## Interdisciplinary Studies Course Descriptions

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.
IS 1051. Introduction to College Learning Skills. (4 cr; S-N or audit; prereq participation in Gateway Program or \#; counts toward the $60-\mathrm{cr}$ general ed requirements; 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; S-N only; prereq \#;

 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 ; S-N only; prereq registration with the Stevens County Ambulance Services; arrangements must be made by contacting them at 320-589-7421; 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 1322. Land and People in the 16th-Century Mining Region of the

Erzgebirge, Saxony. (Envt; $3 \mathrm{cr} ;$; [ESci 2103]; summer, odd years)
Study of the works of Georgius Agricola and Lazarus Ercker as examples for the emergence of applied chemistry through economic need during the 16th century; site visits to mines and ore processing technological sites of the period. Emphasis on political, economical, cultural, and environmental implications encountered in a region with an ongoing 800-year history of mining. This course is part of the international program "Journey to the Roots of Modern Science" in Freiberg, Germany.
IS 1802. Music, Education, and the Liberal Arts. (IC; 2 cr; prereq new college student in their first semester of enrollment at UMM; fall, offered periodically)
What is a liberal arts education, and how does music fit into this idea? How does one succeed in such an environment? Explore the liberal arts approach and the role of music in education. This course also helps students to develop skills that are crucial to success in a liberal arts college environment.
IS 1803. Dangerous Minds: Images of Education in Popular Culture. (IC; 4 cr ; prereq new college student in their first semester of enrollment at UMM; fall, offered periodically)
Are college students always drunk? Do faculty members routinely have affairs with students? Can marginalized students triumph over adversity in high school? Should a college education be free for anyone who wants to attend? Are sports overemphasized in schools? These are only a sampling of the questions the class will explore by putting a critical lens up to representations of education in popular culture. Through the use of books, film, television, and news stories, students determine if they are being properly represented in today's society or if college really is "Animal House."
IS 1804. Community Engagement: From Volunteerism to Social Justice. (IC; 4 cr ; prereq new college student in their first semester of enrollment at UMM; requires off-site meeting times to be arranged; fall, offered periodically)
Introduction through readings and discussion to multiple frameworks for community engagement, ranging from meeting individual people's and agency's needs through direct volunteerism to engaging in research and direct action intended to create systematic change. In the process of studying these frameworks, students are exposed to a variety of controversies in the service-learning field. Students are also introduced to Stevens County through field trips to community agencies. Students
complete a community engagement project that reflects their academic and professional goals and meets community needs. Projects can range from volunteering directly at an agency to planning a fund-raiser or educational event with a partner to completing a manageable community-based research project. Requires off-site meeting times to be arranged.
IS 1806. Bottom Dwellers in an Ocean of Air. (IC; 2 cr; prereq new college student in their first semester of enrollment at UMM; fall, odd years) We live on the bottom of an ocean of a mix of gases and vapors which is kept in constant, chaotic motion by uneven heating and planetary rotation, thus evading our control. We, as humans, are often on the defense or in a role of passive adaptation with regard to weather. Are human beings victims or actors on the stage of global atmospheric dynamics? Striving to assemble an answer to this question, students in the course: (1) mine human history for cases in which significant interaction between human society and climate was found; (2) study individual events in which history and weather were intertwined; (3) learn about palaeoclimate research; and (4) pay particular attention on how this interaction between society and atmosphere is shaped in the modern world. The physical principles of weather and climate are introduced as needed for meaningful discussion.
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 continents 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 $13 \mathrm{cr}]$; S-N only; =[IS 3011]; prereq \#; fall, spring, summer, every year) Students assist teachers of English in countries where English is not the primary language.
IS 2023. London Arts Tour. (1 cr [max 3 cr]; summer, offered periodically) A 10-day arts and culture tour of London. Admission to major museums and theatres highlights the diversity of London's arts and cultural traditions. Includes tours of the city: Buckingham Palace, Westminster, St. Paul's Cathedral, Abbey Road, Carnaby Street, and Portobello Road. Provides tickets for a variety of theatrical performances: Shakespeare's Globe Theatre, the National Theatre, and the West End. Museum entry covers: the British Museum, National Portrait Gallery, Hayward Gallery, Tate Modern, Victoria and Albert Museum, and Tate Britain.

## IS 2035. Aging in Greece: Comparative Cultural Practices and Social

 Policy. (IP; 2 cr ; spring, offered periodically)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 and public sector in promoting optimal aging. Students spend two hours per day in the classroom and 4-6 hours per day at a nursing home.
IS 2037. China: Traditions and Transformations. (IP; 4 cr ; summer, offered periodically)
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.
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$]$; S-N only; =[IS 2011]; prereq jr status, \#; 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.

IS 3020. Italy and Austria: Brunnenburg and Beyond. (IP; 4 cr [max 8 cr ]; summer, offered periodically)
The focus of the course will be the Habsburg period of the AustroHungarian 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.

IS 3110. Rural Community Field Project: Center for Small Towns. (SS; $1-6 \mathrm{cr}$ [max 6 cr ]; S-N only; prereq \#; SS [if taken for 2 or more cr]; fall, spring, offered periodically)
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.
IS 31וH. 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 periodically)
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 periodically)
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 Contemporary World, 1450 to the Present. (HDiv; 2-4 cr [max 4 cr ]; prereq high school higher algebra, participation in Honors Program or \#; spring, offered periodically)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.
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IS 3216H. Honors: Perspectives on Disability in Contemporary American Life. (HDiv; 2 cr; prereq participation in Honors Program or \#; fall, offered periodically)
Introduction to the interdisciplinary field of disability studies, which favors a social rather than medical approach to understanding difference. History and struggle for civil rights, identity issues, contemporary controversies, and exploring the frontiers of one's own interest in disability by means of a service learning project.
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The dispute between Galileo and the Inquisition produced one of history's most notorious trials, an enduring symbol of the struggle between science and religion. Study of the complicated history behind the myth by reenacting the trial and learning about the theology, science, and cultural politics of this tumultuous period.
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IS 3235H. Honors: Politics and Film. (Hum; 2 cr ; prereq participation in Honors Program or \#; spring, offered periodically)
Explores age-old questions of political science and philosophy-what is "justice, what does citizenship mean, what is power, how do we relate to the "other"-through the lens of film. Examines American and foreign films and a variety of filmmakers to analyze effects of different cinematic and narrative techniques on our interpretations.
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Goes beyond the image and myth of Lake Wobegon in examining the past and present of West Central Minnesota. An intensely interdisciplinary focus on environmental, social, political, and economic change and how modern global forces play out in this specific setting. Community leaders and experts play an active role in lecture and discussion.
IS 3705. Peer Tutoring Theory. (SS; 3 cr; prereq \#; fall, every year) Topics in pedagogical theory regarding peer tutoring processes. Practice in peer tutoring.
IS 3710. Peer Tutoring in College. (1 cr [max 3 cr]; prereq 3705; fall, every year)
Tutor students in selected courses.
IS 3720. Tutoring Writing Across the Disciplines. (1-2 cr [max 6 cr]; S-N only; prereq Engl 1011 or equiv, soph standing, \#, coreq Engl 3005 for students in their first sem at the Writing Room; fall, spring, every year) Tutor student writers at the Writing Room; meet regularly with other tutors for ongoing training in peer writing tutoring.
IS 3796. Interdisciplinary Internship in the Helping Professions. (1-16 cr [max 32 cr ]; S-N only; prereq IS 4101, approved internship form; Psy 4101 recommended; fall, spring, summer, every year)
One-semester educational experience providing field applications in the helping professions (social work, counseling, casework, child protection services, educational settings, human resource counseling, and the like) for the student's theoretical classroom learning experiences.
IS 3800. Practicum in Social Sciences. (1-2 cr [max 4 cr]; S-N only; prereq \#; fall, spring, every year)
Supervised experience of selected learning activities such as discussion group leader, lab assistant, research assistant, or other teaching-related activities.

IS 3810. Practicum in the Humanities. (1-2 cr [max 4 cr]; S-N only; prereq \#; fall, spring, every year)
Supervised experience of selected learning activities such as discussion group leader, test review leader, research assistant, or other teaching-related activities.
IS 3893. Prior Learning Directed Study. (1-4 cr [max 10 cr ]; prereq approved directed study form; fall, spring, every year)
Individualized learning project combining prior learning with facultydirected new learning, awarding academic credit for both. (When content is discipline-related, discipline designation will appear on transcript and credit may count toward appropriate general education requirement category.)
IS 3896. Prior Learning Internship. (1-16 cr [max 32 cr$]$; S-N only; prereq approved internship form; fall, spring, every year)
An educational experience in a work environment providing field application for the student's theoretical classroom learning experiences. The prior learning internship, such as in social service or business settings, occurred prior to the student's matriculation. The prior learning is documented and combined with faculty-directed new learning, with credit awarded for both.
IS 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.

IS 3996. Interdisciplinary Internship. (1-16 cr [max 32 cr$] ;$ S-N only; prereq approved internship form; fall, spring, summer, every year) One-semester educational experience in a work environment providing field applications for the student's theoretical classroom learning experiences.

IS 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.
IS 4994H. 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."

## Italian (Ital)

## Division of the Humanities

Courses in Italian introduce students to the study of the language, literature, and culture of Italy. The courses satisfy foreign language and other general education requirements.
Objectives-Courses are 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 1001. Beginning Italian I. (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.
Ital 1002. Beginning Italian II. (FL; 4 cr ; prereq 1001 or placement or \#; spring, every year)
Continuation of 1001.
Ital 1104. Major Works of Italian Literature in Translation from the Middle Ages to the Present. (Hum; 4 cr; spring, offered periodically) Survey of Italian literature from the Middle Ages to the present. Attention given to major works of narrative, poetry, and drama of various periods. Emphasis on ground-breaking works that constituted a challenge to prevailing literary and cultural values. This course is conducted in English; all texts will be read in English translation.
Ital ו105. Italian Cinema. (IP; 4 cr ; spring, offered periodically)
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.
Ital 1311. Modern Italy through Literature and Film. (Hum; 4 cr ; spring, offered periodically)
The political, social, and cultural transformations of Italy from 19th-century unification to contemporary issues of immigration and multiculturalism as reflected in literature and film. Topics include forging a national identity; Fascism, the Resistance and post-war period; the "southern question"; the "economic miracle"; current cultural issues.
Ital 1331. The Eternal City: The Language and Culture of Rome I. (FL; 4 cr; summer, offered periodically)
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.
Ital 1801. Rome: The City in Literature and Film. (IC; 2 cr; prereq new college student in their first semester of enrollment at UMM; fall, offered periodically)
Study of representations of the city of Rome in significant works of Italian literature and film. Topics include the rhetorical construction of national and cultural identities, the individual's relationship to fictional and lived space, the city as stage for major cultural and political preoccupations of contemporary Italy. Conducted in English.
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 2001. Intermediate Italian I. (IP; 4 cr; prereq 1002 or \#; fall, spring, offered periodically)
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.
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 periodically)
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.
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.

## Language (Lang) <br> Division of the Humanities

Language courses support and help develop the academic language skills of non-native speakers of English.
Objectives-"Lang" courses are designed to support the academic language demands found in American higher education. Courses focus on the development of writing, reading, and oral skills proficiency in English as well as the cultural norms and expectations of American education. These courses are not prerequisites but instead intended to be taken at the same time as other academic work.

## Language Course Descriptions

Lang 1061. Writing in the American University. (3 cr [max 6 cr ]; prereq non-native speaker of English, \#; fall, spring, every year) Writing course for non-native speakers of English at the advanced level, emphasizing competency in standard written English with a focus on development of paragraphs, exploration of the writing process, and experience with various rhetorical styles of essays in preparation for the demands of classroom writing.
Lang 1062. Reading in the American University. (1 cr [max 2 cr ]; S-N only; prereq non-native speaker of English, \#; fall, spring, every year) For non-native speakers of English. Focus on developing academic vocabulary through study of the Academic Word List; students apply this vocabulary to texts which also reinforce basic reading skills such as prereading strategies, skimming, scanning, and word parts work.
Lang 1063. Academic Culture and Oral Skills in the American University. (IC; 2 cr [max 4 cr ]; S-N only; prereq non-native speaker of English, \#; fall, spring, every year)
For non-native speakers of English. Designed to assist international students with the transition from the social/educational systems in their own cultures to the social/educational systems in the United States. Primary focus on oral skills; coursework focuses on class participation, discussion, note-taking, and critical thinking.
Lang 1064. Preparing for the American Liberal Arts Classroom. (3 cr; S-N only; prereq non-native speaker of English, \#; admission to UMM; summer, every year)
Prepares international students for norms and rigors of an English-language, liberal arts college classroom. Includes preparation in language/academic skills of reading, writing, oral skills; exposure to disciplines that compose liberal arts; development of familiarity with cultural norms of a U.S. classroom; contextualization of topics through field trips.

## 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 20 -credit elective requirement for the major.

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 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)
Anth 3603 -Latin American Archaeology, SS ( 4 cr )
Hist 3608-The Cuban Revolution in Historical Perspective, Hist (4 cr)
Hist 3609-Natural Calamities: Disaster and Response in Latin American History, IP (4 cr)
Hist 3611-The Amazon in History, Hist (4 cr)
LAAS 1311—Salvador Da Bahia, Brazil: Exploring Its African Identity, IP (2 cr)
LAAS 1993, 2993, 3993, 4993—Directed Study (1-5 cr)
Pol 3475-International Human Rights, IP (4 cr)
Pol 3504 -Latin American Politics, 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)
Span 1311—Salvador Da Bahia, Brazil: Exploring Its African Identity,
IP (2 cr)
Span 2121—Associated Languages: Intensive Portuguese, IP (4 cr)
Span 3011-Conversation, Composition, and Culture, IP (2 cr)
Span 3012-Spanish Grammar in Practice, IP (2 cr)
Span 3111—Readings in Spanish I, Hum (2 cr)
Span 3112—Readings in Spanish II, Hum (2 cr)
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, IP (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)
Span 3684—Seminar: Hispanic Film, Hum (4 cr)
Span 4001 -Research Symposium, Hum (4 cr)

## Latin American Area Studies Course Descriptions

Anth 3601. Social Justice and Human Rights in Latin America. (IP; 4 cr; =[Soc 3601]; prereq וווו or Soc ו101 or \#; fall, 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; $4 \mathrm{cr} ;=[$ Soc 3602]; prereq iווו or Soc 1101 or \#; spring, every year)
Same as Soc 3602. Study of the social, economic, and political positions of women in Latin American countries. Topics include class and ethnic differences, women in the labor force, and women's participation in political movements through the lens of feminist theory.
Anth 3603. Latin American Archaeology. (SS; 4 cr; prereq וווו 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, odd 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)
Aear)
A look at Latin American history through great books.
Hist 3608. The Cuban Revolution in Historical Perspective. (Hist; 4 cr ; fall, spring, offered periodically)
A survey of modern Cuban history with an emphasis on the Cuban Revolution. An introduction to a wide variety of perspectives.
Hist 3609. Natural Calamities: Disaster and Response in Latin

## American History. (IP; 4 cr; fall, odd years)

Earthquakes, hurricanes, volcanic explosions, and other natural disasters have had a significant impact on the economies, politics, and culture of Latin America. A broad historical overview of the impact of such hazards is explored, together with an in-depth focus on the Haitian earthquake of 2010.

## Hist 3611. The Amazon in History. (Hist; 4 cr; spring, even years)

Analyzes the Amazon from a number of historical perspectives: exploration, conquest, exploitation, development, sustainability, and environmentalism.

LAAS 1311. Salvador Da Bahia, Brazil: Exploring Its African Identity. (IP; 2 cr ; =[Span 1311]; spring, offered periodically)
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.

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 8 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. ( cr ; prereq LAAS major; fall, spring, offered periodically) 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 4101. Senior Tutorial in Latin American Area Studies. (1-4 cr [max $4 \mathrm{cr}]$; prereq 3201, sr LAAS major; fall, spring, offered periodically) 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.
Pol 3475. International Human Rights. (IP; 4 cr; prereq 1401 or \#; spring, odd years)
Explores the historical and philosophical development of concepts of human rights and the contemporary international political and legal frameworks to address rights. Analyzes contemporary concerns about political, economic, and social rights, as well as specific human rights topics like human trafficking and war crimes. Compares American, European, Asian, and Developing World conceptions and critiques of human rights.

## Pol 3504. Latin American Politics. (IP; 4 cr; prereq 1401 or \#; spring, even

 years)A comparative examination of central issues in and components of Latin American political life, with a particular focus on economic development, political development of democratic regimes, political violence and human rights, and the region's role in the world. Countries analyzed may include Argentina, Brazil, Chile, Colombia, El Salvador, Mexico, Peru, and Cuba.
Soc 3601. Social Justice and Human Rights in Latin America. (IP; 4 cr ; =[Anth 3601]; prereq ו1וטו or Anth in \#; fall, 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; $4 \mathrm{cr} ;=$ [Anth 3602]; prereq 1101 or Anth 1111 or \#; spring, every year)
Same as Anth 3602. Study of the social, economic, and political positions of women in Latin American countries. Topics include class and ethnic differences, women in the labor force, and women's participation in political movements through the lens of feminist theory.

Span 1311. Salvador Da Bahia, Brazil: Exploring Its African Identity. (IP; 2 cr; =[LAAS 1311]; spring, offered periodically)
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.

Span 2121. Associated Languages: Intensive Portuguese. (IP; 4 cr; prereq 2002 or Fren 2002 or \#; fall, spring, offered periodically) Intensive, accelerated study of the basic skills of Brazilian Portuguese (reading, writing, listening, and speaking) with emphasis on oral competency.
Span 3011. Conversation, Composition, and Culture. (IP; 2 cr ; prereq 2002 or \#; fall, every year)
Practice in effective oral and written communication in Spanish for advanced students, with an emphasis on the diversity of contemporary Hispanic cultures and a review of basic grammatical concepts.
Span 3012. Spanish Grammar in Practice. (IP; 2 cr; prereq 3011 or \#; spring, every year)
A review of advanced Spanish grammar, with emphasis on areas of concern and challenge for the non-native speaker, and on strengthening academic writing skills in Spanish.

Span 3111. Readings in Spanish I. (Hum; 2 cr; prereq 3011 or \#; fall, every year)
Introduction to representative works of contemporary Hispanic literature from diverse genres and cultural contexts, with emphasis on strategies for comprehension and interpretation.
Span 3112. Readings in Spanish II. (Hum; 2 cr; prereq 3012, 3111 or \#; spring, every year)
Further examination of representative works of Hispanic literature from diverse genres, time periods, and cultural contexts, with emphasis on literary concepts and terminology, analysis, research and writing practices, and interpretation.

Span 3211. Literature and Culture of Latin America. (Hum; 4 cr; prereq 3012, 3112, or \#; spring, offered periodically)
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 3012, 3112, or \#; spring, offered periodically)
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 3621. Seminar: Confessions and Letters in Latin American Fiction. (Hum; 4 cr; prereq 3012, 3112 or \#; spring, offered periodically)
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 which imitates and enhances reality.
Span 3622. Seminar: Exile and Emigration in Latin American Fiction. (IP; 4 cr ; prereq 3012, 3112 or \#; fall, offered periodically)
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 3012, 3112 or \#; fall, offered periodically)
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 3012, 3112 or \#; fall, offered periodically)
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 3012, 3112 or \#; fall, offered periodically)
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 3012, 3112 or \#; fall, offered periodically) 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 3012, 3112 or \#; fall, offered periodically) 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 3012, 3112 or \#; fall, offered periodically)
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 3012, 3112 or \#; fall, offered periodically) 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 3012, 3112 or \#; fall, offered periodically)
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 3012, 3112 or \#; fall, offered periodically)
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 3012, 3112, or \#; fall, offered periodically)
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 3684. Seminar: Hispanic Film. (Hum; 4 cr; prereq 3012, 3112 or \#; fall, offered periodically)
View, study, and discuss relevant Hispanic films from Spain, Latin America, and the U.S.A. Consider the films' cinematic techniques and their specific socio-cultural and socio-political contexts.
Span 4001. Research Symposium. (Hum; 4 cr; A-F only; prereq \#; 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)
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)
IS 4101-Intro to Prof Conduct, Legal Constraints, Ethics in Human Services, E/CR (2 cr)
Take 4 or more credit(s) from the following:
IS 3796-Interdisciplinary Internship in the Helping Professions ( $1-16 \mathrm{cr}$ )
IS 3996 -Interdisciplinary Internship (1-16 cr)
Psy 4896 —Field Experiences in Psychology, SS (1-4 cr)

## Electives

40 credits to be selected from the courses listed below, with a minimum of 16 credits each in anthropology/sociology and upper division psychology.

## 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 3204-Culture, Food, and Agriculture, Envt (4 cr)
Anth 3206-Ecological Anthropology, Envt (4 cr)
Anth 3402-Representations from the Field: American Indian Ethnography and Ethnohistory, 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 3701—Forensic Anthropology, Sci-L (4 cr)
Soc 2101—Systems of Oppression, HDiv (4 cr)
Soc 3111—Sociology of Modernization, IP (4 cr)
Soc 3112-Sociology of the Environment and Social Development, Envt ( 4 cr )
Soc 3121—Sociology of Gender and Sexuality, HDiv (4 cr)
Soc 3122—Sociology of Childhoods, HDiv (4 cr)
Soc 3123-Sociology of Aging, HDiv (4 cr)
Soc 3124-Sociology of Law, SS (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)

## Upper Division Psychology Electives

Students who plan to enroll in Psy 4101 should complete the course before their internship or field experience.
Take 16 or more credit(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 3101—Learning Theory and Behavior Modification, SS (4 cr)
Psy 3112—Cognition, SS (4 cr)
Psy 3211—Biological Psychology, Sci-L ( 5.0 cr )
Psy 3221 —Behavioral Biology of Women, Sci ( 4 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 3502—Psychology and Law, SS (4 cr)
Psy 3504 -Educational 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 4101—Helping Relationships, SS (4 cr)
Psy 4301 -Clinical Assessment and Therapeutic Interventions, SS (4 cr)
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)

## 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 2704-Gender, Women, and Sexuality in Medieval Europe, 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 3513-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)
Pol 3263-Political Psychology, SS (4 cr)
Pol 4221 —Judicial Politics, SS (4 cr)
Pol 4264 -American Political Culture, Hist (4 cr)
Psy 1071—Human Sexuality, SS (4 cr)
Psy 1081—Drugs and Human Behavior, SS (2 cr)
SSA 1051-Fitness for Life (2 cr)

## Liberal Arts for the Human Services Course Descriptions

Anth 1ו1ו. 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 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.

## 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 וווו or Soc 1101 or \#; spring, offered periodically)
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 וווו or Soc 1101 or \#; spring, every year)
Same as Soc 3204. Examines the globalization of food systems utilizing a political ecology perspective 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 וווו 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

 Soc 1101; fall, offered periodically)
Same as AmIn 3402. An analysis of ethnographic and ethnohistoric materials focusing on specific American Indian cultures.
Anth 3451. Contemporary American Indians. (HDiv; 4 cr; =[Soc 3451]; prereq 111 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, selfdetermination, and identity.

Anth 3452. American Indian Women. (HDiv; 4 cr; =[Soc 3452]; prereq $1 ו 1$ or Soc 1101 or \#; fall, offered periodically)
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 $1 ו 1 ו$ 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 \#; fall, 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; $4 \mathrm{cr} ;=[\mathrm{Soc} 3602]$; prereq 1111 or Soc 1101 or \#; spring, every year)
Same as Soc 3602. Study of the social, economic, and political positions of women in Latin American countries. Topics include class and ethnic differences, women in the labor force, and women's participation in political movements through the lens of feminist theory.
Anth 3603. Latin American Archaeology. (SS; 4 cr; prereq וווו 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 3701. Forensic Anthropology. (Sci-L; 4 cr; prereq 2101 or Biol 2102; fall, odd years)
Recovery, identification, and analysis of human skeletal remains, including investigation techniques, identification of age, sex, ancestry, and cause of death. Two $65-\mathrm{min}$ lectures and one 2 -hour lab weekly.

CMR 2052. Legal Advocacy: Speaking in Appellate Forensic Situations. (E/CR; 4 cr; spring, offered periodically)
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 periodically)
Study of organizational communication, including small group perspectives.
Econ ווווI. Principles of Microeconomics. (SS; 4 cr; prereq high school algebra or \#; fall, spring, every year)
Study of scarce resource allocation in a market economy. Supply and demand, consumer theory, theory of the firm, market structure, pricing of factors of production, income distribution and the role of government.

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 3201. Microeconomic Theory. (SS; 4 cr; prereq וווו, 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 2704. Gender, Women, and Sexuality in Medieval Europe. (SS; 4 cr; spring, odd years)
Analysis of the history of European women and gender systems as constructed during the Middle Ages (c. 500-1500).
IS 3796. Interdisciplinary Internship in the Helping Professions. (1-16 cr [max 32 cr ]; S-N only; prereq IS 4101, approved internship form; Psy 4101 recommended; fall, spring, summer, every year)
One-semester educational experience providing field applications in the helping professions (social work, counseling, casework, child protection services, educational settings, human resource counseling, and the like) for the student's theoretical classroom learning experiences.
IS 3996. Interdisciplinary Internship. (1-16 cr [max 32 cr$]$; S-N only; prereq approved internship form; fall, spring, summer, every year) One-semester educational experience in a work environment providing field applications for the student's theoretical classroom learning experiences.
IS 4101. Intro to Prof Conduct, Legal Constraints, Ethics in Human Services. (E/CR; 2 cr; prereq jr, 8 cr 3xxx or 4xxx human services courses or \#; fall, spring, every year)
Concepts of professional ethics in human services professions; ethically relevant legal mandates and constraints on professional practice; practical problems in the application of ethical principles.
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 periodically)
Topics in human resource management: evaluating employee performance, training, safety, labor relations, international human resource management.
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 3513. Negotiation. (SS; 4 cr; = [Psy 3513]; prereq 3221 or Psy 3501 or Psy/Mgmt 3701; spring, offered periodically)
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 3701. Organizational Behavior. (SS; $4 \mathrm{cr} ;=[$ Psy 3701]; prereq Stat 1601 or Stat 2601, jr or sr; fall, spring, offered periodically)
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.

Pol 3201. Legislative Process. (SS; 4 cr; prereq 1201 or \#; Stat 1601 or Stat 2601 recommended; fall, odd years)
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.

Pol 3263. Political Psychology. (SS; 4 cr; prereq 1201; Psy 1051 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, even 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.
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 child birth; 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 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 וווו; 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 bases 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; 4 cr ; prereq (3201 or 3211) or Biol 2111 or \#; spring, odd years)
Exploration of proximate and ultimate influences on female behavior in human and nonhuman species. Topics include sexual differentiation, gender differences in cognition, biological basis of sexual orientation, female sexual selection, dominance, and other topics of interest to students. Readings consist of primary journal articles.

Psy 3302. Personality. (SS; 4 cr; prereq 1051 or \#; spring, every year) Nature of personality constructs and theories. Conscious vs. nonconscious 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.

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 3502. Psychology and Law. (SS; 4 cr; prereq 1051; spring, even years) A psychological perspective to the law and to the legal system. Topics include jury decision making, forensic psychology, trial processes, eyewitness testimony, and sentencing.

Psy 3504. Educational Psychology. (SS; 4 cr; prereq 1051; spring, offered periodically)
Discussion of psychological principles/theories in relation to learning in academic settings. Topics may include: a consideration of developmental and social issues that are likely to impact the learner; a discussion of individual differences in learning; an examination of different theoretical approaches to learning applied specifically to educational settings; an analysis of factors related to student motivation and behavior; and a discussion of issues related to testing and measurement in academic settings

Psy 3513. Negotiation. (SS; 4 cr; ; [Mgmt 3513]; prereq 3501 or Mgmt 3221 or Psy/Mgmt 3701; spring, offered periodically)
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 world views, communication styles, acculturation, prejudice, white privilege, identity development, physical and mental health, and multicultural competencies.
Psy 3701. Organizational Behavior. (SS; $4 \mathrm{cr} ;=$ [Mgmt 3701]; prereq Stat 1601 or Stat 2601, jr or sr; fall, offered periodically)
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 4301. Clinical Assessment and Therapeutic Interventions. (SS; 4 cr; prereq 3313 or 4101 ; spring, every year)
Evaluation of psychological assessments and interventions from different perspectives. Topic examples: structured and unstructured assessments; career counseling and assessment; motivational interviewing; family and couples therapy; interpersonal therapy; group therapy; and solution-focused therapy.
Psy 4896. Field Experiences in Psychology. (SS; 1-4 cr [max 4 cr ]; S-N only; 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; 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; A-F only; =[Psy 4710]; prereq 2001, 31ו1 or 3112, sr status, \#; 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; $4 \mathrm{cr} ;$ A-F only; $=\left[\mathrm{P}_{\text {sy }} 4720\right.$ ]; prereq 2001, 3201 or 3211, sr status, \#; 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 ; A-F only; =[Psy 4730]; prereq 2001, 3302 or 3313, sr status, \#; 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.

Psy 4940. Advanced Seminar in Developmental Psychology. (SS; 4 cr; A-F only; =[Psy 4740]; prereq 2001, 3401 or 3402 or 3403, sr status, \#; fall, every year)
Advanced seminar on selected topics in the area of 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.
Psy 4950. Advanced Seminar in Social Psychology. (SS; 4 cr; A-F only; =[Psy 4750]; prereq 2001, 3501, sr status, \#; spring, every year) Advanced seminar on selected topics in the area of 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.
Psy 4960. Advanced Seminar in Health Psychology. (SS; 4 cr; A-F only; =[Psy 4760]; prereq 2001, 3521, sr status, \#; fall, every year) Advanced seminar on selected topics in the area of Health 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.
Soc 1101. Introductory Sociology. (SS; 4 cr; fall, spring, every year) Introduction to the field of sociology, the exploration of societies, and how societies operate. Sociology broadens social insights, fosters critical thinking, guides analytical thinking, and develops writing skills. By actively thinking about issues facing societies today, students learn to examine life situations and the influence of societies and groups on people's lives, careers, hopes, fears, and personalities. Emphasis on how society is stratified: how organizations and institutions influence the way people think, talk, feel, and act and how different groups (e.g., racial and ethnic) and divisions (e.g., gender and social class) within society have different access to power and privilege. People live their lives in relation to social and physical environments; sociologists study these environments and their effects on people's experiences and behavior.

Soc 2101. Systems of Oppression. (HDiv; 4 cr ; prereq 1101 or Anth $1 ו 11$ 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 and ageism.
Soc 3111. Sociology of Modernization. (IP; 4 cr ; prereq 1101 or Anth 111 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 3112. Sociology of the Environment and Social Development. (Envt; 4 cr ; prereq 1101 or \#; fall, odd years)
Introduces students to the sociological study of the environment and social development. Examines the impact of international environmental and development efforts on individuals at the local level. Focuses on grassroots environmental activism and social development work. Explores and discusses power relations and systems of inequality within the context of environmental and social development efforts.
Soc 3121. Sociology of Gender and Sexuality. (HDiv; 4 cr; prereq 1101 or Anth וווו or \#; fall, every year)
Introduces students to the sociological study of gender and sexuality. Focuses on gender difference and gender inequality. Analyzes 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. Following a theoretical overview, examines how gender and sexuality affect everyday experiences.

Soc 3122. Sociology of Childhoods. (HDiv; 4 cr; prereq 1101 or \#; spring, odd years)
Introduces students to the sociological study of childhoods. Examines the interaction between societies and their youngest members-how societies shape children's lives through social institutions such as families, education, and the state. Takes a close look at children's access to privileges and resources as determined by children's experiences of race, gender, class, nationality, and sexual orientation.
Soc 3123. Sociology of Aging. (HDiv; 4 cr; prereq 1101; spring, every year) An introduction to sociology of aging. Examination of the major theories of social aging as well as the historical and cross-cultural variations in aging and differences by race, ethnicity, gender, and social class.
Soc 3124. Sociology of Law. (SS; 4 cr; prereq 1101; spring, every year) Explore the emergence and function of law through the lens of social theories. The course assumes law is embodied in the social structure of society; hence, it is the product of social interaction. Based on this assumption, it examines the role of law in maintaining and reproducing social order, class, race, and gender inequalities. The course is interdisciplinary and comparative in its scope and integrates jurisprudence and various social science theories.
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 3141. Sociology of Deviance. (E/CR; 4 cr; prereq 1101 or \#; spring, every year)
Introduces students to the sociological study of deviance. Explores the social reality of deviance within contemporary society and examines the social construction of deviant categories. Focuses on images of deviance as social constructs, rather than as intrinsic elements of human behavior. Investigates the complex relationships between individual behavior and social structure, with a focus on power, inequality, and oppression. Also, examines the socio-cultural definitions of morality and behavior.

Soc 3204. Culture, Food, and Agriculture. (Envt; 4 cr; =[Anth 32O4]; prereq ו1ור or Anth or \#; spring, every year)
Same as Anth 3204. Examines the globalization of food systems utilizing a political ecology perspective 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. (HDiv; 4 cr ; prereq 1101 or Anth iוו1; fall, spring, offered periodically)
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; prereq 1101 or Anth ו1ו1; spring, offered periodically)
The cultures and social statuses of women in several Muslim countries are examined and placed in their political, economic, and religious contexts.
Soc 3451. Contemporary American Indians. (HDiv; 4 cr; =[Anth 3451]; prereq 1101 or Anth $1 ו 1 ו$ 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 $1 ו 1$ or \#; fall, offered periodically)
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; =[Anth 3601]; prereq 1101 or Anth 111 or \#; fall, 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 1101 or Anth וווו or \#; spring, every year)
Same as Anth 3602. Study of the social, economic, and political positions of women in Latin American countries. Topics include class and ethnic differences, women in the labor force, and women's participation in political movements through the lens of feminist theory.
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; 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 chi-squared tests; use of statistical computer packages.
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.
SSA 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 lifetime program for improving one's quality of life.

## Management (Mgmt)

## Division of the Social Sciences

This discipline offers a multidisciplinary liberal arts-based program that allows students to enter the field of management as a professional or proceed to graduate studies.
Objectives-The management curriculum focuses on those areas of human knowledge that concern the operation and control of business and nonprofit organizations. In addition to developing competence in analytical and core business areas, students majoring in the field are expected to learn to critically examine business and other institutions from a liberal arts perspective. Specifically, management students:

1. understand and use a variety of techniques to manage financial, human, and material resources
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. develop competence 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. Some students will also benefit from taking CMR 1052. 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 successful completion of each of the following four elements.

1. the Management core
2. the 3xxx-level elective Management block
3. the elective Management capstone block
4. a program sub-plan in either
a) General Management -or-
b) Global Business

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 $\mathrm{D}+$ may be used to meet the major requirements if offset by an equivalent number of credits of A or B . No coursework for the major may 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.
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.

## Courses for the Program

## Element 1: The Management Core

Students must successfully complete all of the courses listed below in order to satisfy this element of the major.
Students should complete all but Econ 3113 and Mgmt 3601 during their first two years.
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)
Mgmt 2101—Principles of Accounting I (4 cr)
Mgmt 3601-Transnational Enterprise, IP (4 cr)
Stat 1601 -Introduction to Statistics, M/SR (4 cr)
or Stat 2601—Statistical Methods, M/SR (4 cr)

Element 2: 3000-level Elective Management Block
Take 8 or more credit(s) from the following (exclusive of coursework used to satisfy sub-plan requirements):
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 3009-Political Economy, SS (4 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 3133-Economics of China, IP (2 cr)
Econ 3134-Cooperative Business Model, SS (2 cr)
Econ 3141-Economic Development and Growth I, IP (2 cr)
Econ 3142-Economic Development and Growth II, IP (2 cr)
Econ 3153-Contemporary Global Economic Issues, IP (2 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)
Mgmt 3101-Financial Management, SS (4 cr)
Mgmt 3133-Managerial Accounting (4 cr)
Mgmt 3134-Cooperative Business Model, SS (2 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 3701-Organizational Behavior, SS (4 cr)
Mgmt 3993-Directed Study ( $1-5 \mathrm{cr}$ )
Psy 3503 -Consumer Psychology, SS ( 4 cr )
Econ 3201-Microeconomic Theory, SS (4 cr)
or Mgmt 3123-Managerial Economics, SS (4 cr)
Element 3: Elective Management Capstone Block
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)
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)
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)

## Element 4: Program Sub-plans

Students are required to complete a sub-plan in either General Management or Global Business. The respective requirements are listed below.

## General Management (GM) Sub-plan <br> Required Courses for the Sub-plan

The General Management (GM) Sub-plan requires completion of the following elements:

1. The GM Required Courses Block
2. The GM Elective Courses Block

## GM Sub-plan Element 1: The GM Required Courses

 BlockStudents must successfully complete the list of courses below.
Mgmt 2102—Principles of Accounting II (2 cr)
Mgmt 3101—Financial Management, SS (4 cr)
Mgmt 3701—Organizational Behavior, SS (4 cr)
Mgmt 3123-Managerial Economics, SS (4 cr)
or Econ 3201—Microeconomic Theory, SS (4 cr)
Math 1021-Survey of Calculus, M/SR (4 cr)
or Math 1101—Calculus I, M/SR (5 cr)

## GM Sub-plan Element 2: The GM Elective Courses Block

Take 4 or more credit(s) from the following:
CSci 1251 -Computational Data Management and Manipulation, M/ SR (4 cr)
Phil 2112—Professional Ethics, E/CR (4 cr)

## Global Business (GB) Sub-plan

Required Courses for the Sub-plan
The Global Business (GB) Sub-plan requires completion of the following elements:

1. The GB Language Block
2. The GB Skills and Perspectives Block
3. The GB General Electives Block

## GB Sub-plan Element 1: The GB Language Block

Students must complete 8 credits of French, German, Spanish, or other approved language of international commerce at 2 xxx -level or above.

## GB Sub-plan Element 2: The Skills and Perspectives Block

Take 8 or more credit(s) from the following:
CSci 1251 -Computational Data Management and Manipulation, M/ SR (4 cr)
Math 1021 -Survey of Calculus, M/SR (4 cr)
or Math 1101 -Calculus I, M/SR ( 5 cr )
Phil 2112—Professional Ethics, E/CR (4 cr)

## GB Sub-plan Element 3: The GB General Electives Block

Take 6 or more credit(s) from the following:
Econ 3131-Comparative Economic Systems, IP (2 cr)
Econ 3133-Economics of China, IP (2 cr)
Econ 3141—Economic Development and Growth I, IP (2 cr)

Econ 3142—Economic Development and Growth II, IP (2 cr)
Econ 3153 -Contemporary Global Economic Issues, IP (2 cr)
Econ 3351-Globalization: Examining India's Social and Economic Development, IP (4 cr)
Econ 4121 -International Trade Theory, SS (2 cr)
Econ 4131-International Finance, SS (2 cr)
Mgmt 3351—Globalization: Examining India's Social and Economic Development, IP ( 4 cr )
Mgmt 3352-Emerging Markets in Asia, IP (4 cr)
Mgmt 4501—Globalization and Business Strategy, IP (2 cr)
Mgmt 4502-Technological Change, Labor Market, and Skill Formation, IP ( 2 cr )

## Management Minor

## 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

Grades of D or D+ in Mgmt 2101-2102 or Econ 1111-1112 may not be used to meet minor requirements.
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 (2 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 3134 -Cooperative Business Model, SS (2 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 (4 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

## Management Course Descriptions

Mgmt 10ו1. Fundamentals of Personal Finance. (SS; 2 cr ; spring, offered periodically)
An application-based personal finance course to help students with lifetime financial planning and decision making. Focus on personal responsibility with respect to understanding financial instruments and their functions including: stocks, bonds, money markets, mutual funds, and derivatives Also learn about savings, retirement, and social insurance vehicles including social security, Medicare, defined contribution, and defined benefit plans along with various individual retirement accounts. A way of thinking about personal finance that incorporates knowledge of current financial institutions, structures, and markets; time value of money; risk analysis; and available budgeting tools.

Mgmt 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.
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 both 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 2800. Rural Entrepreneurship Practicum. (1-5 cr [max 5 cr$] ;$ S-N only; prereq \#; fall, spring, summer, every year)
Supervised educational experience developing a business or marketing plan for a for-profit or non-profit enterprise to be located in a small town or rural area. Written analysis appropriate to the plan is required.

Mgmt 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.
Mgmt 3101. Financial Management. (SS; 4 cr; prereq 2102, Econ וווו, Econ 1112, Stat 1601; fall, every year)
Fundamental theories of financial management, their applications, and their limitations in solving real business problems. Emphasis on financial analysis, valuation of future cash flows, capital budgeting, risk and return, cost of capital.

Mgmt 3123. Managerial Economics. (SS; 4 cr; prereq 2101, Econ וווו, Stat 1601 or Stat 2601 or \#; spring, every year)
Development of the basic concepts of the microeconomic theories of consumer behavior, the firm, and market structure, in application to managerial decision-making contexts in the operation and control of business and non-profit organizations.
Mgmt 3133. Managerial Accounting. (4 cr; prereq 2102; fall, spring, offered periodically)
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. The emphasis of this course is placed 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 3134. Cooperative Business Model . (SS; 2 cr; =[Econ 3134]; prereq Econ וווו or \#; spring, even years)
Same as Econ 3134. In the northern plains of the United States, cooperative businesses, including consumer, producer, and worker cooperatives, have made significant contributions to economic growth and development. Identify the unique economic, legal, and organizational characteristics of these firms and their role in the economy. Special attention is given to the potential role of cooperative business organizations in community development.

Mgmt 3141. Business Law I. (SS; 2 cr; prereq 2101 or \#; fall, spring, offered periodically)
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 periodically)
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 periodically)
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 וווו or \#; fall, spring, offered periodically)
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 periodically)
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 periodically)
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 3221. Management and Organization Theory. (SS; 4 cr; prereq 2101, Econ וווו or \#; fall, spring, offered periodically)
Theory, research, and practice of management. Planning, organizing, leading, controlling. Emphasizes goals, policies, procedures. Factors and human relationships necessary to achieve organizational success. Organizational structure/culture. Changing environment in which businesses operate.

Mgmt 3351. Globalization: Examining India's Social and Economic Development. (IP; $4 \mathrm{cr} ;=[$ Econ 3351]; prereq Econ 1111 or Econ 1112 or \#; spring, offered periodically)
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
Mgmt 3352. Emerging Markets in Asia. (IP; 4 cr; prereq Econ וווו, Econ 1112, Stat 1601 or Stat 2601 or \#; fall, every year)
An overview of the largest and fastest-growing markets in the world, the Asian markets. Examines topics such as business strategy and organization, marketing strategies, and business-State relations in Asia. Theory is balanced with practice by including comparative studies and business case studies.

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. Queueing 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; $4 \mathrm{cr} ;=\left[\mathrm{P}_{\text {sy }} 3513\right]$; prereq 3221 or Psy 3501 or Psy/Mgmt 3701; spring, offered periodically)
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; 4 cr; prereq 2101, Econ וווו, Econ 1112 or \#; spring, every year)
Development and transformation of business enterprise within the global economy emerging from time and motion studies, mergers, "corporate revolution," Fordism through to multi-plant manufacturing beyond national boundaries. 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 periodically)
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 3123 or Econ 3201, Math 1021 or Math 1101, or \#; fall, spring, offered periodically)
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 periodically)
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 periodically)
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 periodically) 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 periodically)
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 periodically)
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 periodically)
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 periodically)
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]; S-N only; prereq 2102, \#; 2 cr may be applied to major or minor; 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 \& 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 $2 x x x$. 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 3411-Discrete and Combinatorial Mathematics
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 2202-Mathematical Perspectives, M/SR (4 cr)
Math 3221—Analysis, M/SR (4 cr)
Math 3231-Abstract Algebra I, M/SR (4 cr)
Math 4901-Senior Seminar, M/SR (2 cr)
Stat 2611-Mathematical Statistics, M/SR (4 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 3401—Geophysics, Sci (4 cr)
Geol 3501-Hydrology, Sci (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)
Phys 2401-Optics, Sci-L (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 $\mathrm{D}+$ 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 2 XXX 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)

## 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 0901. Basic Algebra. (o 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, logic, and the history of mathematics, including applications in today's world.
Math 1012. PreCalculus I: Functions. (4 cr; prereq placement; no credit for students who have received credit for Math 1014; 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; no credit for students who have received credit for Math 1014; 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 1014. Intensive Pre-Calculus. (M/SR; 4 cr; prereq second year of high school algebra, @; fall, spring, every year) Offered online only. 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. 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; multipleangle identities; the Law of Sines; the Law of Cosines.

Math 1021. Survey of Calculus. (M/SR; 4 cr; prereq 1012 or placement; spring, 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.
Math 1102. Calculus II. (M/SR; 5 cr; prereq 1101; fall, spring, every year) Techniques of integration. Further applications involving mathematical modeling and solution of simple differential equations. Taylor's Theorem. Limits of sequences. Use and theory of convergence of power series. Students use a computer algebra system.

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 1102 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, even years)
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)
Same as Stat 2501. Probability theory; set theory, axiomatic foundations, conditional probability and independence, Bayes' rule, random variables. Transformations and expectations; expected values, moments, and moment generating functions. Common families of distributions; discrete and continuous distributions. Multiple random variables; joint and marginal distributions, conditional distributions and independence, covariance and correlation, multivariate distributions. Properties of random sample and central limit theorem. Markov chains, Poisson processes, birth and death processes, and queuing theory.
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 calculusconvergence, 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 323I. 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 2601 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 2601 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. Queueing 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.
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.
Math 4201. Complex Analysis. (M/SR; 2 cr; prereq 3221 or \#; fall, spring, offered periodically)
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 periodically)
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 periodically)

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 periodically)
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 periodically)
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 periodically)
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 periodically)
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 periodically)
Finite differences; interpolation; numerical integration; numerical solutions of differential, algebraic, and transcendental equations; continuous mathematical models.

Math 4452. Mathematical Modeling. (M/SR; 4 cr; prereq \#; fall, spring, offered periodically)
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 queuing 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 (Mus)

## Division of the Humanities

The music curriculum offers a wide range of courses for the music major. It also has strong appeal to the general student, especially in the activities of the instrumental and vocal ensembles.

Objectives-Students become familiar with the traditions of Western and non-Western music through theoretical analysis, research, performance, and historical survey. The curriculum fosters the development of the critical ability necessary to understand those traditions. Students experience the unique relationship between research and performance in music. Theoretical and practical courses that provide a sound academic background in music are available for those who intend to pursue graduate study, teach, or fulfill general education requirements.

## 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.

The music major requires an assessment prior to a students' first day of classes in order to assist them with planning their future at UMM through suggested class placement. Details about the assessment are outlined on the music discipline website.

## 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 1000 seven times.
Mus 1000-Concert Attendance (. 5 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 32 xx Advanced Individual Performance Studies series.

## Elective Courses

Take 6 or more credit(s) from the following:
Mus 2301—Instrumental Techniques-Woodwind ( 1 cr )
Mus 2302-Instrumental Techniques-Brass and Percussion (1 cr)
Mus 2303-Instrumental Techniques-Strings (1 cr)
Mus 2304-Vocal Techniques (1 cr)
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, $\operatorname{ArtP}$ ( 1 cr )
Mus 3311—Conducting Techniques ( 2 cr )
Mus 3321—Instrumental Conducting and Materials (2 cr)
Mus 3331-Choral Conducting and Materials (2 cr)
Mus 3351-Instrumental Arranging, ArtP (2 cr)
Mus 3352-Choral Arranging, ArtP (2 cr)
Mus 3400-Vocal Performance Workshop, ArtP (1 cr)
Mus 3993 -Directed Study ( $1-5$ cr)
Mus 4101-Form and Analysis (4 cr)
Mus 4102-Counterpoint, FA (4 cr)
Mus 3xxx, 4xxx

## Music 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

## Concert Attendance

Four successful completions of Mus 1000
Mus 1000 -Concert Attendance (. 5 cr )
Individual Performance Studies
Applied Music Area
4 cr from Mus 12 xx , all must be from the same instrument.

## Piano Proficiency

4 cr in Mus 1200—Piano unless it is the main applied instrument area. If so, then choose one of the following:
a) 4 cr in a secondary instrument or voice
b) 4 additional cr in Mus 1200 -Piano
c) 2 cr in Mus 1200 - Piano, plus 2 cr in Mus 1050 Accompanying
d) 4 cr in Mus 1320 - Concert Choir

Mus 1101—Core Studies I: Music Theory I, M/SR (4 cr)
Mus 1102-Core Studies I: Music Theory II, M/SR (4 cr)
Any two of the following three courses
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 3161—Introduction to World Music, IP (4 cr)

## Teacher Preparation Requirements

Students seeking teaching licensure in instrumental music $\mathrm{K}-12$ or vocal music K-12 should refer to the Education, Secondary (SeEd) section of this catalog.

## Music Course Descriptions

Mus 1000. Concert Attendance. (. 5 cr [max 3.5 cr ]; S-N only; prereq major or minor; fall, spring, every year)
To be taken by all music majors; involves attending at least 15 music concert offerings during the semester, both as a participant and as part of the audience.

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, odd 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 periodically)
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 for the Non-Music Major. (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.
Mus 1045. Class Guitar. (ArtP; 1 cr; special fee required; fall, spring, every year)
Introduction to guitar performance for students with no previous guitar experience. Students learn basic guitar skills, study beginning guitar technique, and learn to perform music. This class is not for students who have played guitar before.
Mus 1049. Introduction to American Popular Music. (Hum; 4 cr; spring, even years)
Survey of popular musical styles in America from the early 20th century to today.
Mus 1050. Accompanying. (ArtP; 1 cr [max 8 cr$]$; S-N only; prereq \#; fall, spring, every year)
Students who accompany private lessons and recitalists may receive credit. Accompanying assignments are made through consultation with the piano faculty.
Mus 1061. Introduction to World Music. (IP; $4 \mathrm{cr} ;=[$ Mus 3161]; non-music major enrollment only; music majors, minors should register for 3161; fall, every year)
Survey of primarily non-Western music cultures, emphasizing the development of an appreciation for the music and an understanding of its significance in its culture of origin. For non-music majors.

Mus 1070. Instrumental Chamber Ensemble. (ArtP; 1 cr [max 8 cr ]; prereq \#; fall, spring, every year)
Performance of instrumental chamber music. Groups are formed according to the interests of students and availability of materials.
Mus 1080. Jazz Combo. (ArtP; 1 cr [max 8 cr]; prereq \#; fall, spring, every year)
Performance of instrumental jazz music with emphasis on improvisation.
Mus 1090. Vocal Chamber Ensemble. (ArtP; 1 cr [max 8 cr]; prereq \#; fall, spring, every year)
Performance of vocal ensemble music especially written for smaller groups.
Mus ilol. Core Studies I: Music Theory I. (M/SR; 4 cr; prereq major or minor or \#, concurrent enrollment in piano lessons until the piano proficiency test is passed; fall, every year)
First course in a series of four. Basic harmonic techniques, initial analysis of scores, and introduction to four-part writing. Must have adequate skills in grand staff music reading at the start of the course.
Mus 1102. Core Studies I: Music Theory II. (M/SR; 4 cr; prereq 1101, major or minor or \#, concurrent enrollment in piano lessons until the piano proficiency test is passed; spring, every year)
Harmonic progression and modulation, seventh chords, secondary dominants and sevenths, analysis of scores with attention to two- and threepart forms.
Mus 1ווו. Functional Keyboard for the Music Major I. (ArtP; 1 cr; prereq coreq 1101; special fee required; fall, every year)
Beginning instruction for music majors and minors whose principal performing medium is voice or non-keyboard instrument; skill development in sight reading, technique, harmonization, simple literature.
Mus 1112. Functional Keyboard for the Music Major II. (ArtP; 1 cr; prereq ו111, coreq 1102; special fee required; spring, every year) Continued beginning instruction begun in Mus 1111 for music majors and minors whose principal performing medium is voice or non-keyboard instrument; includes sight reading, technique, harmonization, transposition, improvisation, simple literature.
Mus 1200-1223. Individual Performance Studies. (ArtP; 1 cr [max 8 cr] per sem for each; prereq \#; special fee required; fall, spring, every year) Private instruction in the following areas is open to all students. It is recommended that music majors fulfill their requirement of 7 credits in successive enrollments in order to maintain continuous emphasis in the major performance area. The 3200 series is intended for music students who have achieved an advanced performance level. A jury examination in the major performance area is required to progress to the advanced performance series. The examination provides an effective check on the music student's progress. All music majors and other students who anticipate applying for the jury exam should enroll under A-F grading only.

Note: Applied music instructors are not expected to make up sessions for absences from scheduled lessons.

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Mus 1200. Piano.
    Mus 1201. Piano Accompanying.
    Mus 1202. Organ.
    Mus 1203. Harpsichord.
    Mus 1204. Voice.
    Mus 1205. Violin.
    Mus 1206. Viola.
    Mus 1207. Cello.
    Mus 1208. Double Bass.
    Mus 1209. Flute.
    Mus 1210. Oboe.
    Mus 1211. Clarinet.
    Mus 1212. Saxophone.
    Mus 1213. Bassoon.
    Mus 1214. Trumpet.
    Mus 1215. French Horn.
    Mus 1216. Trombone.
    Mus 1217. Baritone.
    Mus 1218. Tuba.
    Mus 1219. Percussion.
    Mus 1220. Recorder.
    Mus 1221. Guitar.
    Mus 1222. Electric Bass.
    Mus 1223. Composition.
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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 1330. 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 1360. Concert Choir Tour. (. 5 cr [max 2 cr ]; S-N only; prereq coreq 1320, \#; a program fee is attached to this course to cover the expenses of the concert tour; spring, every year)
Participation in the spring concert tours undertaken by the UMM Concert Choir. A program fee is attached to this course to cover the expenses of the concert tour.

Mus 1370. String Orchestra. (ArtP; 1 cr [max 8 cr]; A-F only; fall, spring, every year)
The study and preparation of standard string orchestral works for performance at several public concerts and appearances each semester. The study of basic orchestral procedure.

## Mus 1401. English, Italian, German, and French Diction for Singers.

(ArtP; 1 cr; A-F or audit; spring, even 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 1411. Vocal Performance Workshop. (ArtP; 1 cr; prereq \#; spring, offered periodically)
Practical introduction to vocal performance. Students become familiar with a number of operas and musical comedies and perform selections emphasizing ensemble work.
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-ninth, eleventh, and thirteenth chords; altered dominants and chromatic mediants; analysis of scores including nonfunctional harmony; and twelve-tone techniques.

Mus 2111. Functional Keyboard for the Music Major III. (ArtP; 1 cr; prereq ו112, coreq 2101; special fee required; fall, every year)
Elementary to early intermediate instruction for music majors and minors whose principal performing medium is voice or non-keyboard instrument; continued skill development begun in Mus 1112; introduction of easy solo and ensemble literature.

Mus 2112. Functional Keyboard for the Music Major IV. (ArtP; 1 cr; prereq 211ו, coreq 2102; special fee required; spring, every year)
Intermediate instruction for music majors and minors whose principal performing medium is voice or non-keyboard instrument; continued skill development begun in Mus 2111; introduction of intermediate solo and ensemble literature.
Mus 2301. Instrumental Techniques-Woodwind. (1 cr; prereq major or minor or \#; fall, offered periodically)
Practical study to develop elementary skills as well as a basic teaching knowledge and understanding of performance problems of the woodwind instruments.

Mus 2302. Instrumental Techniques-Brass and Percussion. (1 cr; prereq major or minor or \#; spring, offered periodically)
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 2303. Instrumental Techniques-Strings. (1 cr; prereq major or minor or \#; fall, offered periodically)
Practical study to develop elementary skills as well as a basic teaching knowledge and understanding of performance problems of the string instruments.

Mus 2304. Vocal Techniques. (1 cr; prereq major or minor or \#; spring, odd years)
Practical study to develop elementary skills as well as a basic teaching knowledge and understanding of performance problems of the voice.

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.
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.
Mus 3061. Guitar Pedagogy. (ArtP; 2 cr; prereq 1221 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.

Mus 3065. Introduction to Creative Guitar Repertoire. (ArtP; 1 cr [max 2 cr]; prereq 1221 or \#; fall, offered periodically)
Exploration of guitar styles and genera. Rather than master each style, students write original pieces or arrangements based on each style. Professional musicians present guest lectures and give private lessons. Course culminates in a concert featuring student compositions.
Mus 3101. Core Studies III: Medieval, Renaissance, and Baroque Music. (Hist; 4 cr; prereq 1102, major or minor or \#; fall, odd years) 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, odd years) Historical development of Western music and representative literature of the various periods and styles.
Mus 3161. Introduction to World Music. (IP; $4 \mathrm{cr} ;=$ [Mus 1061]; prereq major or minor; non-music majors or minors should register for 1061; fall, every year)
Survey of primarily non-Western music cultures, emphasizing the development of an appreciation for the music and an understanding of its significance in its culture of origin. For music majors.
Mus 3200-3223. Advanced Individual Performance Studies. (ArtP; 1 cr [max 8 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. A jury examination is required for advanced performance study. 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 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; A-F only; prereq 1102 or \#; spring, offered periodically)
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; $2 \mathrm{cr} ;$ A-F only; prereq 1102 or \#; spring, offered periodically)
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 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, even 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, odd years) Contrapuntal techniques of the 18 th century with references to earlier 16th century species counterpoint.
Mus 4103. Seminar: Topics in Music History. (Hist; 4 cr; prereq 1102, major or minor or \#; spring, even years)
A small, discussion-oriented seminar emphasizing a multi-faceted approach to an advanced musical topic. Topics vary each semester the course is offered and are determined by the instructor. Student work culminates in a semester-long research project and presentation.
Mus 4901. Senior Project and Portfolio. (1 cr; S-N only; prereq major, \#; 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 \& 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 periodically)
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 periodically) 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 periodically)
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.

NSci 2102. Field Experience in Natural History: The Italian Alps. (Sci; 4 cr; summer, offered periodically)
Study of the geology, 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 periodically)
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 periodically)
Special relativity: covariance, Lorentz transformation, Minkowski diagrams, the nature of spacetime. The Cosmological Principle. Hubble's Law. The geometry, kinematics and dynamics of Friedmann models. Horizons. The age of the universe. Steady-state theory and kinematic relativity.

## 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) or Phil 1801-THINK: An Introduction to Philosophy, IC (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 $4 \times x x$ 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 $\mathrm{S}-\mathrm{N}$ 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.

## Required Courses for the Program

## Required Courses

Take 8 or more credit(s) from the following:
Phil 2101—Introduction to Symbolic Logic, M/SR (4 cr)
Phil 2111—Introductory Ethics, Hum (4 cr)
Phil 1101—Introduction to Philosophy, Hum (4 cr)
or Phil 1801—THINK: An Introduction to Philosophy, IC (4 cr)

## Core Courses

Take 8 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)

## Philosophy Course Descriptions

Phil ו10ו. Introduction to Philosophy. (Hum; $4 \mathrm{cr} ;=$ [Phil 180ı]; fall, spring, offered periodically)
An introduction to fundamental philosophical problems in areas such as metaphysics (what exists?), epistemology (what can we know? and how can we know it?), and ethics (what actions are moral and immoral? and what is the good life?), with an emphasis on developing the reading, writing, and analytical skills required for philosophical investigation.
Phil 1801. THINK: An Introduction to Philosophy. (IC; 4 cr ; =[Phil ו101]; prereq new college student in their first semester of enrollment at UMM; fall, offered periodically)
How should we live our lives? What happens after death? What is the relationship between the mind and body? Does God exist? Why do bad things happen to good people? Examine classical works in philosophy that address these big questions about human nature and its place in the universe. Authors include: Plato, Aristotle, Epictetus, Lucretius, Sextus Empiricus, Descartes, and Hume. Work on the development of philosophical writing, reading, and speaking skills.
Phil 1802. Philosophy and Pop Culture. (IC; 4 cr ; prereq new college student in their first semester of enrollment at UMM; fall, offered periodically)
An introduction to traditional issues in philosophy through the lens of characters presented in various pop cultural media.
Phil 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.
Phil 2101. Introduction to Symbolic Logic. (M/SR; 4 cr; fall, every year) An introduction to formal or deductive logic, including basic concepts of logical argumentation; Aristotelian logic; and symbolic translations, truth tables, and theory of deduction. Samples from political speeches, philosophical essays as well as original LSAT questions are analyzed.
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.
Phil 2112. Professional Ethics. (E/CR; 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.
Phil 2113. International and Biomedical Ethics. (Hum; 4 cr ; spring, offered periodically)
A general survey of topics in international and biomedical ethics. Topics may include: nuclear deterrence, humanitarian intervention, just war theory, famine relief, global justice, abortion, euthanasia, doctor-patient relationships, clinical trials, animal experimentation, and genetic engineering.
Phil 2121. Philosophy of Religion. (Hum; 4 cr; spring, offered periodically) A selection of main philosophical issues concerning religion such as the notion of a divinity, the attempts to prove or refute the existence of a divine being, the relationship between faith and reason, the link between religion and morality, the knowledge of a divinity.
Phil 2141. Analytic Feminism. (Hum; 4 cr; spring, offered periodically) Applies an analytical approach to issues discussed in feminist writings. A mixture of lecture and discussion. Requirements include essay exams, papers, attendance, service-learning projects with related reflective journals, and class participation.
Phil 2151. Philosophy of Mind. (Hum; 4 cr; fall, spring, offered periodically)
An introduction to several problems in the philosophy of mind, such as the mind/body problem, consciousness, and psychological explanation.
Phil 2161. Philosophy and Film. (Hum; 4 cr; spring, every year) Addresses some traditional aesthetic questions about the status of film as well as examining film to be a form of philosophy. Also, the role of film as social commentary is discussed.
Phil 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.

Phil 3101. Metaphysics. (Hum; 4 cr ; prereq 1101 or 2101 or 2111 or \#; spring, odd years)
Explores fundamental metaphysical issues such as the nature of reality, the notion of personal identity, the relationship between language,
thought, minds, and the world. Philosophical works of both classic and contemporary philosophers such as Plato, Aristotle, Quine, Putnam, and Kripke are discussed.
Phil 3112. Free Will. (Hum; 4 cr; prereq 1101 or 2101 or 2111 or \#; spring, offered periodically)
Explores ancient and contemporary debates surrounding the nature of free will, its plausibility given prevailing theories of physics and mind, and its value. Possible topics include the relevance of free will to autonomy, moral responsibility, and living meaningfully.
Phil 3121. Political Philosophy. (SS; 4 cr; prereq 1101 or 2101 or 2111 or \#; fall, even years)
Explores fundamental issues in political philosophy (e.g., political authority; distributive justice; nature, origin, and justification of the state; natural and civil rights) by, among other things, an examination of the works of philosophers such as Plato, Hobbes, Mill, and Rawls.
Phil 3131. Philosophy of Law. (SS; 4 cr; spring, odd years)
Critical examination of theoretical and practical normative issues in the philosophy of law, especially questions regarding the justification of punishment.
Phil 3141. The Theory of Knowledge. (Hum; 4 cr; prereq 1101 or 2101 or 2111 or \#; fall, even years)
Explores historical and contemporary views on the limits, justification, and nature of human knowledge. Topics include experiential versus a priori knowledge, the nature of belief, skepticism, and different theories of justification.
Phil 3151. History of Ancient Philosophy. (Hist; 4 cr; prereq 1101 or 2101 or 2111 or \#; fall, even years)
Explores the views of philosophers such as Plato, Aristotle, Epicurus, and the Stoics. Possible topics include ancient views on the nature and possibility of knowledge, the relationship of the soul to the body, and what the good life is for a human being.
Phil 3162. The Scottish Enlightenment: Text and Contexts. (IP; 4 cr ; =[Hist 3162]; summer, offered periodically)
Same as Hist 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 smallgroup discussions with recognized experts in the study of the Scottish Enlightenment. Includes visits to historically significant cities and sites.
Phil 3171. History of Modern Philosophy. (Hist; 4 cr ; prereq 1101 or 2101 or 211 or \#; spring, odd years)
Explores views of philosophers such as Descartes, Leibniz, Berkeley, Hume, and Kant. Possible topics include the relationship of the mind to the body, and whether and how it is possible to have knowledge of the external world.
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 211 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 $2 x x x$ or \#; fall, spring, offered periodically)
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 nonexistence makes on the significance of our lives.
Phil 4100. Moral Issues and Theories. (Hum; 4 cr [max 8 cr ]; prereq 2111 or \#; fall, even years)
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 4וII. Ethical Theory. (Hum; 4 cr; prereq 2111 or \#; spring, odd 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, even 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 413ı. Personal Identity, Proper Names, and Essences. (Hum; 4 cr; prereq 1101 or 2101 or 2111 or \#; fall, spring, offered periodically) A seminar primarily devoted to the discussion of readings, i.e., Naming and Necessity by Saul Kripke and Reasons and Persons by Darek 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 4901. Senior Philosophical Defense. (2 cr; A-F only; prereq phil major; 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.

## Physical Education and Athletics

(See Sport Studies and Athletics.)

## Physics (Phys)

## Division of Science \& 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.

## Required 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 (4 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, Envt (4 cr)
Phys 2302-The Physics of Sustainable Energy, Envt (4 cr)
Phys 2401—Optics, Sci-L (4 cr)
Phys 3002-Biological and Medical Physics, Sci (4 cr)
Phys 3003 - Computer Modeling of Materials, Sci ( 4 cr )
Phys 3401 -Experimental Physics, Sci-L (4 cr)
Phys 3501—Statistical Physics, Sci (4 cr)
Phys 3993, 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

## 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, Envt (4 cr)
Phys 2302-The Physics of Sustainable Energy, Envt (4 cr)
Phys 2401 —Optics, Sci-L (4 cr)
Phys 2993 —Directed Study ( $1-5$ cr)
Phys 3002—Biological and Medical Physics, Sci (4 cr)
Phys 3101—Classical Mechanics, 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-N 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; $5 \mathrm{cr} ;$ no cr for students who have received cr for Phys 1051; 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, offered periodically)
Wave characteristics, sound properties, resonance, the human voice and hearing, basic musical instruments, analysis and synthesis of complex waves, acoustics.

Phys 1063. Physics of Weather. (Envt; 4 cr; fall, even 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 1064. High Altitude Ballooning: An Exploration of Near Space. (IC; $2 \mathrm{cr} ;$ A-F only; prereq new college student in their first semester of enrollment at UMM; launch and recovery is a required class activity tentatively scheduled for a Saturday about two thirds of the way through the semester; fall, offered periodically)
In this hands-on course, students design and build mini-spacecraft and use (relatively) inexpensive high-altitude helium balloons to launch them into near-space (the upper reaches of the atmosphere), which has many of the same physical properties as outer space. The launch and recovery is a required class activity tentatively scheduled for a Saturday about two thirds of the way through the semester. The remainder of the semester involves data analysis from the balloon mission as well as lectures, discussions, and activities associated with full-fledged spaceflight, including the scientific accomplishments and engineering challenges of past, current, and future missions.
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)
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 1102. General Physics II. (Sci-L; 5 cr; prereq 1101, Math 1102 or \#; fall, every year)
Coulomb's law, electric field, Gauss's law, electric potential, capacitance, dielectrics, current, resistance, circuits, magnetic field, Ampere's law, inductance, Faraday's law, AC circuits, Maxwell's equations, electromagnetic waves, nature of light, reflection, refraction, optical instruments, interference, diffraction. (4 hrs lect and rec, 2 hrs lab)

Phys 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.
Phys 2101. Modern Physics. (Sci-L; 5 cr; prereq 1102, Math 2401 or \#; spring, every year)
Special relativity, quantum nature of matter and radiation, BohrSommerfeld 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 2201. 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, pn 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 2301. Atmospheric Physics. (Envt; 4 cr; prereq 1092 or 1102, Math 1102; fall, odd 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)
Phys 2302. The Physics of Sustainable Energy. (Envt; 4 cr; A-F only; prereq 1091 or 1101; spring, odd years)
Introduction to the physics necessary to quantify aspects of energy generation, transport, and consumption. These tools are used to analyze the feasibility of meeting energy demands with renewable energy sources. Content is designed for students interested in the environmental sciences and is centered on renewable energy, consumption, and potential environmental costs.
Phys 2401. Optics. (Sci-L; 4 cr; prereq 1102; spring, odd 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 3002. Biological and Medical Physics. (Sci; 4 cr; prereq 1101, 1102; 2101 recommended; fall, odd years)
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 periodically)
The description of materials as assemblies of microscopic particles. The various approximations for interparticular 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]; A-F only; prereq 1101, 1102; 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, even years)
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 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, even 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; 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 4901. 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 comprehensive study of the behaviors, organizations, institutions and philosophical foundations of political life at the individual, state, national and international settings. The major program is designed to prepare students for lifelong civic engagement and leadership in democratic society as well as intercultural competence as global citizens. 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. 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

Take 2 or more of the 1xxx courses PLUS Pol 2001 AND Pol 4905 AND Stat 1601 (or Stat 2601).
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)
or Stat 2601 —Statistical Methods, M/SR (4 cr)

## Electives

Of the 24 additional credits, at least one course must be at the $4 x x x$ 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 or the requirement for one 4 xxx political science course. 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 3233 -Civil Liberties and American Politics, E/CR (4 cr)
Pol 3234 -Race, Class, and Power: Social Movements and Interest Groups in U.S. Politics, HDiv (4 cr)
Pol 3261 -State and Local Politics, SS (4 cr)
Pol 3263 -Political Psychology, SS (4 cr)
Pol 3272—Making Environmental Public Policy, Envt (4 cr)
Pol 4251 —Political Participation and Voting Behavior, SS ( 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 3461 -Diplomatic Negotiations, IP (4 cr)
Pol 3475-International Human Rights, IP (4 cr)
Pol 3501-Government and Politics of Asia, SS (4 cr)
Pol 3503-Women in Politics Worldwide, IP (4 cr)
Pol 3504—Latin American Politics, IP (4 cr)
Pol 4451-Comparative Foreign Policy, IP (4 cr)
Pol 4452-International Relations, IP (4 cr)
Pol 4453 -Russian Politics and Foreign Policy, 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 4xxx

## Political Science 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

These 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 Theory, 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 Theory, 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 3233 -Civil Liberties and American Politics, E/CR (4 cr)
Pol 3234—Race, Class, and Power: Social Movements and Interest Groups in U.S. Politics, HDiv (4 cr)
Pol 3261—State and Local Politics, SS (4 cr)
Pol 3263 —Political Psychology, SS (4 cr)
Pol 3272-Making Environmental Public Policy, Envt (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 3461 —Diplomatic Negotiations, IP (4 cr)
Pol 3475-International Human Rights, IP (4 cr)
Pol 3501-Government and Politics of Asia, SS (4 cr)
Pol 3503-Women in Politics Worldwide, IP (4 cr)
Pol 3504 -Latin American Politics, IP (4 cr)
Pol 3996 -Field Study in Political Science ( $1-16 \mathrm{cr}$ )
Pol 4251-Political Participation and Voting Behavior, SS (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

## Teacher Preparation Requirements

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

## 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 1811. War and Terrorism. (IC; 2 cr ; prereq new college student in their first semester of enrollment at UMM; fall, offered periodically) An in-depth look into war and terrorism from 1914 to the present. Why do nations go to war? Why do people resort to terrorism? How do we prevent war/terrorism and preserve peace? Grapple with these questions and by the end of the term, acquire a rich, sophisticated understanding of war/terrorism and independent, critical thinking skills on international conflicts as a whole.
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-science 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, odd years)
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.

Pol 3211. The American Presidency. (SS; 4 cr ; prereq 1201 or \#; Stat 1601 or Stat 2601 recommended; spring, even 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.
Pol 3233. Civil Liberties and American Politics. (E/CR; 4 cr; prereq 1201; spring, even years)
Overview of the contested history of civil liberties in the United States. Topics include a discussion of the role of civil liberties in American political culture and the theoretical foundations of civil liberties as a concept. Survey of changing Supreme Court interpretations of the Bill of Rights and when and why its opinions on such subjects as freedom of speech have varied over time. Also examined are factors which have contributed to support and opposition to civil liberties throughout the history of the United States within the public as a whole.

Pol 3234. Race, Class, and Power: Social Movements and Interest Groups in U.S. Politics. (HDiv; 4 cr; prereq 1201; fall, even years) A broad overview of social movements and interest groups. Using a case study approach, the class considers the question of when and why social movements and interest groups in American politics arise and what makes them more or less successful.

## Pol 3261. State and Local Politics. (SS; 4 cr; prereq 1201 or \#; spring, odd

 years)Examination of the ways American democracy functions on the subnational level in states, rural communities, and urban centers. Analysis of principles, organizations, procedures, and functions of state and local government, both urban and rural, in the United States, with particular emphasis on comparing state politics and policy outcomes.

Pol 3263. Political Psychology. (SS; 4 cr; prereq 1201; Psy 1051 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 3272. Making Environmental Public Policy. (Envt; 4 cr; prereq 1101 or 1201 or 1401; spring, even years)
Exploration of the domestic and international politics of environmental and energy policy making. Focus on theoretical frameworks for policy making and political behaviors surrounding development of environmental and energy policies. Includes the applications of political dynamics and principles to specific areas of environmental and energy policy. Emphasis also given to politics of policy implementation.
Pol 3351. Ancient and Medieval Political Thought. (Hum; 4 cr ; prereq 1101 or \#; spring, odd 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, even 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 periodically)
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, summitry, 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.

Pol 3475. International Human Rights. (IP; 4 cr; prereq 1401 or \#; spring, odd years)
Explores the historical and philosophical development of concepts of human rights and the contemporary international political and legal frameworks to address rights. Analyzes contemporary concerns about political, economic, and social rights, as well as specific human rights topics like human trafficking and war crimes. Compares American, European, Asian, and Developing World conceptions and critiques of human rights.

Pol 3501. Government and Politics of Asia. (SS; 4 cr; prereq 1301 or \#; spring, offered periodically)
Examination of governments, political and leadership changes, and economic developments in China, Japan, and Korea. Modernization, democratization, political pluralism, revolution, authoritarianism, and civilmilitary relations.
Pol 3502. Government and Politics of Europe. (SS; 4 cr ; prereq 1301 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 3503. Women in Politics Worldwide. (IP; 4 cr; prereq 1201 or \#; spring, odd years)
Examines the ways gender influences politics throughout the world. Topics covered include: the "gender gap" and voter turnout, women's involvement in linkage organizations, such as parties and interest groups, and finally policy outcomes regarding women in different kinds of political systems.
Pol 3504. Latin American Politics. (IP; 4 cr; prereq 1401 or \#; spring, even years)
A comparative examination of central issues in and components of Latin American political life, with a particular focus on economic development, political development of democratic regimes, political violence and human rights, and the region's role in the world. Countries analyzed may include Argentina, Brazil, Chile, Colombia, El Salvador, Mexico, Peru, and Cuba.
Pol 3514. Pyramids and Politics on the Nile . (IP; 4 cr; prereq \#; summer, offered periodically)
Four-week study-abroad course on Egyptian political history with an emphasis on the environmental challenges of the Nile River Valley. Guided excursions, guest speakers, and individual exploration at significant political, historical, and cultural sites in the Cairo area and along the Nile Valley from Aswan to Alexandria.
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 \#; 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, even 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, odd years)
Relationships between mass media, government, and public in American Democracy. Democratic theory and media/press, role of informed citizenry in theories of U.S. democracy, role of media in informing the U.S. citizenry. Ways media influences public opinion, relationship of media, public opinion, and elites in politics.
Pol 4301. Contemporary Political Thought. (Hum; 4 cr; prereq 1101, 2001 or \#; spring, odd years)
A survey of social and political thought in the 20th and 21st centuries.
Pol 4302. International Comparative Political Theory. (IP; 4 cr ; prereq 1101, 2001 or \#; spring, even 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 periodically)
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.

Pol 4453. Russian Politics and Foreign Policy. (IP; 4 cr; prereq 1401, 2001 or \#; spring, odd years)
Domestic and foreign policies of the former Soviet Union from the Bolshevik Revolution to the present. Nature of the Soviet empire, implosion of the Soviet Union, Russian Federalism, democratic and market reforms, ethnic conflicts, nuclear strategy, military policy, and diplomatic style.
Pol 4905. Senior Research Seminar in Political Science. (SS; 2 cr; prereq 2001, Stat 1601 or Stat 2601, at least one Pol 4xxx course; fall, spring, every year)
Guided research in political science. Requires the refinement and expansion of a research paper students previously completed in a 4000-level political science course. The end result of this revision and expansion is an original, significant research paper of a substantial length. Also requires that the student make an oral presentation of the final work to the discipline faculty and graduating seniors. With faculty approval, the student may produce such a paper based on a research paper previously completed in a 3000-level political science course.

Pol 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.

## Psychology (Psy)

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 (4 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)
Psy 4301—Clinical Assessment and Therapeutic Interventions, 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:
Psy 3501—Social Psychology, SS (4 cr)
Psy 3502—Psychology and Law, SS (4 cr)
Psy 3503-Consumer Psychology, SS (4 cr)
Psy 3504 -Educational 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 4101 -Intro to Prof Conduct, Legal Constraints, Ethics in Human Services, E/CR (2 cr)
Pol 3263-Political Psychology, SS (4 cr)
Psy 2993—Directed Study (1-5 cr)
Psy 3611—History and Philosophy of Psychology, Hist (4 cr)
Psy 3800 -Research Practicum (1-12 cr)
Psy 3993 —Directed Study ( $1-5$ cr)
Psy 4770 —Empirical Investigations in Psychology, SS (1-6 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 $\mathrm{S}-\mathrm{N}$ unless offered $\mathrm{S}-\mathrm{N}$ 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/SR (4 cr)
or Stat 2601—Statistical Methods, M/SR (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 3112-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 (4 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 4101 -Helping Relationships, SS (4 cr)
Psy 4301—Clinical Assessment and Therapeutic Interventions, SS (4 cr)

## Developmental Psychology

Take 0-1 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 0-1 course(s) from the following:
Psy 3501—Social Psychology, SS (4 cr)
Psy 3502—Psychology and Law, SS (4 cr)
Psy 3503-Consumer Psychology, SS (4 cr)
Psy 3504—Educational 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)
Pol 3263 -Political Psychology, SS (4 cr)
Psy 2993 —Directed Study ( $1-5 \mathrm{cr}$ )
Psy 3611—History and Philosophy of Psychology, Hist (4 cr)
Psy 3800 —Research Practicum ( $1-12 \mathrm{cr}$ )
Psy 3993 —Directed Study ( $1-5$ cr)
Psy 4770 —Empirical Investigations in Psychology, SS (1-6 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)

## 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.

## Psy 1061. Introduction to the Development of the Child and Adolescent.

(SS; 4 cr; prereq 1051 or \#; spring, every year)
Theory, 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 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 periodically) 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.
Psy 1811. My Wonderful Life: Career and Life Planning for College Students. (IC; 2 cr ; prereq new college student in their first semester of enrollment at UMM; fall, offered periodically)
Now that you got into college, what do you think your life will be like when you finish? By means of assigned texts, career assessments, discussions, presentations, short writing assignments, and Web searching, students explore career options and learn ways to achieve their goals. We will: 1) talk about the choices students have in today's global community and workplaces; 2) consider research about lifespan development, the meaning of life, and career-planning; 3) learn practical tips for studying, goal-setting, and resource and stress management; 4) acquire technological library and bibliographic skills; 5) learn through autobiographies or other writings about the ways that higher education can open doors and change lives; and then 6) focus on how class members can make their choices a reality.

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 Stat 2601 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.
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 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 theory, attention, speech perception, and perceptual-motor coordination. 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 3201. Comparative Psychology. (Sci-L; 4 cr; prereq [1051, 2001] or Biol 2111; spring, every year)
Comparison of the causations of human and non-human animal behavior from both an evolutionary and biological point of view. The contributions of evolutionary selection pressures, genetics, environment, learning, and culture on the expression of behavior in a wide variety of species, through topics such as adaptation, fitness, altruism, social behavior, parental care, reproductive behavior, mating systems, and aggression. Focus on explaining modern human behavior as informed by non-human behavior. Includes lab component.

Psy 3211. Biological Psychology. (Sci-L; 5 cr; prereq [1051, 2001] or Biol 1101 or Biol וווו; 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 bases 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; 4 cr ; prereq (3201 or 3211) or Biol 2111 or \#; spring, odd years)
Exploration of proximate and ultimate influences on female behavior in human and nonhuman species. Topics include sexual differentiation, gender differences in cognition, biological basis of sexual orientation, female sexual selection, dominance, and other topics of interest to students. Readings consist of primary journal articles.
Psy 3261. Human Sexuality. (SS; 4 cr; prereq 1051, 2001; no credit for students who have received cr for Psy 1071; fall, every year)
Survey of aspects of human sexuality, including intimacy and communication; male and female anatomy, physiology, and response; development of sexual differentiation, gender identity, gender role, and gender orientation; varieties of sexual expression; pregnancy and child birth; contraception and disease prevention; sexual coercion and abuse; sexual dysfunctions and their treatment.
Psy 3302. Personality. (SS; 4 cr; prereq 1051 or \#; spring, every year) Nature of personality constructs and theories. Conscious vs. nonconscious 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.
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 3502. Psychology and Law. (SS; 4 cr; prereq 1051; spring, even years) A psychological perspective to the law and to the legal system. Topics include jury decision making, forensic psychology, trial processes, eyewitness testimony, and sentencing.

Psy 3503. Consumer Psychology. (SS; 4 cr; prereq Stat 1601 or Stat 2601 or \#; spring, odd years)
Psychological basis for understanding consumers. Some of the topics include consumer behavior, consumer cognitive processes, and consumer judgments and decisions.
Psy 3504. Educational Psychology. (SS; 4 cr; prereq 1051; spring, offered periodically)
Discussion of psychological principles/theories in relation to learning in academic settings. Topics may include: a consideration of developmental and social issues that are likely to impact the learner; a discussion of individual differences in learning; an examination of different theoretical approaches to learning applied specifically to educational settings; an analysis of factors related to student motivation and behavior; and a discussion of issues related to testing and measurement in academic settings.
Psy 3513. Negotiation. (SS; 4 cr; =[Mgmt 3513]; prereq 3501 or Mgmt 3221 or Psy/Mgmt 3701; spring, offered periodically)
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 world views, communication styles, acculturation, prejudice, white privilege, identity development, physical and mental health, and multicultural competencies.
Psy 3611. History and Philosophy of Psychology. (Hist; 4 cr; prereq 1051 or \#; spring, even years)
Historical roots and comparative features of major theoretical systems in psychology, including scientific methodology, research interests, and techniques. Movements within psychology that are discussed include: structuralism, functionalism, behaviorism, Gestaltism, psychoanalytic, and existential movements and their modern syntheses, as well as other topics of interest to students.

Psy 3701. Organizational Behavior. (SS; $4 \mathrm{cr} ;=[$ Mgmt 3701]; prereq Stat 1601 or Stat 2601, jr or sr; fall, offered periodically)
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. (1-12 cr [max 12 cr$]$; S-N only; 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 4102. Intro to Prof Conduct, Legal Constraints, Ethics in Human Services. (E/CR; 2 cr ; prereq jr, 8 cr 3 xxx or 4xxx human services courses or \#; no credit for students who have received credit for IS 4101; fall, spring, every year)
Concepts of professional ethics in human services professions; ethically relevant legal mandates and constraints on professional practice; practical problems in the application of ethical principles.

Psy 4301. Clinical Assessment and Therapeutic Interventions. (SS; 4 cr ; prereq 3313 or 4101; spring, every year)
Evaluation of psychological assessments and interventions from different perspectives. Topic examples: structured and unstructured assessments; career counseling and assessment; motivational interviewing; family and couples therapy; interpersonal therapy; group therapy; and solution-focused therapy.
Psy 4770. Empirical Investigations in Psychology. (SS; 1-6 cr [max 12 cr ]; prereq 2001, \#; SS [if taken for 2 or more cr]; only 12 cr may be applied to the BA or the Dsy major; fall, spring, every year)
Independent research study by a student in any area of psychology. A research proposal may be required by a faculty member prior to approval to enroll in the course.
Psy 4896. Field Experiences in Psychology. (SS; 1-4 cr [max 4 cr ; S-N only; 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; 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; A-F only; $=$ [Psy 4710]; prereq 2001, 311 or 3112, sr status, \#; 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; $4 \mathrm{cr} ;$ A-F only; =[Psy 4720]; prereq 2001, 3201 or 3211, sr status, \#; 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 ; A-F only; =[Psy 4730]; prereq 2001, 3302 or 3313, sr status, \#; 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.
Psy 4940. Advanced Seminar in Developmental Psychology. (SS; 4 cr; A-F only; =[Psy 4740]; prereq 2001, 3401 or 3402 or 3403 , sr status, \#; fall, every year)
Advanced seminar on selected topics in the area of 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.
Psy 4950. Advanced Seminar in Social Psychology. (SS; 4 cr; A-F only; =[Psy 4750]; prereq 2001, 3501, sr status, \#; spring, every year) Advanced seminar on selected topics in the area of 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.
Psy 4960. Advanced Seminar in Health Psychology. (SS; 4 cr; A-F only; =[Psy 4760]; prereq 2001, 3521, sr status, \#; fall, every year) Advanced seminar on selected topics in the area of Health 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 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.

## Secondary Education

(See Education, Secondary.)

## Social Science Major

Division of the Social Sciences
Objectives-Students will understand how each social science discipline structures and advances knowledge, raises and answers analytical questions, and deals with competing theories and the changing nature of the field. Students develop a sub-plan in a single discipline or an interdisciplinary social science area within the major.

## Program Requirements

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. 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 1111—Principles of Microeconomics, SS (4 cr)
Econ 1112—Principles of Macroeconomics, SS (4 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—Introductory 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.

## 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 Sub-plan
Anth 2101—Physical Anthropology, Sci-L (4 cr)
Anth 2103—Archaeology, SS (4 cr)
Anth 4411—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 in 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, Envt (4 cr)
Anth 3206-Ecological Anthropology, Envt (4 cr)
Anth 3402-Representations from the Field: American Indian Ethnography and Ethnohistory, 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 3701-Forensic Anthropology, Sci-L (4 cr)
Anth $2 \mathrm{xxx}, 3 \mathrm{xxx}, 4 \mathrm{xxx}$

## Sociology Electives

Take no more than 4 credit(s) from the following:
Soc 2101—Systems of Oppression, HDiv ( 4 cr )
Soc 3103-Research Methodology in Sociology, SS (4 cr)
Soc 3111—Sociology of Modernization, IP (4 cr)
Soc 3112_Sociology of the Environment and Social
Development, Envt (4 cr)
Soc 3121—Sociology of Gender and Sexuality, HDiv (4 cr)
Soc 3122—Sociology of Childhoods, HDiv (4 cr)
Soc 3123—Sociology of Aging, HDiv (4 cr)
Soc 3124—Sociology of Law, SS (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 3403-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, 3xxx, 4xxx

## Economics Sub-plan

This sub-plan requires a total of 23 credits.

## Required Courses for the Sub-plan

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

Take 6 or more credit(s) from the following.
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 3009—Political Economy, SS (4 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 3133-Economics of China, IP (2 cr)
Econ 3134 - Cooperative Business Model, SS ( 2 cr )
Econ 3141—Economic Development and Growth I, IP (2 cr)
Econ 3142-Economic Development and Growth II, IP (2 cr)
Econ 3153 - Contemporary Global Economic Issues, 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 ( $1-5 \mathrm{cr}$ )
Econ $3 x x x, 4 x x x$

## Gender, Women, and Sexuality Studies Sub-plan

This sub-plan requires a total of 24 credits.
Required Courses for the 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.

Note: Some of the courses carry prerequisites.
Primarily Gender, Women, and Sexuality Content
Take 16 or more credit(s) 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)
Engl 3332-African American Women Writers, HDiv (4 cr)
Fren 3028 -Early Modern Studies: Female Authorship and Medieval Canon Fodder, Hum (4 cr)
GWSS 4101—Feminist Theory, HDiv (4 cr)
Hist 1402-Women in U.S. History, HDiv (4 cr)
Hist 2704 -Gender, Women, and Sexuality in Medieval Europe, SS (4 cr)
Hist 2708-Gender, Women, and Sexuality in Modern Europe, IP (4 cr)
Hist 3707-Gender in East Asia, HDiv (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 ( 4 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)
Engl 3301—U.S. Multicultural Literature, HDiv (4 cr)
Engl 3522-Harlem Renaissance, HDiv (4 cr)
Eng1 4021—Research Seminar: British Literature of the Fin de Siecle, Hum (4 cr)
Engl 4031—Research Seminar: Renaissance Romance, Hum (4 cr)
Fren 1031-Modern Studies: The Modern Body in France, SS (4 cr)
Fren 1302-French Cinema, IP (4 cr)
Fren 1311-West African Francophone 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: Littèrature migrante, 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 3112-Sociology of the Environment and Social Development, Envt ( 4 cr )
Soc 3122—Sociology of Childhoods, HDiv (4 cr)
Soc 3123-Sociology of Aging, HDiv (4 cr)
Soc 3141—Sociology of Deviance, E/CR (4 cr)

## History Sub-plan

This sub-plan requires a total of 20 credits.
Required Courses for the Sub-plan
Hist 1111—Themes in World History, Hist (4 cr)

## Elective Courses

An additional 16 credits in history of which 12 credits are at 2 xxx 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.

## Elective Courses-1xxx

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

## Elective Courses-2xxx 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 2103-Medieval Europe, Hist ( 4 cr )
Hist 2151—Modern Europe, Hist (4 cr)
Hist 2251-American Indians and the United States: A History, HDiv (4 cr)

Hist 2352-The U.S. 1960s, Hist (4 cr)
Hist 2361—An Environmental and Geographic History of the United States, Envt (4 cr)
Hist 2452-Minnesota History, Hist (4 cr)
Hist 2551—Modern Japan, Hist (4 cr)
Hist 2552-History of Modern China, Hist (4 cr)
Hist 2554—Korean History, Hist (4 cr)
Hist 2704 -Gender, Women, and Sexuality in Medieval Europe, SS ( 4 cr )
Hist 2708-Gender, Women, and Sexuality in Modern Europe, IP ( 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 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 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 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 3381 -History of American Indian Nationalism and Red Power, 1920-Present, Hist (4 cr)
Hist 3451—Facing West, HDiv (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 3558-Shanghai: China's Model of Modernity, IP (4 cr)
Hist 3559-History of Religion in China, 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 3609-Natural Calamities: Disaster and Response in Latin American History, IP (4 cr)
Hist 3611-The Amazon in History, Hist (4 cr)
Hist 3707-Gender in East Asia, HDiv (4 cr)
Hist 3993, 4993-Directed Study (1-5 cr)
Hist $2 \mathrm{xxx}, 3 \mathrm{xxx}, 4 \mathrm{xxx}$

## Management Sub-plan

This sub-plan requires a total of 18 credits.

## Required Courses for the Sub-plan

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 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 3134-Cooperative Business Model, SS (2 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 (4 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 ( $1-5 \mathrm{cr}$ )
Mgmt 3xxx, 4xxx

## Political Science Sub-plan

This sub-plan requires a total of 16 credits.

## Elective Courses for the Sub-plan

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

## Elective Courses-1xxx-2xxx

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 or above

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 3233 -Civil Liberties and American Politics, E/CR (4 cr)
Pol 3234-Race, Class, and Power: Social Movements and Interest Groups in U.S. Politics, HDiv ( 4 cr )
Pol 3261 -State and Local Politics, SS (4 cr)
Pol 3263—Political Psychology, SS (4 cr)
Pol 3272-Making Environmental Public Policy, Envt (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 3461 -Diplomatic Negotiations, IP (4 cr)
Pol 3475-International Human Rights, IP (4 cr)

Pol 3501—Government and Politics of Asia, SS (4 cr)
Pol 3503-Women in Politics Worldwide, IP (4 cr
Pol 3504—Latin American Politics, 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 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

## Psychology Sub-plan

This sub-plan requires a total of 22 credits.

## Required Courses for the 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 (4 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)
Psy 4301-Clinical Assessment and Therapeutic Interventions, 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)
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.
Psy 3501—Social Psychology, SS (4 cr)
Psy 3502-Psychology and Law, SS (4 cr)
Psy 3503-Consumer Psychology, SS (4 cr)
Psy 3504-Educational 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 ( $1-2 \mathrm{cr}$ )
IS 4101-Intro to Prof Conduct, Legal Constraints, Ethics in Human Services, E/CR (2 cr)
Pol 3263-Political Psychology, SS (4 cr)
Psy 2993 —Directed Study ( $1-5$ cr)
Psy 3611-History and Philosophy of Psychology, Hist (4 cr)
Psy 3800 -Research Practicum (1-12 cr)
Psy 3993 -Directed Study ( $1-5$ cr)
Psy 4770—Empirical Investigations in Psychology, SS (1-6 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 Sub-plan

Soc 3103-Research Methodology in Sociology, SS (4 cr)
Soc 3403-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 4991 is strongly 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 and Ethnohistory, 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 3701 -Forensic Anthropology, Sci-L (4 cr)
Anth 4411—Seminar in Anthropological Methodology, E/CR (4 cr)
Anth 4901-Seminar in Anthropological Theory, SS (4 cr)
Anth $2 \mathrm{xxx}, 3 \mathrm{xxx}, 4 \mathrm{xxx}$
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 3112-Sociology of the Environment and Social Development, Envt ( 4 cr )
Soc 3121—Sociology of Gender and Sexuality, HDiv (4 cr)
Soc 3122-Sociology of Childhoods, HDiv (4 cr)
Soc 3123-Sociology of Aging, HDiv (4 cr)
Soc 3124-Sociology of Law, SS (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 4991—Sociology Independent Project Seminar (4 cr)
Soc 2xxx, 3xxx, 4xxx

## Social Science Major Course Descriptions

Anth 1ו1ו. 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.
Econ IIII. Principles of Microeconomics. (SS; 4 cr; prereq high school algebra or \#; fall, spring, every year)
Study of scarce resource allocation in a market economy. Supply and demand, consumer theory, theory of the firm, market structure, pricing of factors of production, income distribution and the role of government.

Econ 1112. Principles of Macroeconomics. (SS; $4 \mathrm{cr} ;$ 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.
Geog 2001. Problems in Geography. (Envt; 4 cr; spring, every year) Basic concepts and questions in the field of geography. The terminology and approaches of geographical inquiry and analysis, with emphasis on the spatial patterns and arrangements of human interaction with the landscape and the production of geographical knowledge.
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.

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.

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.
Soc 1101. Introductory Sociology. (SS; 4 cr; fall, spring, every year) Introduction to the field of sociology, the exploration of societies, and how societies operate. Sociology broadens social insights, fosters critical thinking, guides analytical thinking, and develops writing skills. By actively thinking about issues facing societies today, students learn to examine life situations and the influence of societies and groups on people's lives, careers, hopes, fears, and personalities. Emphasis on how society is stratified: how organizations and institutions influence the way people think, talk, feel, and act and how different groups (e.g., racial and ethnic) and divisions (e.g., gender and social class) within society have different access to power and privilege. People live their lives in relation to social and physical environments; sociologists study these environments and their effects on people's experiences and behavior.

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; 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 chi-squared tests; use of statistical computer packages.
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.

## 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 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 $\mathrm{D}+$ 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

The discipline strongly recommends Stat 1601.
Soc 1101—Introductory Sociology, SS (4 cr)
Soc 3103-Research Methodology in Sociology, SS (4 cr)
Soc 3403-Sociological Theory, SS (4 cr)
Soc 4991—Sociology Independent Project Seminar (4 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:
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 3112-Sociology of the Environment and Social
Development, Envt (4 cr)
Soc 3121—Sociology of Gender and Sexuality, HDiv (4 cr)
Soc 3122—Sociology of Childhoods, HDiv (4 cr)
Soc 3123-Sociology of Aging, HDiv (4 cr)
Soc 3124-Sociology of Law, SS (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 $2 \mathrm{xxx}, 3 \mathrm{xxx}, 4 \mathrm{xxx}$

Take no more than 8 credit(s) from the following:
Anth 1111—Introductory Cultural Anthropology, SS (4 cr)
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 and Ethnohistory, 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 3701—Forensic Anthropology, Sci-L (4 cr)
Anth 4411—Seminar in Anthropological Methodology, E/CR ( 4 cr )
Anth 4901—Seminar in Anthropological Theory, SS (4 cr) Anth $2 \mathrm{xxx}, 3 \mathrm{xxx}, 4 \mathrm{xxx}$

## Sociology Minor

## Minor Requirements

Up to 4 credits of coursework with a grade of D or $\mathrm{D}+$ 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 3103-Research Methodology in Sociology, SS (4 cr)
Soc 3403-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 4991 is 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 3112-Sociology of the Environment and Social Development, Envt (4 cr)
Soc 3121—Sociology of Gender and Sexuality, HDiv (4 cr)
Soc 3122-Sociology of Childhoods, HDiv (4 cr)
Soc 3123-Sociology of Aging, HDiv (4 cr)
Soc 3124-Sociology of Law, SS (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 4991—Sociology Independent Project Seminar (4 cr)
Soc $2 \mathrm{xxx}, 3 \mathrm{xxx}, 4 \mathrm{xxx}$

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 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 and Ethnohistory, 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 3701—Forensic Anthropology, Sci-L (4 cr)
Anth 4411—Seminar in Anthropological Methodology, E/CR (4 cr)
Anth 4901—Seminar in Anthropological Theory, SS (4 cr)
Anth $2 \mathrm{xxx}, 3 \mathrm{xxx}, 4 \mathrm{xxx}$

## Sociology Course Descriptions

Soc 1101. Introductory Sociology. (SS; 4 cr; fall, spring, every year) Introduction to the field of sociology, the exploration of societies, and how societies operate. Sociology broadens social insights, fosters critical thinking, guides analytical thinking, and develops writing skills. By actively thinking about issues facing societies today, students learn to examine life situations and the influence of societies and groups on people's lives, careers, hopes, fears, and personalities. Emphasis on how society is stratified: how organizations and institutions influence the way people think, talk, feel, and act and how different groups (e.g., racial and ethnic) and divisions (e.g., gender and social class) within society have different access to power and privilege. People live their lives in relation to social and physical environments; sociologists study these environments and their effects on people's experiences and behavior.
Soc 1811. Global Sociology: Migration, Economic Globalization, Class, and Gender Inequality. (IC; 2 cr ; prereq new college student in their first semester of enrollment at UMM; fall, offered periodically)
Examination of the global impact of migration on both societies receiving immigrants and societies from which people emigrate, the effect of economic globalization, class and gender inequality. A major goal of the course is to provide students with a systematic way of making sense of a rapidly changing and complex world. Learn from sociological perspectives what it means to live in an interdependent world.

Soc 1812. Human Rights in the Age of Globalization. (IC; 2 cr ; prereq new college student in their first semester of enrollment at UMM; spring, offered periodically)
Exploration of the relationship between globalization and human rights. Globalization as the driving force of capitalism has produced both positive and negative impacts on human rights. Optimists argue that integration into the global world of the free market will foster democracy and human rights, while critics challenge this optimism. Explores these contradictory views and processes. The course is interdisciplinary and integrates perspectives and concepts from different academic fields.

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 וווו 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 and ageism.

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 3103. Research Methodology in Sociology. (SS; 4 cr; prereq 1101; fall, every year)
An introduction to research procedures used in sociology. Developing a research design and applying it to a concrete problem. Questions of validity and reliability examined in the context of research projects developed by the students.

Soc 3111. Sociology of Modernization. (IP; 4 cr ; prereq ו1ורו or Anth 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 3112. Sociology of the Environment and Social Development. (Envt; 4 cr ; prereq 1101 or \#; fall, odd years)
Introduces students to the sociological study of the environment and social development. Examines the impact of international environmental and development efforts on individuals at the local level. Focuses on grassroots environmental activism and social development work. Explores and discusses power relations and systems of inequality within the context of environmental and social development efforts.

Soc 3121. Sociology of Gender and Sexuality. (HDiv; 4 cr; prereq 1101 or Anth ו1ו or \#; fall, every year)
Introduces students to the sociological study of gender and sexuality. Focuses on gender difference and gender inequality. Analyzes 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. Following a theoretical overview, examines how gender and sexuality affect everyday experiences.
Soc 3122. Sociology of Childhoods. (HDiv; 4 cr ; prereq 1101 or \#; spring, even years)
Introduces students to the sociological study of childhoods. Examines the interaction between societies and their youngest members-how societies shape children's lives through social institutions such as families, education, and the state. Takes a close look at children's access to privileges and resources as determined by children's experiences of race, gender, class, nationality, and sexual orientation.
Soc 3123. Sociology of Aging. (HDiv; 4 cr; prereq 1101; spring, every year) An introduction to sociology of aging. Examination of the major theories of social aging as well as the historical and cross-cultural variations in aging and differences by race, ethnicity, gender, and social class.
Soc 3124. Sociology of Law. (SS; 4 cr; prereq 1101; spring, every year) Explore the emergence and function of law through the lens of social theories. The course assumes law is embodied in the social structure of society; hence, it is the product of social interaction. Based on this assumption, it examines the role of law in maintaining and reproducing social order, class, race, and gender inequalities. The course is interdisciplinary and comparative in its scope and integrates jurisprudence and various social science theories.
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 3141. Sociology of Deviance. (E/CR; 4 cr; prereq 1101 or \#; spring, every year)
Introduces students to the sociological study of deviance. Explores the social reality of deviance within contemporary society and examines the social construction of deviant categories. Focuses on images of deviance as social constructs, rather than as intrinsic elements of human behavior. Investigates the complex relationships between individual behavior and social structure, with a focus on power, inequality, and oppression. Also, examines the socio-cultural definitions of morality and behavior.
Soc 3204. Culture, Food, and Agriculture. (Envt; 4 cr; =[Anth 3204]; prereq 1101 or Anth 111 or \#; spring, every year)
Same as Anth 3204. Examines the globalization of food systems utilizing a political ecology perspective 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. (HDiv; 4 cr; prereq 1101 or Anth ו111; fall, spring, offered periodically)
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; prereq ו1Oו or Anth וווו; spring, offered periodically)
The cultures and social statuses of women in several Muslim countries are examined and placed in their political, economic, and religious contexts.

Soc 3403. Sociological Theory. (SS; 4 cr; prereq 1101; 4 addtl cr in Soc recommended; fall, every year)
Survey of major developments in sociological theory, with attention to both classical and contemporary variants. Emphasis on sociological ideas in relation to the principal intellectual currents of European society, American society, and non-Western thought.
Soc 3451. Contemporary American Indians. (HDiv; 4 cr ; =[Anth 3451]; prereq ו1ו ו or Anth \#; 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 $1 ו 1$ or \#; fall, offered periodically)
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; =[Anth 3601]; prereq ו101 or Anth וווו or \#; fall, 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 1101 or Anth וווו or \#; spring, every year)
Same as Anth 3602. Study of the social, economic, and political positions of women in Latin American countries. Topics include class and ethnic differences, women in the labor force, and women's participation in political movements through the lens of feminist theory.
Soc 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 Sociology curriculum. Topic determined by the student and instructor.
Soc 4991. Sociology Independent Project Seminar. (4 cr; =[Soc 4902, Soc 4901]; prereq 3103, 3403; spring, every year)
A capstone seminar to guide sociology majors in the completion of an independent study project, including selection and definition of a research project, designing and planning its execution, developing a literature review and bibliography, applying relevant theoretical perspectives to research materials, and organizing and writing a research paper.
Soc 4993. 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.

## 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 crosscultural 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:
Span 1001—Beginning Spanish I
Span 1002-Beginning Spanish II or equivalent
Span 2001—Intermediate Spanish I
Span 2002—Intermediate Spanish II
Two additional courses chosen from LAAS and/or Hum courses offered by Spanish discipline faculty. A foreign study experience is also recommended.
For an in-depth language emphasis, students should complete:
Span 1001—Beginning Spanish I
Span 1002—Beginning Spanish II or equivalent
Span 2001—Intermediate Spanish I
Span 2002—Intermediate Spanish II
Span 3011-Composition, Conversation, and Culture
Span 3012-Spanish Grammar in Practice
Span 3111—Readings in Spanish I
Span 3112-Readings in Spanish II
A foreign study experience, special projects in language, and regular use of the language lab are recommended to maintain language skills.
For additional language offerings at UMM, see "World Languages."

## Courses for Admission

Beginning Spanish
Beginning Spanish I and II or equivalent previous language experience required to take intermediate Spanish.

## Spanish 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.
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 3011-Conversation, Composition, and Culture, IP (2 cr)
Span 3012-Spanish Grammar in Practice, IP (2 cr)
Span 3111—Readings in Spanish I, Hum (2 cr)
Span 3112-Readings in Spanish II, Hum (2 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, IP (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)
Span 3684—Seminar: Hispanic Film, 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 3011-Conversation, Composition, and Culture, IP (2 cr)
Span 3012-Spanish Grammar in Practice, IP (2 cr)
Span 3111—Readings in Spanish I, Hum (2 cr)
Span 3112-Readings in Spanish II, Hum (2 cr)

## Elective Courses

Latin American area studies are also recommended.
Take 16 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, IP (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)
Span 3684—Seminar: Hispanic Film, Hum (4 cr)

## Spanish Course Descriptions

Span 1001. Beginning Spanish I. (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 ; =[LAAS 1311]; spring, offered periodically)
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.
Span 1801. Hispanic Culture Through Cinema. (IC; 4 cr ; prereq new college student in their first semester of enrollment at UMM; fall, offered periodically)
An introduction to contemporary films from Spain and Latin America, showcasing innovative filmmakers from the Hispanic world, their representations of Hispanic societies through film, and their relationships to other international cinemas, with an emphasis on the medium as an art form rather than a commercial proposition.

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)
Emphasizes the continued development of oral expression, vocabulary building, spelling, grammar, reading, and composition through the use of authentic materials such as short films and news features, cultural readings, literary selections, and contemporary music that strengthen students' proficiency in Spanish and their understanding of Hispanic cultures.
Span 2002. Intermediate Spanish II. (IP; 4 cr; prereq 2001 or \#; spring, every year)
Continuation of the sequence beginning with 2001.
Associated Languages: Introduction to a number of languages and culture 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 periodically) 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 3011. Conversation, Composition, and Culture. (IP; 2 cr ; prereq 2002 or \#; fall, every year)
Practice in effective oral and written communication in Spanish for advanced students, with an emphasis on the diversity of contemporary Hispanic cultures and a review of basic grammatical concepts.
Span 3012. Spanish Grammar in Practice. (IP; 2 cr; prereq 3011 or \#; spring, every year)
A review of advanced Spanish grammar, with emphasis on areas of concern and challenge for the non-native speaker, and on strengthening academic writing skills in Spanish.
Span 3111. Readings in Spanish I. (Hum; 2 cr; prereq 3011 or \#; fall, every year)
Introduction to representative works of contemporary Hispanic literature from diverse genres and cultural contexts, with emphasis on strategies for comprehension and interpretation.
Span 3112. Readings in Spanish II. (Hum; 2 cr ; prereq 3012, 311 or \#; spring, every year)
Further examination of representative works of Hispanic literature from diverse genres, time periods, and cultural contexts, with emphasis on literary concepts and terminology, analysis, research and writing practices, and interpretation.
Span 3211. Literature and Culture of Latin America. (Hum; 4 cr ; prereq 3012, 3112, or \#; spring, offered periodically)
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 3012, 3112, or \#; spring, offered periodically)
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 3012, 3112 or \#; spring, offered periodically) 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 which imitates and enhances reality.

Span 3622. Seminar: Exile and Emigration in Latin American Fiction. (IP; 4 cr; prereq 3012, 3112 or \#; fall, offered periodically) 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 3012, 3112 or \#; fall, offered periodically) 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 3012, 3112 or \#; fall, offered periodically)
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 3012, 3112 or \#; fall, offered periodically) 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 3012, 3112 or \#; fall, offered periodically) 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 3012, 3112 or \#; fall, offered periodically) 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 3012, 3112 or \#; fall, offered periodically)
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 3012, 3112 or \#; fall, offered periodically) 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 3012, 3112 or \#; fall, offered periodically) 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 3012, 3112 or \#; fall, offered periodically) 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 3012, 3112, or \#; fall, offered periodically) 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 3684. Seminar: Hispanic Film. (Hum; 4 cr; prereq 3012, 3112 or \#; fall, offered periodically)
View, study, and discuss relevant Hispanic films from Spain, Latin America, and the U.S.A. Consider the films' cinematic techniques and their specific socio-cultural and socio-political contexts.

Span 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
Span 4001. Research Symposium. (Hum; 4 cr; A-F only; prereq \#; 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.

Span 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.

## Sport Management

Division of Education
This is an interdisciplinary program housed in the Division of Education. The program is administered by the sport management coordinator.
Objectives-Core courses in sport studies and athletics and in management build a foundation of knowledge and skills related to managing, planning, organizing, budgeting, leading, marketing, and evaluating within the context of an organization or department whose primary product or service is related to sport or physical activity. Carefully selected elective courses prepare students for graduate study (e.g., in business, law, or sport management) or a career in the sport or fitness industry (e.g., athletic director, sport agent, sport marketing, sport media, and managing professional and amateur sport organizations, parks and recreation areas, or sport governing bodies).

## Sport Management Major

Program Requirements
No grades below C- are allowed. Required courses including electives must be taken A-F unless they are 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

## Foundational Courses

Phil 2112—Professional Ethics, E/CR (4 cr)
Stat 1601 -Introduction to Statistics, M/SR ( 4 cr )
or Stat 2601—Statistical Methods, M/SR (4 cr)
CMR 1052-Introduction to Public Speaking, E/CR (2 cr)
or CMR 1062-Introduction to Interpersonal and Group Communication, Hum (4 cr)

## Sport Management Core

Econ 1111—Principles of Microeconomics, SS (4 cr)
Mgmt 2101—Principles of Accounting I (4 cr)
Mgmt 3171—Leadership in Organizations, SS (2 cr)
SSA 2302—Introduction to Sport Management (2 cr) SSA 2401—Sociological Aspects of Sports, SS (2 cr) SSA 2402-Psychological Aspects of Sports, SS (2 cr) SSA 3101—Sport Industry Analysis, SS (4 cr)

SSA 4101—Planning and Programming of Athletic Facilities, SS ( 4 cr )
SSA 4102-Organization and Administration of Athletics and Recreation, SS (4 cr)
SSA 4201 —Sport Governance: Legal and Ethical Issues, E/CR (4 cr)

## Elective Courses

Take an additional 12 or more credits from the courses listed below. At least 8 credits must be in management at the 3 xxx level or above.
Students interested in earning a Management major should see the Management section of the catalog for additional information.
Take 12 or more credit(s) from the following:
Take 8 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 3201—Marketing Principles and Strategy, SS (4 cr)
Mgmt 3221-Management and Organization Theory, SS (4 cr)
Mgmt 3513-Negotiation, SS (4 cr)
Mgmt 3701—Organizational Behavior, SS (4 cr)
Take no more than 4 credit(s) from the following:
Biol 2102—Human Anatomy (3 cr)
Biol 4004—Principles of Public Health and Epidemiology, Sci ( 4 cr )
Econ 4101—Labor Economics I, HDiv (2 cr)
Econ 4102—Labor Economics II, SS (2 cr)
Mgmt 2102—Principles of Accounting II (2 cr)
Psy 2001—Research Methods in Psychology, SS (4 cr)
Psy 3701—Organizational Behavior, SS (4 cr)
SSA 2102-Human Anatomy (3 cr)
SSA 2111—Kinesiology, Sci (2 cr)
SSA 2112—Exercise Physiology (2 cr)
SSA 3172-Leadership in Sport Organizations, SS (2 cr)
SSA 3201—Coaching Practicum (1 cr)

## Sport Management Minor

## 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

## Sport Management Core

Econ 1111—Principles of Microeconomics, SS (4 cr)
Mgmt 2101—Principles of Accounting I (4 cr)
SSA 2302-Introduction to Sport Management (2 cr)
SSA 2401—Sociological Aspects of Sports, SS (2 cr)
SSA 2402-Psychological Aspects of Sports, SS (2 cr)
SSA 3101—Sport Industry Analysis, SS (4 cr)
SSA 4101—Planning and Programming of Athletic Facilities, SS ( 4 cr )
or SSA 4102—Organization and Administration of Athletics and Recreation, SS (4 cr)

## Elective Courses

Take 4 additional credits from Mgmt 3xxx or above.
Students interested in earning a Management minor should see the Management section of the catalog for additional information.
Take 4 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 3513-Negotiation, SS (4 cr)
Mgmt 3701—Organizational Behavior, SS (4 cr)

## Sport Management Course Descriptions

Biol 2102. Human Anatomy. (3 cr; =[SSA 2102]; prereq soph; no elective cr for biol majors or minors; fall, every year)
Same as SSA 2102. Structure of human systems at their organ and cellular level. (two $65-\mathrm{min}$ lect, one $120-\mathrm{min}$ lab)
Biol 4004. Principles of Public Health and Epidemiology. (Sci; 4 cr; prereq Stat 1601 or Stat 2601, jr status or \#; spring, every year) The biology of diseases (infectious and chronic) and the interventions (medical and behavioral) designed to treat or prevent disease.
Epidemiologic methods and case studies are examined to understand the determinants of health and disease. (three $65-\mathrm{min}$ lect)
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.
Econ ו1ו1. Principles of Microeconomics. (SS; 4 cr; prereq high school algebra or \#; fall, spring, every year)
Study of scarce resource allocation in a market economy. Supply and demand, consumer theory, theory of the firm, market structure, pricing of factors of production, income distribution and the role of government.
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.
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 both 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 3101. Financial Management. (SS; 4 cr; prereq 2102, Econ וווו, Econ וII2, Stat 1601; fall, every year)
Fundamental theories of financial management, their applications, and their limitations in solving real business problems. Emphasis on financial analysis, valuation of future cash flows, capital budgeting, risk and return, cost of capital.

Mgmt 3123. Managerial Economics. (SS; 4 cr; prereq 2101, Econ וווו, Stat 1601 or Stat 2601 or \#; spring, every year)
Development of the basic concepts of the microeconomic theories of consumer behavior, the firm, and market structure, in application to managerial decision-making contexts in the operation and control of business and non-profit organizations.
Mgmt 3133. Managerial Accounting. (4 cr; prereq 2102; fall, spring, offered periodically)
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. The emphasis of this course is placed 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 periodically)
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 periodically)
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 periodically)
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 וווו or \#; fall, spring, offered periodically)
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 periodically)
Issues in labor-management negotiation, grievances, wages and economic security plans, public policies toward collective bargaining. Case studies from labor arbitration.
Mgmt 3201. Marketing Principles and Strategy. (SS; 4 cr; prereq 2102, Stat 1601 or \#; spring, offered periodically)
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 3221. Management and Organization Theory. (SS; 4 cr; prereq 210ו, Econ וווו or \#; fall, spring, offered periodically)
Theory, research, and practice of management. Planning, organizing, leading, controlling. Emphasizes goals, policies, procedures. Factors and human relationships necessary to achieve organizational success. Organizational structure/culture. Changing environment in which businesses operate.
Mgmt 3513. Negotiation. (SS; 4 cr; $=[$ Psy 3513]; prereq 3221 or Psy 3501 or Psy/Mgmt 3701; spring, offered periodically)
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 3701. Organizational Behavior. (SS; $4 \mathrm{cr} ;=[$ Psy 3701]; prereq Stat 1601 or Stat 2601, jr or sr; fall, spring, offered periodically)
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.

Psy 2001. Research Methods in Psychology. (SS; 4 cr; prereq 1051, Stat 1601 or Stat 2601 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 3701. Organizational Behavior. (SS; $4 \mathrm{cr} ;=[$ Mgmt 3701]; prereq Stat 1601 or Stat 2601, jr or sr; fall, offered periodically)
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.
SSA 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 $65-\mathrm{min}$ lect, one $120-\mathrm{min}$ lab)
SSA 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.
SSA 2112. Exercise Physiology. (2 cr; fall, every year)
Human physiological adaptations resulting from activity/exercise.
SSA 2302. Introduction to Sport Management. (2 cr; A-F only; fall, every year)
Provides students with an overview of and a foundation in sport management. Topics include the history of sport management, the relevance of managerial concepts to sport, typical settings for sport managers, areas of study within sport management, sustainability in sport, and globalization and sport, among others.
SSA 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.
SSA 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.
SSA 3101. Sport Industry Analysis. (SS; 4 cr; prereq 2302, Stat 1601 or Stat 2601 or \#; spring, every year)
An examination of the rapidly developing sports industry from a promotional and sales management perspective. Focus on sport promotion, sport consumers, sales, sponsorship, licensing, and e-commerce.
SSA 3172. Leadership in Sport Organizations. (2 cr; prereq 2302, Mgmt 3171; no cr for students who have received cr for Mgmt 3172; A-F only; fall, offered periodically)
Examination of theories and case studies of organizational leadership within sport. Students learn about additional theories and models of sport leadership and practice and develop their leadership skills.

SSA 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.
SSA 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.
SSA 4201. Sport Governance: Legal and Ethical Issues. (E/CR; 4 cr ; prereq 2302, 2401, 2402, 4101, 4102; A-F only, spring, every year) An integrative capstone for students in sport management. In addition to emphases in legal and ethical issues, it integrates knowledge from key areas of study in sport management. Includes an independent research project and a public presentation.

# Sport Studies and Athletics (SSA) 

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

SSA 1101—First Aid
SSA 2102—Human Anatomy
SSA 2111—Kinesiology
SSA 2112—Exercise Physiology
SSA 2121—Prevention and Care of Injuries
SSA 3201—Coaching Practicum
One of the following courses:
SSA 2201—Baseball Coaching
SSA 2202—Basketball Coaching
SSA 2203-Football Coaching
SSA 2204—Softball Coaching
SSA 2205-Track and Field Coaching
SSA 2206-Volleyball Coaching
SSA 2208—Soccer Coaching

## Sport Studies and Athletics Course Descriptions

SSA 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 lifetime program for improving one's quality of life.
SSA 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.
SSA 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.

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 SSA 12xx skills may be applied to the 120-credit degree requirement.

SSA 1213. Golf. ( 5 cr [max 1 cr ]; S-N only; fall, every year) Introductory instruction in the skills and techniques of golf.
SSA 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.
SSA 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.
SSA 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.
SSA 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.
Varsity Athletics: All varsity athletics courses carry 0.5 credit, are repeatable to a total of 2 credits, and are graded S-N only. No more than 4 credits in SSA 1401-1412 may be applied to the 120-credit degree requirement.

SSA 1401. Varsity Baseball (M). (. 5 cr [max 2 cr ]; S-N only; spring, every year)
SSA 1402. Varsity Basketball. (. 5 cr [max 2 cr ]; S-N only; spring, every year)
SSA 1403. Varsity Cross Country. (. 5 cr [max 2 cr$]$; S-N only; fall, every year)
SSA 1404. Varsity Football (M). (. 5 cr [max 2 cr$]$; S-N only; fall, every year)
SSA 1405. Varsity Golf. (. 5 cr [max 2 cr ]; S-N only; fall, every year)

SSA 1406. Varsity Softball (W). (. 5 cr [max 2 cr$]$; S-N only; spring, every year)
SSA 1407. Varsity Tennis. (. 5 cr [max 2 cr ]; S-N or audit; spring, every year)
SSA 1408. Varsity Track and Field. (. 5 cr [max 2 cr$]$; S-N only; spring, every year)
SSA 1410. Varsity Volleyball (W). (. 5 cr [max 2 cr ; S-N only; fall, every year)
SSA 1411. Varsity Soccer. (. 5 cr [max 2 cr ]; S-N only; fall, every year) SSA 1412. Varsity Swimming \& Diving (W). (. 5 cr [max 2 cr ]; S-N only; fall, every year)

SSA 1801. Mind and Body: Mental Skills and Martial Arts. (IC; 2 cr ; prereq new college student in their first semester of enrollment at UMM; fall, spring, offered periodically)
Mental skills such as stress management, imagery, and concentration have been practiced for centuries by martial artists and more recently by elite performers in a variety of fields (e.g., athletics, artistic and dramatic performance, medicine, and business). These skills and more are introduced through readings, analyzed during discussions, emphasized via the practice of martial arts skills and techniques, and applied to students' individual needs. Readings come from current sport psychology literature as well as traditional Asian martial arts passages. Students engage in physical activity.
SSA 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.
SSA 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 $65-\mathrm{min}$ lect, one $120-\mathrm{min}$ lab)
SSA 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.
SSA 2112. Exercise Physiology. (2 cr; fall, every year)
Human physiological adaptations resulting from activity/exercise.
SSA 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 65min lab)

## SSA 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.
SSA 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.

## SSA 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.
SSA 2204. Softball Coaching. ( 2 cr ; spring, even years)
History, psychology, and theory of the game, techniques of coaching each position, rules, batting, practice and game organization, strategy, officiating.
SSA 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.
SSA 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.
SSA 2208. Soccer Coaching. (2 cr; fall, odd years)
History, psychology, and theory of the sport, individual techniques, practice and game organization, officiating, rules and strategies.
SSA 2302. Introduction to Sport Management. (2 cr; A-F only; fall, every year)
Provides students with an overview of and a foundation in sport management. Topics include the history of sport management, the relevance of managerial concepts to sport, typical settings for sport managers, areas of study within sport management, sustainability in sport, and globalization and sport, among others.

SSA 2311. Sports Officiating. (2 cr; summer, offered periodically) Knowledge of the rules, techniques, and mechanics for officiating basketball, baseball, and softball at the high school level.

SSA 2324. Advanced R.A.D. (Rape Aggression Defense System) . (1 cr; S-N only; prereq 1224; 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.
SSA 2331. Personal Training Preparation. ( 2 cr ; S-N only; fall, spring, offered periodically)
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.
SSA 2333. The Story of Sports. (SS; 4 cr; summer, offered periodically) 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.
SSA 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.
SSA 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.
SSA 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.
SSA 3101. Sport Industry Analysis. (SS; 4 cr; prereq 2302, Stat 1601 or Stat 2601 or \#; spring, every year)
An examination of the rapidly developing sports industry from a
promotional and sales management perspective. Focus on sport promotion, sport consumers, sales, sponsorship, licensing, and e-commerce.
SSA 3172. Leadership in Sport Organizations. (2 cr; prereq 2302, Mgmt 3171; no cr for students who have received cr for Mgmt 3172; A-F only; fall, offered periodically)
Examination of theories and case studies of organizational leadership within sport. Students learn about additional theories and models of sport leadership and practice and develop their leadership skills.
SSA 3201. Coaching Practicum. (1 cr; S-N only; prereq \#; fall, spring, every year)
Supervised field experience in coaching, consisting of no fewer than 40 hours.
SSA 3210. Internship in Sport Studies and Athletics. (1-12 cr [max 24 cr ]; S-N only; prereq \#; 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.
SSA 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.
SSA 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.

## SSA 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.

SSA 4201. Sport Governance: Legal and Ethical Issues. (E/CR; 4 cr; prereq 2302, 2401, 2402, 4101, 4102; A-F only, spring, every year) An integrative capstone for students in sport management. In addition to emphases in legal and ethical issues, it integrates knowledge from key areas of study in sport management. Includes an independent research project and a public presentation.
SSA 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.

## Statistics (Stat)

Division of Science \& 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 . Courses may not be taken S-N unless offered S-N only.
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)
Stat 2501 —Probability and Stochastic Processes, M/SR (4 cr)
Stat 2611-Mathematical Statistics, M/SR (4 cr)
Stat 3601—Data Analysis, M/SR (4 cr)
Stat 4901—Senior Seminar, M/SR (1 cr)
Stat 1601 -Introduction to Statistics, M/SR (4 cr)
or Stat 2601 —Statistical Methods, M/SR (4 cr)

## Elective Courses

Take 8 or more credit(s) from the following:
Stat 3501—Survey Sampling, M/SR (4 cr)
Stat 3611-Multivariate Statistical Analysis, M/SR (4 cr)
Stat 4601 —Biostatistics, M/SR (4 cr)
Stat 4631 -Design and Analysis of Experiments, M/SR (4 cr)
Stat 4651 -Applied Nonparametric Statistics, M/SR (4 cr)
Stat 4671—Statistical Computing, M/SR (4 cr)
Stat 1993, 2993, 3993, 4993—Directed Study (1-5 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 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)
Psy 2001—Research Methods in Psychology, 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 )
or Stat 2601—Statistical Methods, 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 3611-Multivariate Statistical Analysis, M/SR (4 cr)
Stat 4601 -Biostatistics, M/SR (4 cr)
Stat 4611—Statistical Consulting, M/SR (4 cr)
Stat 4631—Design and Analysis of Experiments, M/SR (4 cr)
Stat 4651—Applied Nonparametric Statistics, M/SR (4 cr)
Stat 1993, 2993, 3993, 4993—Directed Study (1-5 cr)

## 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)

## Statistics Course Descriptions

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; 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 chi-squared tests; 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 periodically)
Same as Math 2501. Probability theory; set theory, axiomatic foundations, conditional probability and independence, Bayes' rule, random variables. Transformations and expectations; expected values, moments and moment generating functions. Common families of distributions; discrete and continuous distributions. Multiple random variables; joint and marginal distributions, conditional distributions and independence, covariance and correlation, multivariate distributions. Properties of random sample and central limit theorem. Markov chains, Poisson processes, birth and death processes, and queuing theory.
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 \#; fall, summer, even years)
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, HorvitzThomson 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)
Analysis of categorical data. Loglinear models for two- and higherdimensional contingency tables. Logistic regression models. Aspects of multivariate analysis, random vectors, sample geometry and random sampling, multivariate normal distribution, inferences about the mean vector, MANOVA. Analysis of covariance structures: principal components, factor analysis. Classification and grouping techniques: discrimination and classification, clustering, use of statistical computer packages.
Stat 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.
Stat 4601. Biostatistics. (M/SR; 4 cr; prereq 1601 or 2601 or 2611 or \#; spring, offered periodically)
Design and analysis of biological studies: biological assays, case-control studies, randomized clinical trials, factorial designs, repeated measures designs, observational studies, and infectious disease data. Analysis of survival data: basic concepts in survival analysis, group comparisons, and Cox regression model. Use of statistical computer packages.
Stat 4611. Statistical Consulting. (M/SR; 4 cr; prereq 3601, 3611; fall, spring, offered periodically)
Statistical consulting skills needed to deal effectively with clients or project teams, formulate statistical models, explain analyses, use standard statistical computer packages, and write reports in language understandable to nonstatisticians.

Stat 4631. Design and Analysis of Experiments. (M/SR; 4 cr; prereq 3601 or \#; fall, spring, offered periodically)
Design and analysis of experimental designs; blocking, randomization, replication, and interaction; complete and incomplete block designs; factorial experiments; crossed and nested effects; repeated measures; confounding effects.
Stat 4651. Applied Nonparametric Statistics. (M/SR; 4 cr; prereq 1601 or 2601 or 2611 or \#; fall, spring, offered periodically)
Application of nonparametric statistical methods. Examples use real data, gleaned primarily from results of research published in various journals. Nonparametric inference for single samples, paired samples, and independent samples, correlation and concordance, nonparametric regression, goodness-of-fit tests, and robust estimation.
Stat 4671. Statistical Computing. (M/SR; 4 cr; prereq 1601 or 2601 or 261 or \#; summer, offered periodically)
Entering, exploring, modifying, managing, and analyzing data by using selected statistical software packages such as R or SAS. The use of statistical software is illustrated with applications of common statistical techniques and methods. Designed for students who have a basic understanding of statistics and want to learn the computing tools needed to carry out an effective statistical analysis.
Stat 4681. Introduction to Time Series Analysis. (M/SR; 4 cr; prereq 3601 or \#; fall, summer, odd years)
Introduction to the analysis of time series including those with a connection to environment such as spatial and spatio-temporal statistics. Randomness test, ARMA, ARIMA, spectral analysis, models for stationary and non-stationary time series, seasonal time series models, conditional heteroscedastic models, spatial random processes, covariance functions and variograms, interpolation and kriging.

Stat 4901. Senior Seminar. (M/SR; 1 cr; prereq sr; fall, every year) Full-year course. Required for all statistics majors. Students must attend year round and present one of the seminars.
Stat 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.

## 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 3101—World Theatre: History and Literature I, FA (4 cr)
Th 3102-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, $\operatorname{ArtP}(4 \mathrm{cr})$
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 3201—Advanced Acting, ArtP (4 cr)
Th 3202—Advanced Directing, ArtP (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)

## Other Requirements

At least one para-programmatic theatre experience that is arranged through a theatre arts faculty member and may take any number of forms, e.g., internship with a theatre company, study abroad, or theatre tour to New York (Th 1040) or London (Th 1050).
Portfolio review in the third year.

Six major production responsibilities (four of which must be in a faculty-directed production, all others must be pre-approved by faculty, and three must be in the junior and senior years).

## Theatre Arts Minor

## Minor Requirements

Up to 4 credits of coursework with a grade of D or $\mathrm{D}+$ 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, $\operatorname{ArtP}$ ( 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, $\operatorname{ArtP}(4 \mathrm{cr})$
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)
Th 3201—Advanced Acting, ArtP (4 cr)
or Th 3202—Advanced Directing, ArtP (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]; S-N only; prereq \#; fall, spring, offered periodically)
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]; S-N only; prereq \#; fall, spring, offered periodically)
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 ]; S-N only; prereq \#; 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 ]; S-N only; prereq \#; 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 2-5 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 וווו. Fundamentals of Acting. (ArtP; 4 cr; prereq 1101, theatre arts major or minor or \#; spring, every year)
Approaches characterization from a physical and psychological view. Focus is on use of imagination, text analysis, body and voice to develop characters from modern realistic dramatic literature
Th 1301. Fundamentals of Design. (ArtP; 4 cr ; fall, every year)
Problem-solving approach to elements, principles, and functions of design; their place in the theatre and elsewhere.

Th 1801. Technical Theatre. (IC; 4 cr; prereq new college student in their first semester of enrollment at UMM; fall, offered periodically)
Technical Theatre is a creative force behind every stage production. Explore the major technical elements of theatre: lighting, scenery, costumes, and sound and participate in the design and construction of the UMM Theatre fall production. This course is designed for potential theatre majors and anyone else with an interest in technical theatre.

Th 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.
Th 2101. Fundamentals of Directing. (ArtP; 4 cr; prereq וווו, 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 of concepts, and stylistic techniques.

Th 2111. Creative Drama with Children. (ArtP; 4 cr ; prereq 1101 or theatre or elem ed major or \#; fall, spring, offered periodically)
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 ; prereq ill, 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 expansion and enhancement of vocal and physical skills through release of tension, posture, vocal exercises, and muscle extension.

Th 2211. Oral Interpretation. (ArtP; 4 cr; offered alternate yrs; fall, spring, offered periodically)
Introduces the study of literature through text analysis and performance. Focus is on the student's discovery of the aesthetic, communicative, and performative elements of a variety of personal narratives, prose, and poetry.
Th 2221. Readers' Theatre. (ArtP; 4 cr; prereq 2211; fall, spring, offered periodically)
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 2222. Creating Live Radio Theatre from Script to Performance. (ArtP; 1 cr; S-N only; prereq \#; students will audition/interview to be on radio; spring, offered periodically)
Provides an opportunity to develop a radio theater show from script through broadcast performance. Parts are assigned through audition. Involves significant research and rehearsal time in various capacities for all students enrolled.
Th 2231. Playwriting. (ArtP; 4 cr ; fall, spring, offered periodically) 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; 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 ]; 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 3001. Theatre Scene Painting Studio. (FA; 4 cr ; prereq \#; 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; prereq \#; fall, spring, offered periodically)
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 influences on, 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 17 th 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; prereq 1101, וווו, 2101; fall, spring, offered periodically)
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, postmoderism, musical theatre, etc.
Th 3202. Advanced Directing. (ArtP; 4 cr ; prereq ו101, וווו, 2101; fall, spring, offered periodically)
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, postmoderism, musical theatre, etc.
Th 3301. Stage Lighting. (ArtP; 4 cr; prereq 1301, 2301; fall, even 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; prereq 1301, 2301; fall, odd years) History and development of stage costume. Theory and concepts of stage costuming 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

 periodically)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 periodically)
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 Make-Up. (ArtP; 4 cr; fall, spring, offered periodically) Systematic approach to stage make-up application. Includes history, safety, product, design, and application, with heavy emphasis on hands-on experience.
Th 3451. Shakespeare's England. (Hum; 4 cr; =[Engl 3451]; summer, offered periodically)
Same as Engl 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.

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.

## World Languages

In addition to degree programs in French, German, and Spanish, introductory language courses are available as listed below. For additional courses, see listings under individual languages or designators.

## World Languages Course Descriptions

AmIn 1001. Beginning Dakota Language I. (4 cr; fall, every year) An introduction to speaking, writing, and reading Dakota language and an overview of Dakota culture.
AmIn 1002. Beginning Dakota Language II. (FL; 4 cr; prereq 1001 or \#; spring, every year)
A continuation of 1001 with greater emphasis on conversation and culture.
AmIn 1011. Beginning Anishinaabe Language I. (4 cr; fall, every year) An introduction to speaking, writing, and reading Anishinaabe language and an overview of Anishinaabe culture.
AmIn 1012. Beginning Anishinaabe Language II. (FL; 4 cr; prereq 1011; spring, every year)
A continuation of 1011 with greater emphasis on conversation and culture.
Chn 1001. Beginning Modern Chinese I. (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.
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.
Ed 1011. Beginning Sign Language I. (3 cr; 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.

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.

Ed 2011. Intermediate Sign Language. (FL; 3 cr; prereq 1012 or \#; fall, spring, offered periodically)
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.
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.

Fren 1001. Beginning French I. (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.
Ger 1001. Beginning German I. (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.
Ital 1001. Beginning Italian I. (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.

Ital 1002. Beginning Italian II. (FL; 4 cr ; prereq 1001 or placement or \#; spring, every year)
Continuation of 1001.
Lang 1061. Writing in the American University. (3 cr [max 6 cr ]; prereq non-native speaker of English, \#; fall, spring, every year)
Writing course for non-native speakers of English at the advanced level, emphasizing competency in standard written English with a focus on development of paragraphs, exploration of the writing process, and experience with various rhetorical styles of essays in preparation for the demands of classroom writing.
Lang 1062. Reading in the American University. (1 cr [max 2 cr ]; S-N only; prereq non-native speaker of English, \#; fall, spring, every year) For non-native speakers of English. Focus on developing academic vocabulary through study of the Academic Word List; students apply this vocabulary to texts which also reinforce basic reading skills such as prereading strategies, skimming, scanning, and word parts work.
Lang 1063. Academic Culture and Oral Skills in the American University. (IC; 2 cr [max 4 cr ]; S-N only; prereq non-native speaker of English, \#; fall, spring, every year)
For non-native speakers of English. Designed to assist international students with the transition from the social/educational systems in their own cultures to the social/educational systems in the United States. Primary focus on oral skills; coursework focuses on class participation, discussion, note-taking, and critical thinking.
Lang 1064. Preparing for the American Liberal Arts Classroom. (3 cr; S-N only; prereq non-native speaker of English, \#; admission to UMM; summer, every year)
Prepares international students for norms and rigors of an English-language, liberal arts college classroom. Includes preparation in language/academic skills of reading, writing, oral skills; exposure to disciplines that compose liberal arts; development of familiarity with cultural norms of a U.S. classroom; contextualization of topics through field trips.

## World Languages

Span 1001. Beginning Spanish I. (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.

## Campus Directories and Map

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## Campus Directory

Questions? Problems? Need information? The following UMM directory should assist persons in directing their requests to the proper offices. Write the appropriate office at the University of Minnesota, Morris, MN 56267, or call the number listed. The area code is 320 .

## Academic Advising <br> 589-6178 <br> Advising assignments, change of major, academic planning

 advice and materials.
## Academic Affairs,

589-6015
Vice Chancellor and Dean
Academic affairs, curriculum, faculty interests
Academic Assistance Center 589-6178
Academic advising, counseling, and tutoring.

## Academic Center for Enrichment

589-7014
Undergraduate research, national scholarships, study abroad, National Student Exchange, Honors.
Admissions and Financial Aid 589-6035 Admissions, fees, scholarships, student employment.

Alumni Relations and Annual Giving 589-6066
Alumni records and services, alumni association.
Business Office
589-6125
Payment of fees, college purchases.

## Campus Police

589-6000
Police, emergencies.
Career Center
589-6065
Career advising, placement services, internships.
Chancellor
589-6020
General policies and interests of the college.
Computing Services
589-6383
Computing services.
Continuing Education, Regional
589-6450
Programs, and Summer Session
Evening classes, May session, summer session, online courses, conferences, advising.
Counseling, Student
589-6060
Personal counseling services.

## Disability Services

(V/TDD) 589-6178
Accommodations, access, advocacy.

## Education, Division of <br> 589-6400

Division of Education faculty and courses, including wellness and sport science.
Finance Director
589-6006
College finances, budgeting, human resources.

## Fund Development

Financial gifts to the college.
Grants Development589-6465Grant opportunities, management.
Health Service ..... 589-6070
Medical care, health-related excuses
Human Resources ..... 589-6024
Personnel services, employee benefits and payroll
Humanities, Division of the ..... 589-6250
Division of the Humanities faculty and courses.
Honors Program ..... 589-6464UMM Honors Program.
Institutional Research ..... 589-6012Statistics about the University.
Library ..... 589-6175
Circulation, reference, administration.
Multi-Ethnic Student Program ..... 589-6095Services for students of color.
Plant Services ..... 589-6100
Physical plant, grounds.
Registrar, Office of the ..... 589-6030Transcripts of grades and records, classschedules, registration.
Residential Life ..... 589-6475Student housing, residence hall interpersonalrelations and programming.
Science and Mathematics, ..... 589-6300
Division of
Division of Science and Mathematics faculty and courses.
Social Sciences, Division of the ..... 589-6200
Division of the Social Sciences faculty and courses.
Student Activities ..... 589-6080
College events, student organizations, service learning (Campus Compact).
Student Affairs, Vice Chancellor ..... 589-6013Student affairs.
Morris Campus Student Association ..... 589-6086Student government.
University Relations ..... 589-6414Information services, media relations, special events, calendar.

## UMM Web Directory

The following UMM web directory should assist persons in locating Internet address information for Morris. The campus home page address is www.morris.umn.edu.

## Academic Advising

www.morris.umn.edu/academic/advising

## Academic Center for Enrichment <br> www.morris.umn.edu/ACE

## Academic Programs

www.morris.umn.edu/academic

## Admissions

www.morris.umn.edu/prospective

## Alumni Relations and Annual Giving

www.morris.umn.edu/alumni

## Athletics <br> ummcougars.org

## Campus Departments and Disciplines

directory.morris.umn.edu/offices
Catalogs Online for the Morris Campus
www.catalogs.umn.edu/morris

## Committees and Organizations

www.morris.umn.edu/committees

## Computing Services

www.morris.umn.edu/technology/about
/computingservices

## Continuing Education

www.morris.umn.edu/outreach

## Directories

directory.morris.umn.edu
Diversity and Multiculturalism on Campus
www.morris.umn.edu/CampusLife/Multicultural.html

## Education, Division of

www.morris.umn.edu/academic/education

## Events Calendar

www.morris.umn.edu/newsevents

## Financial Aid

www.morris.umn.edu/admissions/financialaid

Grants Development<br>www.morris.umn.edu/grants

## Honors Program

www.morris.umn.edu/academic/honors
Humanities, Division of the
www.morris.umn.edu/academic/humanities.html

## Institutional Research

www.morris.umn.edu/academic/instres.html

## Language Teaching Center

www.morris.umn.edu/academic/ltc

## Library

www.morris.umn.edu/library
Registrar, Office of the
www.morris.umn.edu/services/registrar

## Residential Life

www.morris.umn.edu/residentiallife

## Science and Mathematics, Division of

www.morris.umn.edu/academic/science_math.html

## Social Sciences, Division of the

www.morris.umn.edu/academic/socialsci.html

## Study Abroad

www.morris.umn.edu/ACE/studyabroad

## Summer Term

www.morris.umn.edu/academics/summerterm

## UMM Writing Room

www.morris.umn.edu/academic/writing_room

## University Relations

www.morris.umn.edu/urelations
Visitor Information
www.morris.umn.edu/visitors

## Campus Map




[^0]:    Dentistry
    Engineering
    Law
    Medicine
    Nursing
    Pharmacy
    Physical Therapy
    Veterinary Medicine

